The Effects of Peer Mentoring on the Stress Levels of Nursing Students

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Dedication

This work is dedicated to my family- my supportive husband, John, and our three incredibly cool kids, Katie, Sean, and Kevin. It is not lost on me that while I have studied mentoring, you have mentored me along the way. Each time I felt stuck, you pushed me to keep going. I love each of you more than any words could possibly express!

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Abstract

The purpose of this non-equivalent control group design, quantitative quasi-experimental study with a qualitative component is to compare the stress levels of nursing students who have a peer mentor to stress levels of nursing students who do not have a peer mentor while taking an Introduction to Nursing Course in a Bachelor of Science in Nursing (BSN) program at a small, Midwestern, private health professions college. Fifty-one nursing students participated in the study. Results indicated that while not statistically significant, students who took the Introduction to Nursing Course and had a peer mentor experienced slightly lower stress levels than the students who did not have a peer mentor. Additionally, stress levels of students assigned a peer mentor decreased between the start of the semester and toward the end of the semester, though this decrease was not statistically significant. Finally, for participants without a peer mentor, stress levels increased between the start of the semester and toward the end of the semester. This also was not a statistically significant change. Students in the peer mentoring program provided positive feedback about the impact of having a peer mentor on academics, balancing personal lives, and gaining knowledge of support services. Over sixty-nine percent of these students agreed they would recommend having a peer mentor to other nursing students. Findings of this study indicate peer mentoring may be one way to help nursing students taking their first nursing course to reduce stress. It may also be considered as a method to assist these students with academics, balancing their personal lives, and gaining knowledge of available support services.

The Effects of Peer Mentoring on the Stress Levels of Bachelor of Science in Nursing Students

Chapter I: Introduction

Stress in nursing education may affect students' learning, as well as their academic and clinical performance (Chernomas & Shapiro, 2013). Feeling overwhelmed with coursework and clinical demands, as well as clinical experiences has been described as an experience of nursing students (Chernomas & Shapiro, 2013). Peer mentoring may be one way to help students cope with and/or decrease their stress levels. Research has shown peer mentoring may lead to support and encouragement (Sims-Giddens, Helton, & Hope, 2010) and that students are positive regarding peer mentors' help (Moser, Berlie, Salinitri, McCuistion, & Slaughter, 2015).

In this chapter, the effects of peer mentoring on the stress levels of Bachelor of Science in Nursing students will be examined. Background information, the research problem, and purpose of the study will be discussed. Additionally, research questions and definitions of terms will be provided. Finally, the study's assumptions, limitations, and delimitations will be described.

Background

In order for nurses to enter the workforce, finding ways to retain students, specifically Bachelor of Science in Nursing students, through graduation is important. The Institute of Medicine's (2010) report recommendations included increasing the number of nurses who have a baccalaureate degree to 80 percent by 2020. Edmonds (2013) reported, "It is imperative to retain those who secure one of these valuable spots as a nursing student" (p. 221). Supporting this idea, Jeffrey (2007) stated that retention, success, graduation and licensure of nursing students is a priority. It is important to help nursing students to be successful to address these issues. Once nursing students are admitted into a Baccalaureate program, nurse educators must work to

support these students in order to assure their success, retention, and ultimately graduation. The Institute of Medicine's (2010) report recommended nurse leaders in academia work together across nursing schools to accomplish this goal.

One factor that may negatively affect such success for nursing students is stress. Jameson (2014) reported "baccalaureate nursing education is stressful" (p. 603) and this stress is derived from academic and clinical reasons, as well as personal and social ones. Stress in baccalaureate nursing education has also resulted for nursing students when they perceive the hospital staff does not welcome them or communicate with them (Wallace, Bourke, Tormoehlen, & Poe-Greskamp, 2015). Additionally, students described having to wait for their clinical instructor due to a high student-to-instructor ratio, and inconsistent expectations that contributed to their feelings of stress (Wallace, et al., 2015).

Stress in nursing education is of concern because it may hinder a student's learning and academic performance (Jimenez, Navia-Osorio, & Diaz, 2010). Nursing students in a study conducted by Chernomas and Shapiro (2013), which explored the incidence of stress, depression, and anxiety of baccalaureate in nursing students, reported feeling "'overwhelmed'" (p. 261) due to the many demands placed upon them both in their coursework as well as their personal lives. Students also reported feeling stressed and experiencing loss of sleep the night before their clinical practice. Not knowing what to expect and feeling unprepared contributed to this feeling of stress. Nursing students also felt stress from worrying they may have missed something, made a mistake, or even fear they may "kill" someone (Chernomas & Shapiro, 2013, p. 261).

It is believed having a peer mentor may provide advantages for the mentee (Washington University, 2017). Beginning nursing students who had a peer mentor for a clinical experience stated they felt less anxious and confused (Sprengel & Job, 2004). McIntosh, Gidman, and

Smith (2014) reported third-year nursing students supporting first-year nursing students was effective. One third-year mentor shared that being able to teach and pass on skills to first-year students was part of the role of being a more experienced student. Sims-Giddens, et al. (2010) found nursing students felt together they could accomplish more than individually, and students who were part of peer mentoring felt encouragement and support from one another.

Additionally, student progression improved and failure rates decreased for students who were part of a learning community involving mentoring. These students gave consistently positive comments about their peer mentors' help. Peer mentors also found the learning community mentoring experience to be a positive one, stating they gained many benefits (Moser, et al., 2015).

Support and confidence were improved as a result of peer mentor relationships. Mentors "stated that it was essential for students to support each other, noting that this acted as a confidence booster" (McIntosh, et al., 2014, p. 362). Emotional support was identified by students as an outcome of peer learning. Benefits to the student who served as a mentor were reported (Christiansen & Bell, 2010). "…the encouragement and support of a peer enhanced students' self esteem and increased their confidence…" (Christiansen & Bell, 2010, p. 808). Participants reported having a preceptor increased their confidence. "Students…benefit from informal conversations that can be shared without hierarchy…and from the support that could be made available to them through their peers" (Kelly & McAllister, 2013, p. 175). In summary, many benefits of peer mentoring experiences have been discovered.

Regarding stress, Lazarus (1990) described that a stress relationship exists when demands exceed a person's resources. When a person experiences stress, an appraisal of that stress occurs in which the individual determines the stress is a harm or something that is an obstacle to

overcome. This stress can be affected by coping which attempts to change this appraisal (Lazarus, 1990). Lazarus and Folkman (1984) discussed the importance of peers as they described how stressful events may be more stressful when they occur at a time when peers may not be available to provide support. They stated "having an event happen too early or too late can mean that one is deprived of the support of compatible peers" (Lazarus & Folkman, 1984, p. 109) and in this way conveyed the importance of peers. Lazarus' (1990) stress theory is one theory used to frame this research study.

In addition to Lazarus' (1990) stress theory, another theory is used to frame this research. Watson (2008) has developed a philosophy of care of self and others which incorporates ten Caritas Processes. Included in these processes are Caritas Process Four: "Developing and Sustaining a Helping-Trusting Caring Relationship" (p. 71) which includes in its focus the importance of the caring relationship. This caring relationship, written for self and others, was directed in this study toward the care of students, specifically through the peer mentoring experience. Additionally, Watson's seventh Caritas Process, "Engage in Genuine Teaching-Learning Experience That Attends to Unity of Being and Subjective Meaning-Attempting to Stay Within the Other's Frame of Reference" (Watson, 2008, p. 125) is also used as framework for this study because of its focus on relationships as well as the importance of using another person's frame of reference as a lens.

Research Problem

Beyond theory, the research problem must be identified. Baccalaureate nursing students experience stress that may hinder their learning and it is important nursing educators assist in decreasing this stress in order to improve student learning (Wallace, et al., 2015). Peer mentoring may be an effective intervention nursing educators may use to decrease nursing

students' stress. More research needs to be conducted about the effects peer mentoring may have on the stress levels of nursing students (Li, Wang, Lin, & Lee, 2011).

Purpose of Study

The purpose of this non-equivalent control group design, quantitative quasi-experimental study with a qualitative component is to compare the stress levels of nursing students who have a peer mentor to stress levels of nursing students who do not have a peer mentor while taking an Introduction to Nursing Course in a Bachelor of Science in Nursing (BSN) program at a small, Midwestern, private health professions college. Creswell (2014) states when studying variables' relationships, quantitative research questions are appropriate. These questions are also used often in social science which applies to this research study. Also applicable to this study is the use of open-ended questions which is a characteristic of qualitative research (Creswell, 2014).

Research Questions

How do stress levels differ in nursing students who have a peer mentor compared to nursing students who do not have a peer mentor while taking an Introduction to Nursing Course in a Bachelor of Science in Nursing (BSN) program at a small, Midwestern, private health professions college?

Subsidiary Research Questions

1. For nursing students who are assigned a peer mentor, how do stress levels differ between the start of the semester and toward the end of the semester?
2. For nursing students without a peer mentor, how do stress levels differ between the start of the semester and toward the end of the semester?

Definition of Terms

Bachelor of Science in Nursing (BSN) Program. The Bachelor of Science in Nursing Program is a four-year nursing program accredited by The American Association of Colleges of Nursing's (AACN) accreditation agency, the Commission on Collegiate Nursing Education (CCNE). The program is part of a small, Midwestern, private health professions college accredited by the Higher Learning Commission (HLC).

Introduction to Nursing Course. The Introduction to Nursing Course is a five credit hour course that includes a classroom and clinical portion. The course is foundational in the community-based nursing curriculum.

Peer Mentee. The peer mentee is a Bachelor of Science in Nursing (BSN) student who is enrolled in an Introduction to Nursing Course at a small, Midwestern, private health professions college. The peer mentee is assigned a peer mentor.

Peer Mentor. The peer mentor is a Bachelor of Science in Nursing (BSN) student who has successfully completed an Introduction to Nursing Course at a small, Midwestern, private health professions college and is enrolled in his or her second or third clinical nursing course.

Peer Mentoring. Peer mentoring is a process by which a Bachelor of Science in Nursing (BSN) student who has successfully completed an Introduction to Nursing Course provides support and encouragement to a Bachelor of Science in Nursing (BSN) student who is enrolled in an Introduction to Nursing Course. The mentor serves as a role model (Demir, Demir, Bulut, & Hisar, 2014; Dennison, 2010) for the mentee who must be motivated to be successful in his or her educational endeavors as well as being open to learning from the mentor (Li, et al., 2011; McIntosh, et al., 2014).

Stress. "a state of mental tension and worry… something that causes strong feelings of worry or anxiety…" (Merriam- Webster) as measured in this study by a self-report Likert scale survey.

Assumptions, Limitations, Delimitations

Assumptions

Assumptions of this study include that the mentor-mentee relationship was mutually respectful (Li, et al., 2011; McIntosh, et al., 2014; Waisman Center, 2006; Washington University in St. Louis web site, 2017) and that the mentors and mentees met as assigned and maintained a relationship that included the following:

a. The mentor-mentee relationship included commitment on the part of the mentor and mentee (Sims-Giddens, et al., 2010).
b. The mentor-mentee relationship included initiative on the part of the mentor and mentee (Sims-Giddens, et al., 2010).
c. The mentor-mentee relationship included cooperation on the part of the mentor and mentee (Sims-Giddens, et al., 2010).
d. The mentor-mentee relationship included communication skills between the mentor and mentee (Sims-Giddens, et al., 2010).
e. The peer mentor supported learning (McIntosh, et al., 2014).

Additionally, it is an assumption of this study that participants honestly answered all survey questions.

Limitations

In addition to assumptions, limitations must also be identified. Limitations of this study include a small sample size of students who all attended a small, Midwestern, private health professions college which limits generalizability. All students were in the BSN program and may or may not have had prior peer mentoring experience. The mentors and mentees spent more or less time communicating with each other than was recommended in the peer mentoring program or than other mentors and mentees communicated.

Delimitations

Delimitations of the study include that no students under the age of 19 were included in the study. Additionally, students who had taken the course previously and were repeating it were excluded from the study. Students who had taken a nursing course at another college were also excluded. Finally, the study did not include students who were not nursing students or those at large institutions.

Summary

The purpose of this non-equivalent control group design, quantitative quasi-experimental study with a qualitative component is to compare the stress levels of nursing students who have a peer mentor to stress levels of nursing students who do not have a peer mentor while taking an Introduction to Nursing Course in a Bachelor of Science in Nursing (BSN) program at a small, Midwestern, private health professions college. Nursing students experience stress and peer mentoring may be one way to decrease this stress. This research aimed to study the effects of having a peer mentor on the stress levels of nursing students.

Chapter II: Review of Literature

While stress is inevitable, ongoing stress may be harmful to a person's mental and physical health (Reingold, 2015). Nursing students often perceive a great deal of stress (Jameson, 2014) and describe feelings of being overwhelmed with coursework, clinical demands, clinical experiences, and their personal lives (Chernomas & Shapiro, 2013). They reported that feeling unprepared for clinical and not knowing what to expect related to clinical were stressful (Chernomas & Shapiro, 2013). This stress may affect nursing students' learning and academic performance (Jimenez, et al., 2010). There is a need to decrease stress in these students and peer mentoring may be explored as one way to accomplish this (Li, et al., 2011). Sims-Giddens, et al.'s (2010) research found peer mentoring may lead to support and encouragement. Research also found that students are positive about peer mentors' help (Moser, et al., 2015). The importance of relationships and caring (Wagner & Seymour, 2007), Lazarus' (1993) theory on stress, and the theoretical framework of Watson's (2008) Caring Theory are used to frame this study. Following discussion of the theoretical frameworks, the relationship between stress in nursing students and peer mentoring will be presented.

Stress in Nursing Students

Students in undergraduate nursing programs often experience stress (Beck & Srivastava, 1991; Moscaritolo, 2009) and nursing students who have higher stress levels are more likely to have increased psychological distress and poorer physical health (Klainin-Yobas, Keawkerd, Pumpuang, Thunyadee, Thanoi, & He, 2013). Stress in academics is of particular concern because it may affect a student's academic success and his/her well-being (Jimenez, et al., 2010). Additionally, high anxiety levels can impede nursing student success by affecting knowledge and

critical thinking, and students' grades (Moscaritolo, 2009). Jimenez, et al. (2010) identified three different types of stressors in nursing students: academic, clinical, and external.

Academic stressors

According to Jimenez, et al. (2010), academic stressors include assignments/workload, exams, grades, fear of failing, and relationships with instructors. Stress may affect students' test taking anxiety. In a study of nursing students, Augner (2015) found nursing students have a high incidence of chronic stress as well as test anxiety and chronic stress is strongly related to, and is one of the best predictors of test anxiety. Stress and testing was also an issue for chiropractic students taking an "objective structured clinical examination" (Zhang & Rabatsky, 2015, p. 139). These students experienced high stress levels during their exam, which had a negative impact on their examination performance. In another study, nursing students described chronically feeling behind and as if they could not catch up academically, as well as being worried about grades (Chernomas & Shapiro, 2013).

Additional academic stressors reported by first-year nursing students included being fearful of failing, not having enough free time, needing to spend a significant amount of time studying, the amount and difficulty of material in the classroom that needed to be learned, and examinations and grades (Jones & Johnston, 1997). Demir, et al. (2014) also found first-year nursing students reported academic standings, coursework, and lecturers as sources of stress.

Clinical Stressors

In addition to academic stressors, clinical stressors also exist for nursing students. While clinical experiences are necessary components of nursing education, they are perceived as stressful and anxiety-producing by students (Elliot, 2002) and are one of the areas in nursing education that students state cause the most anxiety (Moscaritolo, 2009). Anxiety the night

before clinical was associated with high stress scores as reported in a study of stress in nursing students (Chernomas & Shapiro, 2013). This stress was associated with inability to sleep, which increased worry as to how they would perform in clinical (Chernomas & Shapiro, 2013). Nursing students in a baccalaureate program in Shipton's (2002) study found clinical experiences to be very stressful as well.

Clinical stressors include caring for patients who are suffering or who die, lack of knowledge and skills, emergencies in the clinical area and how to deal with them, and relations with clinical staff (Jimenez, et al., 2010). Additionally, Li, et al. (2011) found that stress from 'lack of professional knowledge and skills' (p. 203) had the highest score in their experimental and control groups before clinical experiences and was also the highest score in their control group after clinical. After clinical, the highest score for the experimental group was stress resulting from 'assignments and workload' (p. 203). Nursing students experiencing their first clinical found it to be stressful because this was the first time they were working with patients. These students were also fearful they would make a mistake, and stated the need to apply theory they learned for the first time in clinical was stressful (Lombardo, Wong, Sanzone, Filion, & Tsimicalis, 2017). Williams and Palmer (2013) stated student anxiety before and during clinical in the critical care area may interfere with student learning. Nursing faculty are concerned about the high level of anxiety in nursing students in clinical because this can affect how well students learn as well as their clinical performance with skills, such as medication administration (Moscaritolo, 2009). Additionally, nursing students reported anxiety and emotional distress and stated that during the beginning of clinical, these feelings are the most intense (Jimenez, et al., 2010). Not knowing what to expect regarding clinical and the work associated with clinical increased stress for nursing students (Chernomas & Shapiro, 2013).

External Stressors

External stressors reported by nursing students included daily life and finances (Jimenez, et al., 2010). Needing to work to earn money contributed to stress for students in Chernomas and Shapiro's (2013) study. Additional stressors for nursing students included problems with friends, problems with family, economic problems, and feeling uncertain about the future (Demir, et al., 2014). Students described feeling overwhelmed by multiple demands they experienced (Chernomas & Shapiro, 2013). One student in this study described this overwhelmed feeling in relation to balancing life with courses, and clinicals, stating this increased stress "…is beginning to affect those around me..." (Chernomas & Shapiro, 2013, p. 261). Another student shared feeling overwhelmed from trying to balance being a parent, working, trying to stay healthy, and keeping up with appointments and housework (Chernomas & Shapiro, 2013). Also, lack of sleep, and poor physical health and diet contributed to stress (Chernomas & Shapiro, 2013). When students were able to balance their personal life with demands of school, they reported decreased anxiety (Chernomas & Shapiro, 2013). Feeling uncertain about nursing as a career choice contributed to the stress of nursing students in Beck and Srivastava's (1991) research study.

Additionally, a lack of sense of belonging and satisfaction were an issue for some first-generation students. In a study examining first-generation college students' experiences, Stebleton, Soria, and Huesman (2014) reported first-generation students rated their sense of belonging and satisfaction lower than non-first-generation students and that having a sense of belonging was related significantly to mental health in students, specifically depression and stress. These researchers also found feeling stressed, depressed, or upset was reported more frequently by first-generation students than non-first generation students.

Stress in First Level Nursing Students

While nursing students experience stress, research exists regarding stress specifically for first level nursing students. Nursing programs are rigorous and often first year nursing students become overwhelmed and feel discouraged (Gardiner, Blondy, & Bumpus, 2014). First year transitions can be very difficult due to "'fear of the unknown'" as described by nursing students (Lombardo, et al., 2017, p. 228). These students shared they were uncertain about how they would manage workloads for their courses (Lombardo, et al., 2017).

Jimenez, et al. (2010) also found that nursing students experienced stress and found clinical to be stressful, especially first year nursing students. They reported in the first and second year of nursing school, students perceived more clinical than academic or external stressors. Li, et al. (2011) studied the stress levels of nursing students before and after their first medical-surgical clinical. The lowest score was found for students in the category of peers and daily life (Li, et al., 2011) both before and after clinical. *Lack of professional knowledge and skills* (Li, et al., 2011) resulted in the highest score before and after clinical. Students often have stress resulting from their expectations, specifically related to clinical experiences. Admi (1997) found at the beginning of a clinical experience, stress levels were higher than they were at the end of the clinical experience. Admi's (1997) study also found, while there was no significant difference in stress levels between nursing students who were younger compared to those who were older, there was a significant difference between students based on their previous nursing experience. At the start of clinical experience, those without experience reported stress levels that were significantly higher than students with past nursing experience.

Theoretical Framework

Lazarus

To understand the stress students experience through a theoretical lens, Lazarus' theory of stress is used as a framework. Lazarus (1990) described demands exceeding a person's resources as a stress relationship. As the person experiencing stress, he or she "appraises" (p. 3) that stress giving it meaning, either as a harm, or an obstacle/ "challenge" (p. 3) to overcome. Stress is about a relationship between a person and the environment. "Psychological stress is a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus & Folkman, 1984, p. 19). Lazarus and Folkman (1984) further described the processes of 'cognitive appraisal' and 'coping'. When a person evaluates to what extent something between themselves and the environment is stressful and why it is stressful, cognitive appraisal is taking place. Coping occurs when a person "…manages the demands of the person-environment relationship that are perceived as stressful..." (p. 19). So, the definition of stress may be the "'relationship'" between the person and the environment (Lazarus & Folkman, 1984, p. 21). Additionally, Lazarus and Folkman (1984) described the "support of compatible peers" (p. 109) as a way to deal with stress.

Stress and peer mentoring. How a person copes makes a significant difference in how they perceive stress (Lazarus, 1993).

> Coping shapes emotion, as it does psychological stress, by influencing the person-environment relationship and how it is appraised. Coping involves both (a) attempts to change the person-environment realities behind negative emotions (problem-focused

coping) and (b) attempts to change either what is attended to or how it is appraised (emotion-focused coping). (p. 16)

This study explored peer mentoring as a way to help students cope better with stress.

Watson's Philosophy and Science of Caring

Beyond an understanding of stress theory, interventions are needed to address the high stress levels of nursing students. In order to decrease the perceived stress of nursing students, Jimenez, et al. (2010) recommended better guidance be provided to students by the clinical teachers and that clinical teachers recognize stressors in clinical. Care of these students is explored through the framework of the importance of caring and relationships. Beyond this initial understanding, a connection between nursing student stress, need for care, and peer mentoring will be described. Wagner (2005) discussed relationships and caring in mentoring, sharing "…a caring relationship of trust and commitment, and of compassion and competence…" (p. 89) is important. Additionally, "to mentor and be mentored in a caring way" creates positive outcomes (Wagner, 2005, p. 89). Relationships and relationship building, as well as being committed to another person is important in mentoring (Wagner & Seymour, 2007).

Higher education and the education of nursing students is in part about building a culture of care. In discussion of nursing education and caring, Watson (1998) stated "Knowledgeable caring is the highest form of commitment…" (pp. 424-425) and education of the whole person is important. In order for students to care for patients, they must experience care throughout their educational process. Watson's (2008) *Philosophy of Science and Caring* incorporated this philosophy of care of self and others most specifically directed at nurses caring for others. Watson described ten Caritas Processes to be used in demonstrating this care. Prior to understanding the Caritas Processes, one must understand Watson's (2008) *Basic Assumptions of*

Caring Science. The first of the two Basic Assumptions of Caring Science that may be applied to the peer mentoring process and the peer mentoring relationship is *caring responses.* "Caring responses accept a person not only as he or she is now but as what he or she may become/is Becoming" (p. 17). The second is *caring relationship* which "is one that invites emergence of human spirit, opening to authentic potential, being authentically present, allowing the person to explore options-choosing the best action for self for 'being-in-right relation' at any given point in time" (p. 17).

Caritas processes. *Developing and Sustaining a Helping-Trusting Caring Relationship* is Watson's (2008) fourth Caritas Process. With its emphasis on human connection, relationship quality, listening, and being present, it becomes one of the two Caritas Processes which is the focus of this study's theoretical framework. As a theoretical framework for this study, Watson's (2008) philosophy is directed toward the care of the student, specifically utilizing the *Developing and Sustaining a Helping-Trusting Caring Relationship* Caritas Process. Because Caritas Process seven, *Engage in Genuine Teaching-Learning Experience That Attends to Unity of Being and Subjective Meaning-Attempting to Stay Within the Other's Frame of Reference* includes in its focus trusting relationships and seeing things from another's frame of reference, it becomes an additional foundation for this study's theoretical framework. This Caritas Process will also be utilized to add support to the relationship piece of peer mentoring.

Developing and Sustaining a Helping-Trusting Caring Relationship Caritas Process.

As part of Caritas Process Four, Watson spoke to the Caritas/Caring Relationship theoretical framework to lay the groundwork for understanding the necessity for a caring relationship in successful peer mentoring. Peer mentoring is about caring for each other, which depends on relationships. Watson (2008) utilized information from the Pew-Fetzer Report

(Tresolini & the Pew-Fetzer Task Force, 1994) to introduce the importance of the Caritas Process, *Developing and Sustaining a Helping-Trusting Caring Relationship*. The report described the importance of relationships in healthcare.

> The central task of health professions education-in nursing, medicine, dentistry, public health, pharmacy, psychology, social work, and the allied health professions-must be to help students, faculty, and practitioners learn how to form caring, healing relationships with patients and their communities, with each other, and with themselves. The knowledge, skills, and values necessary for effective relationships with patients, communities, and other practitioners…must become the focus of educational programs. (p. 39)

Additionally, Watson's (2008) *Developing and Sustaining a Helping-Trusting Caring Relationship* Caritas Process requires "authentic listening and hearing, being present for another in the moment" (p. 72) and maintains "the *quality* of the relationship with another person is one of the most significant elements in determining helping effectiveness" (p. 73). This relates closely to the peer mentoring relationship and peer mentoring process and the need for caring relationships within peer mentoring. Watson shared that hearing "another person's story" (p. 74) can be very powerful. This speaks to the positive outcomes mentees describe in having another person hear what they are experiencing. Staying within another's frame of reference is another essential aspect of the caring relationship Watson (2008) described. This is a piece peer mentoring can provide as a mentor is close to the experience the mentee is experiencing currently and can see this from his/her perspective.

Engage in Genuine Teaching-Learning Experience That Attends to Unity of Being and Subjective Meaning-Attempting to Stay Within the Other's Frame of Reference Caritas Process.

This Caritas Process provides an additional lens through which to view peer mentoring. Within this Caritas Process, Watson (2008) also described the importance of relationships.

Honoring the entire person and having trusting and meaningful relationships is involved in learning. In order to demonstrate this process, one must be open to another's feelings, understanding, and learning readiness (Watson, 2008). Additional components of this Caritas Process include helping another to make decisions, problem solve, and create constructive solutions and actions (Watson, 2008). Finally, staying within another's frame of reference is an essential piece of this Caritas Process (Watson, 2008).

Caring and Relationships

Both Caritas Processes (Watson, 2008) described above as well as a piece of Watson's transpersonal caring science, "A transpersonal caring relationship, connotes a spirit to spirit unitary connection within a caring moment…" (Watson & Smith, 2002, p. 458) can be related to the importance of relationships within the peer mentoring process. For example, Sims-Giddens, et al. (2010) provided findings about the importance of the relationship between mentor and mentee which should include commitment, initiative, cooperation, and communication.

Peer Mentoring

This caring may be demonstrated through peer mentoring and the relationship between mentors and mentees. Peer mentoring is a process by which a student provides support and encouragement to a less experienced student (Washington University, 2017) in which the mentor serves as a role model (Demir, et al., 2014; Dennison, 2010) for the mentee who must be motivated to be successful in his or her educational endeavors as well as being open to learning from the mentor (Li, et al., 2011; McIntosh, et al., 2014). The mentor-mentee relationship must be mutually respectful (Li, et al., 2011; McIntosh, et al., 2014; Waisman Center, 2006; Washington University in St. Louis web site, 2017). Within a peer mentoring concept analysis, a

strong interpersonal relationship as well as emotional support were essential pieces of a model case of peer mentoring (Mijares & Bond, 2013).

Peer mentoring often includes the characteristics of reciprocal caring and learning. "Support for each other became possible through… peer mentoring relationships" (Glass & Walter, 2000, p. 159). Barker (2006) studied mentoring of advanced practice nurses and found skillful communication, mutual commitment on the part of the mentor and mentee, and being supportive of each other's growth were important in mentoring relationships. Mentoring was described as a "dynamic and complex relationship that can support growth, increase synergy, and develop ways to succeed…" (Barker, 2006, p. 56). In a study of secondary education students, researchers found peer mentors and their mentees felt a sense of connection (James, Smith, & Radford, 2014). A mentoring project's report stated, "The mentoring process is socially constructed, and the relationship between the participants is tailored to supporting mentees to develop identities which enable them to "'fit in' to University life" (Christie, 2014, p. 963), illustrating the importance of relationships in mentoring.

A concept analysis of peer mentoring described the antecedents of peer mentoring to include a seasoned mentor, a novice protégé, training, and cultural awareness (Mijares & Bond, 2013). Criteria of peer mentoring included sharing knowledge and experience, providing emotional support, role-modeling, and guiding (Mijares & Bond, 2013). Finally, the consequences of peer mentoring were increased self-confidence, maximized learning, increased scholastic and career satisfaction, and the promotion of personal and professional growth (Mijares & Bond, 2013).

In a nursing peer mentoring program, mentees described many positive aspects of their mentors (Lombardo, et al., 2017). The mentees felt more secure because of the support they

received from their mentors. This support was provided as mentors listened to their mentees and talked with them about academic and personal challenges. They shared that their mentors provided information, guidance, and referred them to helpful resources, which assisted them in reducing their feelings of uncertainty and academic stress. Mentees in this mentoring program also stated their mentors provided helpful information about courses, professors and their teaching styles, and ideas about how to study and achieve goals. Mentors also individualized their conversations based on mentees' interests and needs (Lombardo, et al., 2017). Additionally, the mentees felt they could access their mentors. Mentees trusted information given to them by their mentors because they felt their mentors understood what it was like to be a nursing student and had been through similar situations. Because of this relatability, and the ability to experience a relationship that was "nonthreatening and nonhierarchical", mentees often preferred having students, rather than their professors or other nurses, as mentors (Lombardo, et al., 2017, p. 228).

McIntosh, et al. (2014) found that support from mentors in the area of acquiring clinical skills was ranked highest. Areas in which mentees also needed support included personal issues, knowledge and learning. Mentors noted that students supporting each other was essential. In nursing education, faculty can play a role in decreasing students' stress, particularly in clinical experiences, by utilizing peer mentors (Moscaritolo, 2009). Williams and Palmer (2013) also reported that anxiety nursing students experience before and during clinical may negatively affect their learning and that peer mentoring may help students to cope with their anxiety. Sophomore nursing students who served as mentors to freshman nursing students, as well as those being mentored reported increased student interaction was a benefit of peer mentoring (Sprengel & Job, 2004).

Mentoring involves emotional support, role-modeling, guidance, and sharing knowledge and experience (Mijares & Bond, 2013). Sims-Giddens, et al. (2010) found support and encouragement was gained from the peer mentoring relationship and students recognized together they could accomplish more than as individuals. Learning with peers was found to be emotionally supportive and a strategy to prevent social isolation (Christiansen & Bell, 2010). These researchers also uncovered the following statements from a student regarding peer learning: "'Learning with a peer is not always about skills but sometimes just saying, look it will be alright, things will get better' and 'students understand what is important, they understand that all those little things are really big things'" (Christiansen & Bell, 2010, p. 807). Students provided emotional support for each other through peer learning. As a result of being part of the peer mentoring program for nursing students, participants in one study shared that they met new people and became more involved in social activities for nursing students because their mentors introduced them to those opportunities. This improved the mentees' social network and sense of community within nursing (Lombardo, et al., 2017).

Conclusions made by Li, et al. (2011) included the idea that students' thinking process and academic knowledge might be improved by peer mentoring and that it is important for the clinical teacher to support the mentor and the mentee. Kelly and McAllister (2013) concluded peer support and informal conversations without hierarchy were beneficial to nursing students and new graduates. Learning, as well as student engagement, was improved in psychology students in their first undergraduate year through the use of peer mentoring (Chester, Burton, Xenos, & Elgar, 2013). Specifically, psychology students had an increase in strategic learning, and a decrease in surface learning. Additionally, they experienced an increase in "connectedness, culture, and resourcefulness" (Chester, et al., p. 35), which were areas of the peer mentoring

program's focus. Further study results reported 70% of students enjoyed the peer mentoring program, 59% reported their academic work had been positively influenced by the program, and 61% stated the program had a positive effect on their sense of belonging.

When peer mentoring was utilized during the first three weeks of first-semester nursing students, those who received peer mentoring experienced less situation-specific anxiety than those who did not receive peer mentoring (Walker & Verklan, 2016). Specifically in clinical, this study found that the students who experienced peer mentoring were less anxious when they provided care to patients and utilized equipment (Walker & Verklan, 2016). Additionally, preparation before a clinical experience improved for sophomore nursing students who served as mentors, as well as the freshmen nursing students they mentored. Both groups wanted to be seen as being competent and knowledgeable (Sprengel & Job, 2004). For first-year nursing students at the end of their first semester, 69% reported that upon starting the nursing program, they would have been interested in having a mentor and 80% reported they believed their anxiety would have been reduced if they had a mentor (Gardiner, et al., 2014). One study found that those who had a peer mentor had higher test scores. The effectiveness of this peer mentoring program found significantly higher test scores were achieved by students who had a mentor compared to students who did not have a mentor (Robinson & Niemer, 2010).

In another study, while students did not serve fully as mentors, they did provide feedback to other students. Regarding peer to peer feedback, students valued the learning experience, but also had concerns about giving feedback to peers. Faculty instruction on how to provide feedback to peers was helpful. Peer observation and constructive feedback increased students' awareness of their needs (Cushing, Abbott, Lothian, Hall, & Westwood, 2011). This information provides an implication for peer mentoring. Because students valued peers' feedback and those

giving feedback found it helpful to have instruction from faculty on how to provide such feedback, these pieces could enhance successful peer mentoring. When reciprocal peer teaching was included in a Physical Therapy's first-year course, researchers found that communication, teamwork, and increased skills resulted (Seenan, Shanmugam, & Stewart, 2016).

While many positive aspects of peer mentoring have been discussed, peer mentoring is not without challenges. A challenge for peer mentoring was found when nursing students mentored less experienced nursing students in a clinical experience on a hospital unit. Because the number of students and faculty were doubled, staff commented how crowded the clinical unit was. However, neither patients nor family members reported the numbers as an issue. Faculty also believed the number of individuals on the unit did not seem to be excessive (Sprengel & Job, 2004).

An additional struggle for peer mentoring may be inadequate match between mentors and mentees. A poor match between mentor and mentee, poor communication, and lack of expertise were found to be a negative side of the mentoring relationship (Barker, 2006). Nursing students whose mentors they perceived as being shy or quiet felt they did not have as positive of a mentoring experience compared to others in their class (Sprengel & Job, 2004). In this same mentoring study, several mentors reported their mentees did not have initiative or motivation (Sprengel & Job, 2004). To deal with some of these issues, Barker (2006) noted it was important to identify the relationship's objectives and expectations.

Peer Mentoring Program

A variety of peer mentoring programs have been described in the literature. When studying peer mentoring programs, Dorsey and Baker (2004) considered whether the programs

were formal or informal, whether mentors were chosen by mentees or assigned, the match between mentor and mentee, and mentor to mentee ratio.

Peer mentoring may decrease stress and increase retention, particularly in first semester students. Two departments of psychology at two different universities were studied; one had a peer mentoring program and the other did not. Peer mentoring was found to be a moderating factor on "the impact of transitional stress on perceived social support, self esteem and positive affect…" (Collings, Swanson, & Watkins, 2014, p. 937). Ten weeks into the first semester, students at the university without a peer mentoring program were four times more likely than the students at the other university to want to leave the university (Collings, et al., 2014).

Specific areas of focus for a peer mentoring program of first year psychology students in their undergraduate program were *connectedness* in which students interacted with peers in small groups, *culture* in which students focused on academic integrity, ethics, and critical thinking (Chester, et al., 2013). Also, in this mentoring program, mentors assisted mentees with logistics, for instance, locating resources such as the library, as well as providing information about policies and procedures (Chester, et al., 2013).

One study included a peer mentoring program for nursing students which was based on Maslow's Hierarchy of basic needs. Items peer mentors assisted mentees with fit into the Maslow's categories of needs. For example, mentors helped mentees with coping with stress, problem solving, and personality trait awareness, which all fit under self-actualization needs (Demir, et al., 2014). This study recommended peer mentoring be utilized due to study results which included that mentees in the program had increased internal locus of control, moving from external locus of control (Demir, et al., 2014). Additionally, the students increased their efforts to seek out social support, and to cope with stress actively. They were more optimistic about

their approach to stress at the end of the peer mentoring program. Mentees in the program also reported many additional benefits, and the majority reported they found the program to be useful. They largely agreed the mentor's advice was useful, and that the mentor guided the mentee to solve problems, listened attentively, and was motivating, sincere, and supportive. Many mentees, 87.7%, either agreed or partly agreed they developed a "strong relation with their mentors" (Demir, et al., 2014, p. 257) and 78.5% either agreed or partly agreed "that their mentors became role models for them" (Demir, et al., 2014, p. 257).

Participants in a peer mentoring program for nursing students shared that fit between peer mentors and mentees was important (Lombardo, et al., 2017). These students stated that when similarities existed in "age, gender, country of origin, background in education, language, personality, interests, career goals, role beliefs, preference for method of communication, and scheduling" (Lombardo, et al., 2017, p. 229), the relationship between mentors and mentees grew. Participants in this peer mentoring program also shared that they preferred the lack of "strict guidelines on mentoring relationships" (Lombardo, et al., 2017, p. 229). They stated it was important for mentors and mentees to decide how to interact based on their needs and priorities, and this decreased feelings of pressure. They did appreciate having their roles and responsibilities clarified (Lombardo, et al., 2017).

Interaction between mentors and mentees was also seen as important in a study of a peer mentoring program involving third-year nursing students being mentored by postgraduate students (Botma, Hurter, & Kotze, 2013). Researchers recommended nursing schools select appropriate mentors, ones that fit the profile of what would make a good mentor (Botma, et al., 2013). They also stressed the importance of face-to-face orientation for mentors and mentees (Botma, et al., 2013). The quality of the mentor/mentee relationship, as well as the amount of

contact between them has been reported as important related to mentee outcomes (Phinney, Torres Campos, Padilla Kallemeyn, & Chami, 2011). When mentor-mentee pairs in a peer mentoring program at Eastern Michigan University were ineffective, reassignments in the pairing was made when possible (Gardiner, et al., 2014).

Additional findings regarding maximizing the success of a nursing peer mentoring program were reported by Botma, et al. (2013). The researchers recommended nursing schools place an emphasis on monitoring the interactions between mentors and mentees and the development of mentors, to include feedback about their mentoring skills. Regarding feedback, the mentors reported they wanted to know how well they were serving in their mentoring role and if mentees learned anything from them (Botma, et al., 2013). The mentors also shared they thought meeting ahead of time in person, rather than by telephone was preferred. They believed an orientation meeting including personal introductions was important. Also, having mentors reflect on their learning during the peer mentoring process was seen as beneficial (Botma, et al., 2013). The study also recommended that structure and process guidelines be available for the peer mentoring program and that mentors and mentees be oriented to these. Finally, Botma, et al. (2013) recommended open communication between mentors and mentees and mentors being given opportunities to develop their mentoring skills.

One of the focuses of a peer mentoring program for nursing students was senior students serving as mentors who could give students in other levels of nursing personalized attention. They were not expected to be able to answer every question but rather to seek out needed resources, an important skill in the profession of nursing (Dennison, 2010).

A peer mentoring program at Washington University (Graduate, 2017) exists to help graduate students cope with feeling of inadequacy, as well as lack of support. The program is

designed to provide a support system for such students. Important components of this peer mentoring program include commitment, availability, and confidentiality on the part of mentors (Graduate, 2017). Regarding commitment, mentors are asked to serve at least one year. Serving for two years is preferred because during their second year mentors are able to support new mentors. Mentors are asked to be available in different ways such as telephone and email during "reasonable hours" (Graduate, 2017, p. 3). Within Washington University's peer mentoring program, while most issues remain confidential between mentor and mentee, if a situation occurs in which outside consultation is needed, the mentor should discuss this with the mentee, and the mentee determines whether or not the mentor may share information with those being consulted. Anytime self-harm or harm to others occurred or may occur, or if any information about sexual harassment, sexual violence, or discriminatory harassment has been received, the mentor is obligated to report this (Graduate, 2017).

Additionally, Washington University provides several tips for creating a peer mentoring program that is successful (Graduate, 2017). Starting small and taking on one project at a time is recommended. Additional tips include clarifying goals of the program such as whether it is meant to address academic support, social support, or both, as well as clarifying expectations with mentors early in the program. Mentor diversity is an additional recommendation for creating a successful program as it provides mentees with "access to people (with whom) they feel comfortable" (Graduate, 2017, p. 5). This program also values and recommends building administrator, faculty, and staff support as well as support from other student organizations (Graduate, 2017).

Another peer mentoring program was developed at Eastern Michigan University which was based on relationships. This mentoring program is called the Student Nurses Association

Peer Support Services Program (Gardiner, et al., 2014). In this program, academically successful upper level nursing students serve as peer mentors for first year nursing students. Mentors and mentees sign a contract stating they will work together for one semester. The contract includes information regarding communication expectations. Mentors attend a one day training session and are not expected to serve as tutors. Because the program was created to provide first-year nursing students with psychosocial support, mentors utilize their own experiences as nursing students to provide advice for students (Gardiner, et al., 2014). They answer questions and provide workshops, all aimed at relieving mentees' stress experienced due to being nursing students. Social outings sponsored by the peer support program are offered as a way to reduce mentees' anxiety and stress. To help students with content review and exam preparation, the program provides trivia nights and "mock clinical settings" (Gardiner, et al., 2014, p. 3). While the program is primarily student run, faculty lend support by providing mentors with advice on how they might support mentees, and topic ideas that might be beneficial for mentors and mentees. For topics beyond mentors' skills, faculty also provided mentees with suggestions (Gardiner, et al., 2014).

An additional peer mentoring program involving senior nursing students serving as mentors to sophomore nursing students who were in their second-semester and experiencing their first clinical experience focused the mentors' roles on practicing supervision, delegation, evaluation, coaching, teaching, and supporting the mentees (Ford, 2015). The senior students had been mentees when they were sophomores and prior to serving as mentors, they "were required to review basic skills, teaching-learning principles and therapeutic communication" (Ford, 2015, p. S109). For these mentors, responsibilities included initiating communication with their mentees and socializing mentees to the clinical setting, assisting the students in

improving their confidence regarding basic nursing skills and therapeutic communication, identifying any potential issues regarding nursing practice or safety, and providing feedback to mentees. Sophomore nursing students were expected to consult with faculty if there were any problems (Ford, 2015). Challenges regarding expansion of the nursing peer mentoring program were reported by participants in one study, including applicant numbers and possibly having a lack of resources such as physical space, funds, and personnel such as a person who was dedicated to be the peer mentoring program coordinator (Lombardo, et al., 2017).

Peer Mentor

In order for peer mentoring to occur and a peer mentoring program to exist, a peer mentor must be in place. "A peer mentor is another student who can serve as a resource, a helping hand, a sounding board, and a referral service. The job of peer mentors is to provide support, encouragement, and information to students…" (Washington University, 2017, p. 1). As a resource person, a mentor can direct other students to the appropriate person to deal with concerns. The mentor is not expected to have all of the answers but rather be able to be aware of services and be familiar with more knowledgeable people who may be able to help (Graduate, 2017). Having someone, a mentor, who has experience in the same academic program as a mentee may serve as a personal support and professional support for their mentees (Washington University, 2017, p. 1).

Additionally, mentors should facilitate connections (Graduate, 2017). Mentors must be aware of their roles and responsibilities regarding their support of mentees (McIntosh, et al., 2014). In McIntosh, et al.'s (2014) study, mentors stated being aware of their role included supporting students' learning, having knowledge and experience, and providing the mentee with their time, and routine engagement.

Students who completed their third year of nursing school and were in a clinical experience with nurse mentors shared that regarding interpersonal relationships between mentors and mentees, communication skills were the most important attribute of effective mentors, and they valued their mentors' attention, care, and empathy (Elcigil & Sari, 2008). The mentees in this study also appreciated evaluation and feedback from their mentors that was constructive, positive, motivational, and not critical (Elcigil & Sari, 2008). They felt motivated by positive feedback and discouraged by negative feedback. Receiving feedback during clinical instead of after clinical, as well as receiving the feedback in private instead of in front of other nurses or patients was important to the mentees (Elcigil & Sari, 2008).

In a peer mentoring program of third-year undergraduate nursing students, mentors were encouraged to be empathetic and enthusiastic (Botma, et al., 2013). In a peer mentoring program in which senior nursing students mentored other nursing students, mentors served as role models and resources, aided students in practicing skills, and with critical thinking. They also supported an "open, comfortable learning environment" (Dennison, 2010, p. 340). Mentees gave positive feedback about the nursing mentors in this peer mentoring program (Dennison, 2010).

Students placed value on their preceptors being friendly (Kelly & McAllister, 2013) and patient (Elcigil & Sari, 2008). In one peer mentoring program, mentees shared that their mentors were supportive, sincere, listened, were motivating, and guided the mentees to solve their own problems (Demir, et al., 2014). Stimulating critical thinking was also seen as an important role of the mentor (Botma, et al., 2013).

Advantages/Benefits of Peer Mentoring for the Peer Mentor

Increased confidence. A benefit of peer mentoring for the mentors was increased confidence in their skills and knowledge (Christiansen & Bell, 2010). In a peer mentoring

program in which senior nursing students mentored other levels of students, mentors reported their confidence in clinical skills, as well as confidence with teaching skills and leadership improved (Dennison, 2010). Senior nursing students who helped first year nursing students with learning experienced benefits. They found they increased their confidence in knowledge and skills and they had more knowledge than they realized (Christiansen & Bell, 2010). Sophomore nursing students who served as mentors to freshman nursing students stated that following the peer mentoring experience, their confidence improved and their learning was reinforced (Sprengel & Job, 2004). Sophomore nursing students who mentored freshman nursing students reported decreased anxiety and a clinical experience that was less stressful as a benefit of mentoring (Sprengel & Job, 2004). Yates, Cunningham, Moyle, and Wollin (1997) also reported that students who served as mentors experienced increased self-confidence.

Improved self-esteem and sense of contributing. Christiansen and Bell (2010) concluded peer learning had benefits for those in the peer learning partnership, including increased self-esteem, and nurturing relationships, and that formalizing peer relationships was important. Foster (2014) shared that mentoring a less experienced person led to positive outcomes for the mentor. One mentor stated, "I felt I had contributed to the students' learning" (Foster, 2014, p. 196). In a study with secondary students, peer mentors felt the peer mentoring experience was worthwhile once they saw how the peer mentees benefitted (James, et al., 2014).

Improved knowledge and skills. Mentors have reported their own clinical skills improved as well as their leadership skills (Yates, et al., 1997). More effective clinical learning strategies were also benefits of being a peer mentor (Yates, et al., 1997). When seniors served as mentors to other levels of nursing students, they learned from them, were challenged by questions, and realized how much they already knew and how much they still had to learn

(Dennison, 2010). Peer mentors identified that improving their own communication skills and knowledge were benefits of mentoring (Moser, et al., 2015). Improved communication skills, as well as knowledge and leadership skills were reported following a peer mentoring experience involving senior nursing students serving as mentors to sophomore nursing students during a clinical experience (Ford, 2015).

Disadvantages/Challenges of Peer Mentoring for the Peer Mentor

Peer mentoring is not without its disadvantages for peer mentors. Li, et al. (2011) reported that some peer mentors in the clinical setting felt mentees tried to get an "'easy answer'" (p. 207) from them and they felt stressed by having their own responsibilities and feeling as though they did not have enough time for their mentee. Mentors reported having to help their mentees increased their load and led to stress when their mentees learned differently than they did.

Peer Mentee

In addition to knowledge about peer mentors, much research contributes to the knowledge about peer mentoring as it relates to the mentee, including attributes and positive outcomes of peer mentoring. Recommended attributes of the peer mentee include that the mentee must be eager to learn, committed, and motivated (McIntosh, et al., 2014). One positive outcome of peer mentoring was that nursing students in Lombardo, et al.'s (2017) study who were mentees in a peer mentoring program then gave back by serving as mentors themselves. Additionally, one sophomore mentor shared that having a mentor as a freshman would have been helpful (Sprengel & Job, 2004).

Advantages/Benefits of Peer Mentoring for the Peer Mentee

Improved academic performance, improved progression, less failure. Many benefits of peer mentoring for the mentee have been reported. Nursing students who participated in a peer mentoring program stated they learned improved time management skills and study habits through peer mentoring, both of which improved their academic performance (Lombardo, et al., 2017). Pharmacy students who were part of a learning community involving mentoring experienced less failure and improved progression (Moser, et al., 2015). These students provided consistently positive comments about the help they received from their peer mentors.

Increased confidence and self-esteem. Mentees have experienced increased confidence (Christiansen & Bell, 2010; McIntosh, et al., 2014) from having a peer mentor. Kelly and McAllister (2013) found that participants reported having a preceptor increased their confidence. "Students…benefit from informal conversations that can be shared without hierarchy…and from the support that could be made available to them through their peers" (Kelly & McAllister, 2013, p. 175). Mentees shared that having a mentor made them feel more at ease and more confident (Sprengel & Job, 2004) and that they experienced enhanced self-esteem (Christiansen & Bell, 2010). Beginning nursing students who were assigned senior nursing students as mentors during a clinical experience expressed it was reassuring to have someone working with them, which decreased anxiety, and that they felt more self-confident (Giordana & Wedin, 2010). Increased self-confidence and self-awareness were also reported as benefits of a nursing student peer mentoring program (Demir, et al., 2014).

Emotional support. Mentees have experienced emotional support and less social isolation (Christiansen & Bell, 2010). Foster (2014) stated, "The students stressed how the 'safety net' of working with an experienced peer…was important for their learning" (p. 196).

Psychosocial factors that affect academic performance were found to be improved as well as mentees experiencing decreased depression and stress in one study. Also, mentees, when compared with those who did not have mentors, were less likely to be identified as students who were at risk for having poor academic outcomes (Phinney, et al., 2011).

Students in Sims-Giddens, et al.'s (2010) study found that students who worked together accomplished more, and that support and encouragement were results of peer mentoring. Another study found peer teachers put a lot of effort into teaching peers and that peer learners felt comfortable asking questions of their peer teacher if they needed more information. This may not be the case when students have questions of faculty. Because of the imbalanced roles, students may feel insecure asking faculty questions (Ytreberg & Aars, 2015). A freshman nursing student described feeling "'more at ease'" (Sprengel & Job, 2004, p. 248) when being mentored by a sophomore nursing student at clinical. Nursing students who had a peer mentor reported that their mentor played a role in their mental health. They felt the atmosphere with their mentors was relaxed and safe and they felt supported, which decreased stress. One participant shared that having a mentor provided someone with whom he/she could talk (Lombardo, et al., 2017).

Decreased stress. Following a peer leadership course in which junior and senior students served as peer leaders to sophomores who were enrolled in a nursing fundamentals laboratory course, juniors and seniors observed, coached, and reinforced sophomore students' learning. While learning these fundamental skills, the sophomore nursing students experienced decreased stress levels (Bensfield, Solari-Twadell, & Sommer, 2008). A participant in Lombardo, et al.'s (2017) study reported the experience of having a peer mentor in a peer mentorship program served to decrease stress experienced because of clinical; and, therefore,

performance was also improved. This student stated "'I would…wake up at three am, then at 4:00 am, then at 5:00 am.... [Mentorship] really helped me decrease my stress…which…made me perform better.'" (Lombardo, et al., 2017, p. 228). Freshman nursing students who were mentored by sophomore nursing students reported less anxiety, less confusion, and a clinical experience that was less stressful due to having a peer mentor in clinical (Sprengel & Job, 2004).

The relationships between the concepts of stress, peer mentor, peer mentee, and the caring theoretical framework are illustrated in Figure 1. Peer mentors need to be supportive and encouraging (Washington University, 2017). Being supportive, as an important part of the peer mentor's role, is identified by Demir, et al. (2014) and McIntosh, et al. (2014). Demonstrating certain attributes is also important for the peer mentee. For example, the mentee must be open to learning from the mentor (Li, et al., 2011; McIntosh, et al., 2014) and enthusiastic (Botma, et al., 2013). Peer mentees experience various types of stress including academic, clinical, and external stressors (Jimenez, et al., 2010) and may benefit from peer mentoring if the peer mentoring relationship is mutually respectful (Li, et al., 2011; McIntosh, et al., 2014; Waisman Center, 2006; Washington University in St. Louis web site, 2017) and includes communication (Barker, 2006; Botma, et al., 2013; Elcigil & Sari, 2008; Lombardo, et al., 2017; Sims-Giddens, et al., 2010). Watson's (2008) Theory of Caring is the theoretical framework which describes the importance of caring in relationships, and in this study is applied to the peer mentoring relationship.

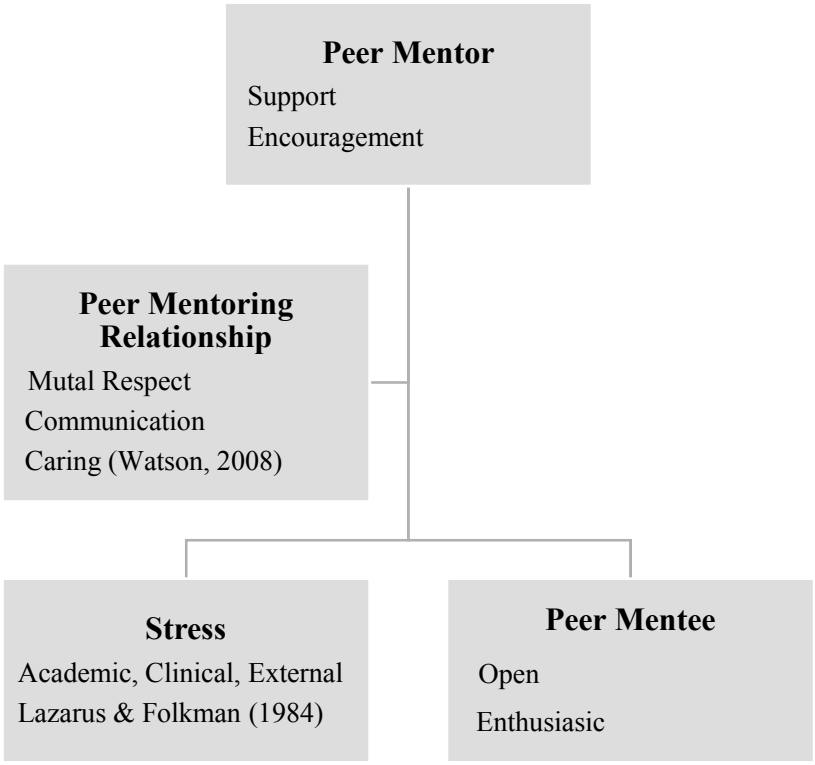

Figure 1. Relationships between stress, peer mentor, peer mentee concepts, and the caring theoretical framework. The peer mentor must be supportive and encouraging to the peer mentee. The peer mentee experiences academic, clinical, and external stress and should be open and enthusiastic to the peer mentor. Mutual respect and communication are important aspects of the peer mentoring relationship which must be based in caring.

Disadvantages/Challenges of Peer Mentoring for the Peer Mentee

In addition to the many advantages of peer mentoring for the peer mentee, disadvantages and challenges also exist. Pharmacy students who were part of learning communities guided by peer mentors reported they were concerned about the "mandatory attendance policy" (Moser, et al., p. 5). Worrying about bothering their mentors was a concern of mentees in another study (Li, et al., 2011). Finally, in a study of retention strategies for minority nursing students, faculty respondents felt peer mentoring was not very effective or well used (Baker, 2010).

Summary

In summary, the review of literature shares insight on the stressors students experience in the area of academics as well as the effects of peer mentoring. Studying the stress nursing students experience and the effects peer mentoring may have on those stress levels may benefit from focusing on these areas through the theoretical frameworks of Watson and Lazarus. Peer mentoring stresses the importance of relationships, specifically those of the peer mentee and mentor (Sims-Giddens, et al., 2010), which compliments the emphasis of Watson's Theory of Caring, which is caring relationships (Watson, 2008). Nursing and teaching are about caring, and as faculty seek ways to decrease the stress of nursing students, they may look to peer mentoring. The development of a peer mentoring program may be one way to decrease the stress levels of nursing students taking their first nursing course.

Chapter III: Methods and Procedures

The purpose of this non-equivalent control group design, quantitative quasi-experimental study with a qualitative component is to compare the stress levels of nursing students who have a peer mentor to stress levels of nursing students who do not have a peer mentor while taking an Introduction to Nursing Course in a Bachelor of Science in Nursing (BSN) program at a small, Midwestern, private health professions college. This chapter will describe the study's research design, population, sampling, and setting. Additionally, the study's data gathering tools and procedures will be discussed.

Research Design

Basic characteristics of quantitative research design include the utilization of numbers (Creswell, 2014) and the reporting of results as numbers, quantities, and statistics (Patten, 2014). Instruments are used to collect data and test variables, and statistical procedures are utilized to analyze data, which is obtained through these instruments (Creswell, 2014). These measures/instruments include objective formats that can produce numbers (Patten, 2014). In addition, objectivity is important (Patten, 2014). Regarding samples and participants, quantitative design prefers large samples/numbers of participants, random samples over purposive samples, and random selection (Patten, 2014).

Qualitative research, in contrast, utilizes "trends and/or themes" (p. 19) rather than statistics, in the reporting of results (Patten, 2014). Additionally, qualitative research uses words instead of numbers, as well as open-ended questions in search of meaning (Creswell, 2014). In this case, the researcher "seeks to establish the meaning of a phenomenon from the views of participants" (Creswell, 2014, p. 19). Creswell (2013) also states that "the voices of participants" (p. 44) must be included in the results reporting of a qualitative research study.

In selection of a research design, it is important to consider the idea that "Research designs are types of inquiry within …approaches that provide specific direction for procedures in a research design" (Creswell, 2014, p. 12). In order to explain the rationale of the selection of a quasi-experimental quantitative research design with a qualitative component for this study, the research problem, purpose of the study, and research questions were considered.

Research Problem

Baccalaureate nursing students experience stress that may hinder their learning, and it is important nursing educators assist in decreasing this stress in order to improve student learning (Wallace, et al., 2015). Peer mentoring may be an effective intervention nursing educators may use to decrease nursing students' stress. More research needs to be conducted regarding the effects peer mentoring may have on the stress levels of nursing students (Li, et al., 2011).

Purpose of the Study

The purpose of this non-equivalent control group design, quantitative quasi-experimental study with a qualitative component is to compare the stress levels of nursing students who have a peer mentor to stress levels of nursing students who do not have a peer mentor while taking an Introduction to Nursing Course in a Bachelor of Science in Nursing (BSN) program at a small, Midwestern, private health professions college.

Research Questions

How do stress levels differ in nursing students who have a peer mentor compared to nursing students who do not have a peer mentor while taking an Introduction to Nursing Course in a Bachelor of Science in Nursing (BSN) program at a small, Midwestern, private health professions college?

Subsidiary Research Questions

1. For nursing students who are assigned a peer mentor, how do stress levels differ between the start of the semester and toward the end of the semester?
2. For nursing students without a peer mentor, how do stress levels differ between the start of the semester and toward the end of the semester?

Creswell (2014) states that when studying relationships among variables, quantitative research questions are appropriate, which is applicable to this research study as it examined the relationships between peer mentoring and stress. Quantitative questions are often used in social science research, which also applies to this research study. Additionally, this study was quasi-experimental in nature because a specific treatment (having a peer mentor) was implemented and the effects of that treatment on an outcome (stress levels) were studied. Participants in one group (the experimental group) were assigned peer mentors and participants in the other group (the control group) were not assigned peer mentors. Additionally, this study was a quasi-experimental "Nonequivalent (Pretest and Posttest) Control-Group Design" (Creswell, 2014, p. 172) because a pretest and posttest were administered to participants in the experimental group and the control group (See Table 1). Outcomes were scored for both groups. This research study was quasi-experimental because of nonrandom assignment of participants to each group (Creswell, 2014; Patten, 2014). Because random assignment to the two groups was not possible, this study was not a true experiment.

Table 1

Quasi-Experimental Nonequivalent Control Group Design (Patten, 2014)

O	X	O
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O		O

Note. The top row represents the experimental group, the bottom row represents the control group, "X" represents the experimental variable (which in this study is having a peer mentor), and "O" represents measurement recorded on an instrument (in this study the instrument is the Perceive Stress Scale). The horizontal dotted line separating the two groups indicates that a nonrandom assignment exists.

In order to provide for "equating" the groups in the nonrandom assignment, the participants were matched. In doing so, control for variables that may "influence the outcome" (Creswell, 2014, p. 168) existed. To accomplish matching, the pretest was first administered to all participants. Next, participants were assigned to groups based on their scores. Through this design, the experimental group and the control group each had the same number of participants who scored high, medium and low on the pretest. Codes were assigned to each student so their data could be tracked. This was done by a faculty member not connected to the research so the primary researcher did not know participants' individual data. For this research study, questions were asked using an instrument and statistical analysis and interpretation was performed. All of these are characteristics of quantitative methods (Creswell, 2014).

In addition to being a non-equivalent control group design, quantitative quasi-experimental study, this research includes a qualitative component. As the peer mentoring program progressed, mentors provided the peer mentoring program coordinator with feedback via email regarding the peer mentoring process as well as positive aspects of the peer mentoring program for the mentor. Because of this, the researcher added two open-ended questions to a questionnaire for mentees. The questions aimed to gain information about how to improve the

peer mentoring program in the future. In this way the researcher was searching for "participants' meanings" (Creswell, 2014, p. 186) in an attempt to learn "the meaning that the participants hold" about peer mentoring (Creswell, 2014, p. 186). The specifics of methods, instruments, and statistical analysis will be discussed later in this chapter.

Identification of Population and Sample

The population for this study was Bachelor of Science in Nursing students, and the target population was Bachelor of Science in Nursing Students at the college where the study was conducted. The sample used specifically for this study was all nursing students enrolled in an Introduction to Nursing Course in a Bachelor of Science in Nursing (BSN) program at a small, Midwestern, private health professions college. Nursing students enrolled in an Introduction to Nursing Course were included as the sample because the entire group of students enrolled in the course who met inclusion criteria and did not demonstrate any characteristics of the exclusion criteria were included in the study.

This study's sample was one of convenience as participant selection was nonrandom (Creswell, 2014) and based on proximity and ease-of access (Urdan, 2010). This type of sampling is also called an accidental sample (Patten, 2014). Because increasing sample size is one way to decrease sampling error (Patten, 2014), all of the students enrolled in the course who met the inclusion criteria were eligible to participate in the study.

Inclusion Criteria

To satisfy inclusion criteria for this study's sample, participants must have met the following descriptions:

- Students must have attended a small, Midwestern, private health professions college.

- Students must have been enrolled in the Introduction to Nursing course in the BSN program.
- Students may or may not have had prior peer mentoring experience.

Exclusion Criteria

Exclusion criteria included the following:

- Students under the age of 19 were excluded from this study.
- Students who had taken the course previously and were repeating the course were not included in the study.
- Students who had taken a nursing course at another college were excluded from the study.
- The study did not include students who were not nursing students or those at large institutions.

Demographics

Fifty-four students in the Introduction to Nursing course agreed to participate in the study and signed the consent form. Two of those participants did not write their names on their pretests and one participant's name was illegible so these students were not included in the study, resulting in 51 participants. Participants' ages ranged from 19 to 46 (M = 24.9). Forty-five (88.2%) participants were female and six (11.8%) were male. Thirty-seven (72.5%) students identified their race/ethnicity as White, four students (7.8%) as Asian, two (3.9%) as Black or African American, and eight (15.7%) as "Other". Thirty-four (66.7%) participants had prior healthcare experience (for example, a job in healthcare or volunteering in healthcare), while seventeen (33.3%) did not. At the time the pretest was administered, 43 (84.3%) participants were employed and eight (15.7%) were not. Employed participants worked five to 40 hours per

week (M = 22.6). Twenty four (47.1%) participants were first-generation college students while 27 (52.9%) were not. Of the 15 (29.4%) participants who were parents, six (11.8%) were single parents.

Description of Setting

The study took place at a small, Midwestern, private health professions college located in a city with a population of 446,970. Additionally, 88% of the city's population have earned a high school degree or higher, and 34.1% or higher held a Bachelor's degree (United States, 2016). Approximately 700 nursing students were enrolled at this college, which was fully accredited, degree granting, and specialized in nursing and healthcare degrees. While this research study focused on nursing students in the BSN program, the college also offered nursing programs such as Masters of Science in Nursing and Doctorate of Nursing Practice.

Data Gathering Tools

The Perceived Stress Scale (PSS) created by Cohen (Cohen, Kamarck, & Mermelstein, 1983) (see Appendix A) was utilized to measure nursing students' stress levels in this study. The PSS has been widely used in the literature. The original scale was obtained from an article written by Cohen, et al. (1983) as well as Cohen's website (Laboratory, 2017). Permission for use of the PSS was not needed because Cohen (Laboratory, 2017) stated on his website that if the PSS was used for educational purposes, no permission was needed. The PSS included easy to understand items that were general, not content specific to any sub-population, and designed to be used by participants in junior high school or higher (Cohen, et al., 1983). The version of the PSS utilized for this research study contained four less items than the original PSS (Cohen, et al., 1983) and has also been widely used in the literature. This scale was chosen because, according to Mind Garden (2017), "The Perceived Stress Scale (PSS) is the most widely used

psychological instrument for measuring the perception of stress. It is a measure of the degree to which situations in one's life are appraised as stressful" (para. 1) which was the focus of this study. Additionally, items on the PSS "assess how unpredictable, uncontrollable, and overloaded respondents find their lives to be" and respondents' "current levels of experienced stress" (Mind Garden, 2017, p. 1). It takes, on average, five to 10 minutes to complete the PSS (Mind Garden, 2017).

The PSS has been widely used to measure students' stress. The following articles related to students' stress utilized the PSS:

- In a study of peer mentoring's impact on students, Collings, et al. (2014) utilized the PSS.
- The PSS was used in a study of college students' perceived stress (Hasel, Abdolhoseini, & Ganji, 2011).
- Junior Baccalaureate nursing students' perceived stress was measured using the PSS (Jameson, 2014).
- Phinney, et al. (2011) studied a mentoring program's outcomes for college freshman. To study the students' stress, the PSS was utilized.
- Pharmacy residents' perceived stress was measured using the PSS (Le & Young, 2017).

Participants answered items on the PSS, which helped answer the primary research question by comparing the stress levels of each group prior to and following the time in which the peer mentoring occurred for the experimental group. The PSS was administered to the experimental and control groups twice- first at the start of the semester and again toward the end of the semester/mid-November. For the subsidiary research questions, the PSS helped to answer how stress levels differed between the start of the semester and toward the end of the semester for the experimental group (nursing students who were assigned a peer mentor) and the control

group (nursing students without a peer mentor). The details of an additional questionnaire created will be discussed in the data gathering procedure section. This questionnaire was added because of information provided to the peer mentoring program coordinator by peer mentors about the peer mentoring experience. Two open-ended questions were included in this questionnaire for the purpose of improving the future peer mentoring program.

Data Gathering Procedure

At the start of the semester, the researcher recruited students who had successfully completed the Introduction to Nursing course and were taking their second or third nursing course, to serve as mentors. This was done in person during the students' class session. Following recruitment of the mentors and at the start of the semester, participants were contacted in person by the researcher during the second class meeting. The research process was described, including the description of the experimental group (students who would be assigned a peer mentor) and the control group (students who would not be assigned a peer mentor). The researcher assured students they were under no obligation to participate in the study, participation was completely optional, and their participation or non-participation would not have any impact on their course grade. Participants were given contact information for the peer mentoring program coordinator who was also this study's primary researcher. The consent process was explained and then the researcher left the classroom.

Next, participants' signed consent (see Appendix B) was obtained by a faculty member outside the Bachelor of Science in Nursing Program. Then this faculty member administered the PSS as a pretest in order to gather the initial data. Having someone who was not the researcher or a nursing program faculty member collect consent forms and administer the PSS was done so participants would not feel pressured to participate in the study and would not feel their

participation or non-participation would have any impact on their grades. Data gathering took place in the Introduction to Nursing Course's designated classroom on the college campus.

Prior to the 10-question PSS, the following participant demographic data was collected:

- Age
- Gender
- Ethnicity
- Previous healthcare experience
- Hours spent working at a job
- First-generation college student
- Previous college experience
- Parent
- Single parent

When collecting and recording demographic data that lends itself to naming something (gender, previous health experience, first-generation college student-yes or no), the nominal scale of measurement is to be used.

Following administration of the pretest, participants were assigned to groups through matching based on their pretest scores (Creswell, 2014), as described previously in the "Research Design" section of this chapter. Next, the peer mentoring process began for the experimental group. Two weeks after administration of the PSS, the experimental group was oriented to the peer mentoring program (see Appendix C) including information from the peer mentoring program materials created by this study's researcher who was also the peer mentoring program coordinator. This was done verbally with all participants in the experimental group.

Additionally, materials including information about the peer mentoring program were provided to the participants both in print copy and electronic version via email.

The peer mentoring program coordinator used the materials to guide the presentation about the peer mentoring program including the program's core values. The first core value was Caring. Individuals involved in the peer mentoring program were meant to be focused on the well-being of each other and to demonstrate this through kindness and mutual support. The second core value was Respect. Individuals involved in the peer mentoring program were to acknowledge that all people have worth and to demonstrate this through honest communication and accepting behaviors.

Additionally, the goals of the peer mentoring program were introduced. The first goal of the peer mentoring program was nursing students taking the Introduction to Nursing course would be able to have a peer mentor to provide support and encouragement. Nursing students who had successfully completed the Introduction to Nursing course would have the opportunity to practice their leadership and communication skills by serving as peer mentors. This was the second goal of the program. The final program goal was that peer mentors and mentees would experience positive mutually beneficial relationships. The definition of peer mentoring and advantages of peer mentoring were shared with participants. Additionally, roles and attributes of both peer mentors and peer mentees were presented and discussed.

Next, the peer mentoring program coordinator shared research and additional information about the peer mentoring relationship. Following this, information was discussed regarding how often mentees should meet with mentors and what to do if questions or issues arose. Students were asked to keep track of times they meet with each other including information about the type of meeting, for example, face-to-face, text, phone, etc. Finally, participants were provided with

information about support services available at the college. Next the peer mentors were oriented by the peer mentoring program coordinator and provided with the same information made available to the peer mentees. Mentors and mentees were then notified by email of their mentee or mentor assignment. Mentors were provided with their mentees' contact information and asked to contact their mentee. Following this orientation and throughout the semester, mentees met with their mentors. The peer mentoring program coordinator contacted peer mentors either in person or by email throughout the research study to encourage participants to meet with their mentees. Throughout the peer mentoring program, peer mentors provided the peer mentoring program coordinator feedback about the process.

Because of the valuable feedback provided by the peer mentors to the researcher, who was also the peer mentoring program coordinator, two changes to the research protocol were requested and approved by the Institutional Review Boards (IRB) of College of Saint Mary (see Appendices D and E) and the Research Institution (see Appendices F and G). The first change was the creation of a questionnaire (see Appendix H) with additional questions for participants in the experimental group about their peer mentoring experience. Questions asking for comments about their experience as well as suggestions for improvement of the peer mentoring program were included in order to gain information to improve the future of the peer mentoring program. The second change was permission to include mentors' quotes and/or personal statements because peer mentors' emails, not meant to gather data, yielded valuable insight into the advantages peer mentoring provided for the mentors. In addition to IRB approval for this second change, permission was also given by the peer mentors themselves (see Appendix I).

Near the end of the semester, the same faculty member who administered the PSS pretest and did not teach in the bachelor's nursing program, administered the PSS as a posttest to both

the experimental and control groups. This was done so participants would not feel their answers on the instrument would in any way affect their grade. For the experimental group only, the posttest included additional questions about the students' feelings about the peer mentoring process.

Data Analysis

To answer the research questions, data was collected using the PSS created by Cohen (Cohen, et al., 1983). The scale asked participants about their stress in the last month including questions about feeling *upset because of something that happened unexpectedly*, feeling *unable to control the important things*, feeling *nervous and stressed*, feeling confident about handling personal problems, feeling that things were *going your way*, feeling that they *could not cope*, *been able to control irritations*, felt that they were *on top of things*, been angered by things out of one's control and felt that things were piling up (Cohen, et al., 1983, p. 394). Additionally, demographic data identified previously in this chapter was collected.

Inferential statistics were utilized for the research questions. To answer the primary research question, which compares the stress levels of students who have a peer mentor to the stress levels of students who do not have a peer mentor group, a dependent samples *t* test was used. For the first subsidiary research question, the stress levels of students who are assigned a peer mentor were compared from the start of the semester to the end of the semester. At the start of the semester, prior to having implemented the treatment, all students' stress levels were measured using the PSS as a pretest. Toward the end of the semester, all students' stress levels were measured again using the PSS as the posttest. Because these groups are matched/paired, a dependent samples *t* test (Urdan, 2010) was used to compare the "two means on a single dependent variable" (Urdan, 2010, p. 94). The same test, the dependent samples *t* test (Urdan,

2010) was used to answer the second subsidiary research question comparing stress levels of nursing students who do not have a peer mentor at the start of the semester and near the end of the semester.

Demographic information was examined according to the descriptive statistics of frequency, mean, and/or range. Frequency identifies "how often a score occurs in a distribution" (Urdan, 2010, p. 10). Mean describes "the arithmetic average of a distribution of scores" (Urdan, 2010, p. 11). Finally, range designates "the difference between the largest score and the smallest score of a distribution" (Urdan, 2010, p. 28).

Emails, written by the peer mentors, provided additional information, which contributed to the understanding of the mentors' and mentees' experiences with the peer mentoring process. Throughout the emails, the researcher discovered key words and themes. This led to the creation of an additional questionnaire. The additional questionnaire included four questions using a Likert scale. These included mentees' report of their agreement or disagreement that peer mentoring benefited them in the areas of academics, balancing school and personal life, learning about available support services, and whether or not they would recommend having a peer mentor to other nursing students. Responses were analyzed and reported using frequencies.

Additionally, a qualitative component was added to the additional survey in the form of two open-ended questions asking peer mentees about their peer mentoring experience and any suggestions for improvement of the peer mentoring program. Rather than data collection, the questions were added to assist with the improvement of the future peer mentoring program. The responses to these questions were examined for keywords and themes. Through these questions, the researcher sought to include the participants' voices (Creswell, 2013) as well as find meaning from the participants' points-of-view (Creswell, 2014).

Data Quality Measures

Reliability

Reliability refers to examining stability (Creswell, 2014). A test is considered reliable if it produces consistent results (Patten, 2014). It is important to "indicate the established…reliability of the scores on instruments…" (Creswell, 2014, p. 170) used in a research study because "…reliability of scores on instruments lead(s) to meaningful interpretations of data" (Creswell, 2014, p. 155). The PSS was utilized for this study because it has demonstrated reliability. "The PSS has adequate internal and test-retest reliability…" (Cohen, et al., 1983, p. 392) and "…has been proven to possess substantial reliability…" (Cohen, et al., 1983, p. 394). Additional evidence of the PSS's reliability was found in the literature. In a study about a mentoring program for Latino college freshman, a short-form of the PSS "was used (twice) to assess students' stress level" (Phinney, et al., 2011, p. 605). Cronbach alphas, used to test reliability were .75 and .83. In another study, when the PSS was used to measure college students' stress "The average Cronbach alpha coefficient reliability was .85" and "reliability was found to be consistent between male and female respondents and among age differences" (Hasel, et al., 2011, p. 1356). An additional study reported a Cronbach alpha of .72 in research of students' stress levels and peer mentoring (Collings, et al., 2014).

In this current study, Cronbach's alpha was run to estimate internal consistency (Patten, 2014; Urdan, 2010) of the PSS. Results will be discussed in Chapter IV: Results.

Threats to reliability. Access to the literature regarding research studies, which tested the reliability of the PSS and using Cronbach's alpha to test reliability, helps to minimize the threats to reliability in this current study.

Validity

Validity means the researcher can "conclude that the intervention affects an outcome and not some other factor" (Creswell, 2014, p. 174). This study's researcher minimized, to the greatest extent possible, the chance factors other than the intervention had effects on the outcome by addressing the threats to validity as explained below. Additionally, it is important to "indicate the established validity…of the scores on instruments…" (Creswell, 2014, p. 170) because validity means the tool is measuring what it is meant to measure. Validity of a tool's scores is also important because this "lead(s) to meaningful interpretations of data" (Creswell, 2014, p. 155).

In addition to reliability of the PSS, validity of the PSS is an important part of this study. The PSS's validity has been established in the literature. "…the PSS is a brief and easy-to-administer measure of the degree to which situations in one's life are appraised as stressful. It has been proven to possess substantial…validity" (Cohen, et al., 1983, p. 394) and "The PSS was correlated with life-event scores" (Cohen, et al., 1983, p. 385). To measure pharmacy residents' perceived stress, researchers utilized the PSS and reported it to be a "validated psychological instrument" (Le & Young, 2017, p. 600).

Threats to internal validity. Within this research study, threats to validity were considered. Even though a change occurs following a treatment, it may not be due to the treatment. There may be other reasons for the change and "these alternative explanations are…threats to internal validity" (Patten, 2014, p. 101). Following are the types of threats to internal validity and the researcher's steps to minimize these threats.

History. Between the pretest and posttest other environmental aspects exist that may influence the participants (Patten, 2014). While Creswell (2014) recommends "the experimental

and control groups experience the same external events" (p. 174) this was not completely possible in this study because it was not a true experiment. Students had different experiences than each other. For example, clinical sites and classes other than the one in the experiment, as well as life, work, and other experiences existed for students, which the researcher was not able to control.

Maturation. Participants mature, get older, and smarter (Patten, 2014). To deal with this, researchers can select participants who are the same age and mature or change similarly (Creswell, 2014). This study was conducted over a fairly short period of time (eight weeks) so maturation should not have played a big part.

Testing. Posttest scores may be affected by what participants learned while taking the pretest (Patten, 2014) because they become familiar with the instrument (Creswell, 2014). Because the PSS asks participants about their feelings, being familiar with the tool should not have affected responses as there were no "right" or "wrong" answers, only the participants' opinions.

Statistical regression. If the researcher chooses extreme scores at the start of the study and uses these participants for the intervention, these scores are likely to increase more than scores that are not extreme (Patten, 2014). Creswell (2014) recommends that participants with extreme scores not be selected. For this study, all eligible students were invited to participate. Matching participants to groups as previously discussed by having the same number of participants with high, medium, and low scores (Creswell, 2014) helped to minimize the threat of statistical regression.

Selection. With the threat of selection, participants are in groups that are not chosen randomly (Patten, 2014). This threat would exist if a researcher selected participants who "have

certain characteristics that predispose them to have certain outcomes" (Creswell, 2014). In this study, all students in the course who met the inclusion criteria were invited to participate in the study.

Mortality. If participants "dropout" (Patten, 2014, p. 102), there is a "differential loss of participants from the groups to be compared" (Patten, 2014, p. 102). To account for those who drop-out researchers can have a large sample (Creswell, 2014). For this study, all students in the course were recruited for participation.

Diffusion of treatment. In this threat, the outcomes can be affected by the communication between the experimental and control groups (Creswell, 2014). During the experiment, if the researcher keeps the "groups as separate as possible" (Creswell, 2014, p. 175), this threat may be decreased. Keeping students separated was not a possibility for this study as they had class together and may have had clinical and/or another course or courses together.

Compensatory/resentful demoralization. Students in the experimental group were assigned a peer mentor while those in the control group were not. Because one group received an unequal benefit, participants in the control group may have felt resentful (Creswell, 2014). While students in one group did not receive the benefit during this research study, it is this researcher's plan to continue a peer mentoring program for interested nursing students in the near future.

Compensatory rivalry. Because students in the control group did not have a peer mentor, they may have felt devalued because they did not have the same treatment (Creswell, 2014). While it was not be possible to decrease expectations of the control group, as Creswell (2014) recommends as a response to this threat, because of the nature of educational and course expectations, students were thanked for their participation in the research study.

Threats to external validity. When researchers generalize a study's findings to other people, settings, and/or situations not part of the study, external threats to validity exist, affecting generalizability (Creswell, 2014). Following are the types of threats to external validity and the researcher's steps aimed to minimize these threats.

Interaction of selection and treatment. This threat exists when a researcher makes generalizations to those who do not have the participants' characteristics (Creswell, 2014). In this study, the researcher does not make claims to those who do not meet the description and inclusion criteria of the nursing students who were participants.

Interaction of setting and treatment. The researcher also does not generalize to those in settings outside of this study's setting. Doing so would contribute to the threat of interaction of setting and treatment (Creswell, 2014).

Interaction of history and treatment. Regarding the final type of external validity threat, the researcher of this study does not "generalize the results to past or future situations" (Creswell, 2014, p. 176) in order to avoid the interaction of history and treatment threat.

Statistical conclusion validity threats. This validity threat occurs when inaccurate inferences are made due to "inadequate statistical power or the violation of statistical assumptions" (Creswell, 2014, pp. 176-177). Prior to reporting of an inference, statistical results of this study were reviewed with a College of Saint Mary statistician in order to minimize this threat.

Construct validity threats. This type of validity threat occurs when a study's definitions and variables' measures are not adequately defined (Creswell, 2014). To minimize this threat, this study's definitions were thoroughly defined as was the tool (PSS) used to measure the variable of stress.

Ethical Considerations

Institutional Review Board (IRB)

Protecting human rights is a federal regulation that requires an Institutional Review Board (IRB) to review research plans (Creswell, 2014). In compliance with this regulation, approval was obtained from the IRBs of College of Saint Mary (see Appendix J) as well as the college where data collection took place (see Appendix K). Students were not contacted prior to IRB approval from both schools and no data was collected prior to IRB approval from both schools. Additionally, an IRB Change form approval from College of Saint Mary as well as a Modification Approval from the Research Institution were obtained prior to the administration of an additional Peer Mentoring Questionnaire.

Protection of Participants' Rights

Instructions regarding the consent letter and form were explained to potential participants, and they were permitted to decide whether or not to participate in the study (Creswell, 2014). They were not pressured to sign a consent form (Creswell, 2014). Additionally, potential participants were made aware that this research study would be conducted at the researcher's place of employment.

The researcher, who was also the instructor and the peer mentoring program coordinator, explained the consent process; however, a faculty member who does not teach in the Bachelor of Science in Nursing degree program obtained the signed consent forms so the participants would not feel pressured to sign or that their participation would in any way affect their grade. Participants were not deceived in any way and the researcher made it clear to potential participants they would be participating in a research study (Creswell, 2014).

Prior to providing any data, participants signed an informed consent form which included identification of the researcher and the institutions that granted the ethics approvals, the purpose of the research, the benefits and risks of the research, a guarantee of anonymity and confidentiality of the data, assurance that the participant had the ability to withdraw from the research study at any time, and contact information the participant may have used to reach the researcher (Sarantakos, 2013).

Ethics in Data Reporting

In data analysis, all results were shared including data that may or may not support the benefits of having a peer mentor. Data analysis "reflect(ed) statistical tests and (was) not underreported" (Creswell, 2014, p. 99). Additionally, the privacy of participants was respected by removing names from data.

Permissions

The researcher obtained approval to conduct the research study from the college's IRB where the study was conducted. As previously discussed, permission to use the PSS was not needed because Cohen (Laboratory, 2017) stated permission was not required if the PSS was utilized for educational purposes.

Secure Files

All paper/pencil data are stored in a locked file drawer in a locked office. Electronic data are stored on a password protected computer (Creswell, 2014). Analyzed data will be kept for at least five years. The APA recommends retaining "raw data for a minimum of five years after publication of the research" (APA, 2010, p. 12).

Summary

This chapter discussed the purpose of this non-equivalent control group design, quantitative quasi-experimental study with a qualitative component, which is to compare the stress levels of nursing students who have a peer mentor to stress levels of nursing students who do not have a peer mentor while taking an Introduction to Nursing Course in a Bachelor of Science in Nursing (BSN) program at a small, Midwestern, private health professions college. This study's research design, population, sampling, and setting were described, as well as the study's data gathering tools and procedures. Also presented in this chapter were the data analysis and data collection measures. Finally, ethical considerations were described.

Chapter IV: Results

The purpose of this non-equivalent control group design, quantitative quasi-experimental study with a qualitative component is to compare the stress levels of nursing students who have a peer mentor to stress levels of nursing students who do not have a peer mentor while taking an Introduction to Nursing Course in a Bachelor of Science in Nursing (BSN) program at a small, Midwestern, private health professions college. In this chapter, inferential statistics will be reported for the research questions and descriptive statistics will be reported for the demographic data. To answer the primary research question, a dependent samples *t* test was utilized. For the first subsidiary research question, the stress levels of students who were assigned a peer mentor were compared from the start of the semester to the end of the semester. Because these groups were matched/paired, a dependent samples *t* test (Urdan, 2010) was used to compare the "two means on a single dependent variable" (Urdan, 2010, p. 94). The same test, the dependent samples *t* test (Urdan, 2010) was used to answer the second subsidiary research question comparing stress levels of nursing students who do not have a peer mentor at the start of the semester and near the end of the semester. The level of statistical significance was set at <0.05. For this study, the PSS was found to be reliable with a Cronbach's Alpha of 0.873 for the pretest and 0.867 for the posttest. Demographic information was examined according to the descriptive statistics of frequency, mean, and/or range.

Data Analysis

Sample Demographics

Fifty-four students in the Introduction to Nursing course agreed to participate in the study. Two of those participants did not write their name on their pretests and an additional participant's name was eligible. Therefore these participants were removed from the study.

Next the participants were placed into two groups; one group was assigned a peer mentor (n = 25), and the other group was not assigned a peer mentor (n = 26). Forty-seven participants completed the posttest. Of the four participants who did not complete the posttest, two were in the experimental group and two were in the control group. Two participants (one who was assigned a peer mentor and one who was not assigned a peer mentor) dropped the course during the semester. It is not known why the other two participants did not complete the posttest. It is possible they were absent from class when the posttest was administered.

Frequencies and range for the demographic data are reported based on the 51 participants who completed the pretest. The age of participants ranged from 19 to 46 with an average age of 24.9. Forty-five (88.2%) participants were female and six (11.8%) were male. No participants identified their race/ethnicity as American Indian or Alaska Native or Native Hawaiian or Other Pacific Islander. For race/ethnicity, four students (7.8%) identified Asian, two (3.9%) Black or African American, 37 (72.5%) White, and eight (15.7%) "Other". Thirty-four (66.7%) participants had prior healthcare experience (for example a job in healthcare or volunteering in healthcare), while seventeen (33.3%) did not. At the time the pretest was administered, 43 (84.3%) participants were employed and eight (15.7%) were not. Employed participants worked an average of 22.6 hours per week and a range of five to 40 hours per week. First-generation college students (meaning none of the student's parents attended a four-year college) numbered 24 (47.1%), and 27 (52.9%) participants were not first-generation college students. Of the 15 (29.4%) participants who were parents, six (11.8%) of them were single parents. Exploratory analysis was done to explore the possible relationships between demographic data and stress levels of participants in both the experimental and control groups. No significant findings were identified. This may have been due to the small sample size.

Results for Research Questions

A dependent samples *t* test was utilized to answer the research question, "How do stress levels differ in nursing students who have a peer mentor compared to nursing students who do not have a peer mentor while taking an Introduction to Nursing Course in a Bachelor of Science in Nursing (BSN) program at a small, Midwestern, private health professions college?" While not statistically significant, students who took the Introduction to Nursing Course and had a peer mentor had slightly lower stress levels than the students who did not have a peer mentor. Following the peer mentoring program, students in the experimental group (those with a peer mentor) had a lower mean stress level (M = 16.30, SD = 5.64) than students in the control group (those without a peer mentor) (M = 16.46, SD = 5.71). These results are illustrated in Table 2.

Table 2

Stress Levels of Students with a Peer Mentor Compared to Students without a Peer Mentor

	PSS Posttest Score	
	n	M (SD)
Peer Mentor	23	16.30 (5.64)
No Peer Mentor	24	16.46 (5.71)

Subsidiary Research Questions

The first subsidiary research question was, "For nursing students who are assigned a peer mentor, how do stress levels differ between the start of the semester and toward the end of the semester?" For this research question, a dependent samples *t* test was utilized.

Stress levels of students assigned to a peer mentor decreased from pretest to posttest. For these students with a peer mentor, dependent-samples *t* test indicated that scores were lower, though

not significantly different between the beginning of the semester PSS score (M = 16.83, SD = 5.96) and the end of the semester PSS score (M = 16.30, SD = 5.64), $t(22) = .38$, $p = .71$. Table 3 illustrates these findings.

Table 3

Comparison of Stress Levels of Students with a Peer Mentor Between the Start of the Semester and Toward the End of the Semester

	Students with a Peer Mentor	
	n	M (SD)
PSS Pretest Score	23	16.83 (5.96)
PSS Posttest Score	23	16.30 (5.64)

Note. $p = .71$

The second subsidiary research question was, "For nursing students without a peer mentor, how do stress levels differ between the start of the semester and toward the end of the semester?" Stress levels of students not assigned to a peer mentor increased from pretest to posttest. Dependent-samples t test indicated that while scores were higher, they were not significantly different between the beginning of the semester PSS score (M = 15.71, SD = 6.12) and the end of the semester PSS score (M = 16.46, SD = 5.71), $t(23) = -.60$, $p = .56$. These findings are illustrated in Table 4.

Table 4

Comparison of Stress Levels of Students without a Peer Mentor Between the Start of the Semester and Toward the End of the Semester

	Students without a Peer Mentor	
	n	M (SD)
PSS Pretest Score	24	15.71 (6.12)
PSS Posttest Score	24	16.46 (5.71)

Note. $p = .56$

Additional Results

Throughout the peer mentoring program, peer mentors shared anecdotal information with the researcher, which led to the creation of an additional questionnaire to ask participants about their experience with peer mentoring. The questionnaire, approved by the research site and IRB at College of Saint Mary, was administered to participants in the experimental group (those who were assigned a peer mentor) along with the PSS posttest. Because the experimental group consisted of 25 participants and two participants did not complete the posttest, 23 participants completed the additional questionnaire. For each of the first questions, participants were asked to reply on a one to five Likert scale with 1= "Strongly disagree", 2= "disagree", 3= "Neutral", 4= "Agree", and 5= "Strongly Agree".

The first statement was, *Having a peer mentor was beneficial to me academically*. Eleven (47.8%) participants rated this positively with seven stating they strongly agreed and four stating they agreed. Eight participants (34.8%) were neutral about having peer mentor being academically beneficial, four students strongly disagreed and no students disagreed (See Table 5).

Table 5

Statement 1: Having a peer mentor was beneficial to me academically.

	Frequency	Percent
Strongly Agree	7	30.4
Agree	4	17.4
Neutral	8	34.8
Disagree	0	0
Strongly Disagree	4	17.4

The second statement on the questionnaire was, *Having a peer mentor helped me learn ways to balance school with my personal life*. Over half of participants, twelve (52.2%) either strongly agreed or agreed, four participants (17.4%) were neutral, and seven participants (30.4%) either disagreed or strongly disagreed (See Table 6).

Table 6

Statement 2: Having a peer mentor helped me learn ways to balance school with my personal life.

	Frequency	Percent
Strongly Agree	5	21.7
Agree	7	30.4
Neutral	4	17.4
Disagree	3	13.0
Strongly Disagree	4	17.4

Additionally, over half of participants, twelve (52.2%) also agreed with the third statement: *Having a peer mentoring helped me learn about support services available to me.* Five participants were neutral and six participants either disagreed or strongly disagreed with the statement (See Table 7).

Table 7

Statement 3: Having a peer mentor helped me learn about support services available to me.

	Frequency	Percent
Strongly Agree	4	17.4
Agree	8	34.8
Neutral	5	21.7
Disagree	3	13.0
Strongly Disagree	3	13.0

For the final statement using the Likert scale, no participants disagreed or strongly disagreed with, *I would recommend having a peer mentor to other nursing students,* while seven students were neutral. For this statement, 69.5% of participants, either agreed or strongly agreed. Seven students (30.4%) agreed and nine (39.1%) strongly agreed they would recommend having a peer mentor to other nursing students (See Table 8).

Table 8

Statement 4: I would recommend having a peer mentor to other nursing students.

	Frequency	Percent
Strongly Agree	9	39.1
Agree	7	30.4
Neutral	7	30.4
Disagree	0	0
Strongly Disagree	0	0

Next, participants who had peer mentors were asked, *How often did you and your peer mentor meet in person?* and *How often did you and your peer mentor meet by telephone/text/email?* A little less than half of the participants (45.5%) met in person with their peer mentor two or less times and just over half (54.5%) met in person with their mentors three to eight times. Less than half (42.9%) of students met their mentors through telephone/text/email five or less times. The remaining students (57.1%) met their mentors via this route eight to 20 times. Although not statistically significant, this study found that the more mentees and mentors met, the more positive they responded to the first four additional questions posed about benefits of peer mentoring- academic, balancing school and personal life, learning about support services,

and recommending peer mentoring. The more they met, the more beneficial having a peer mentor was for them in the areas asked on the additional questionnaire.

In addition to the questions previously discussed, participants who had peer mentors were also asked two open-ended questions. The first question was, *Please provide any comments you would like to share about your peer mentoring experience*, and the second was, *Please provide any comments and/or suggestions for improvement of the Peer Mentoring Program*.

Question one was, *Please provide any comments you would like to share about your peer mentoring experience.* Of the 19 participants who answered this question, 68.4% provided positive feedback. Feeling they were "helped" by their peer mentor was a common response. Seven participants (36.8%) used this word to describe their experience with peer mentoring. They also described that their peer mentors (or in one case, his/her friend's peer mentor) answered their questions and were available to them. Six participants (31.6%) noted their mentors answered their questions. Four participants included both the ideas of helping and having questions answered in their responses. The following are specific comments provided by respondents to illustrate this finding:

- "Having a peer mentor helped me get answers to many nursing class questions. Otherwise I would not have been sure who to ask" (Participant 119).
- "It was great! I had so many questions about my first clinical experience and my mentor helped so much. I never felt like it was too much work to fit into my schedule" (Participant 124).
- "She was awesome. She helped me a lot and was available for any questions I had" (Participant 152).

- "Having a peer mentor was very beneficial to me. She helped me a lot with many questions I had. Sometimes I was nervous, but she helped me a lot to relieve my stress. I learned so much from her. It also helped me because I don't have any friends here because I don't know anybody" (Participant 109).
- "I enjoyed having a peer mentor. My mentor was very helpful unlike some of the others. I would highly recommend this to new nursing students" (Participant 150).
- "My mentor didn't help me but my friend's mentor was great and helped a lot. The study sheets he gave were fantastic!" (Participant 149).
- "My peer mentor was very helpful. I'm very organized by nature but he had experience that I didn't and had great pointers" (Participant 134).
- "I really enjoyed my mentor. She was very friendly and always eager to answer any questions I had. She would tell me ways to study for tests and was very encouraging" (Participant 101).
- "My peer mentor was very supportive, active, and friendly telling me to call or text if I ever had questions about school or just need to talk" (Participant 132).

Two students spoke to the encouragement and advice they received from their peer mentors, stating:

- "It was nice to have a peer mentor and meet a fellow nursing student who can encourage me" (Participant 137).
- "It was a great experience. It was nice being able to talk to someone who has done this before and she gave me great advice" (Participant 120).

Final positive comments to the question about the participants' experiences with peer mentoring included additional positive feedback about their peer mentors with one student stating her mentor shared resources with her.

- "It was very nice and my mentor was great" (Participant 103).
- "It was nice having someone check in after exams as to how they went. She was also able to share resources with me" (Participant 139).

Of the four negative comments to the question, *Please provide any comments you would like to share about your peer mentoring experience*, three respondents noted the difficulty of meeting with their peer mentors while one stated having a peer mentor was not beneficial:

- "I wish I would have been able to meet my mentor but our schedules never matched up" (Participant 118).
- "My mentor only contacted me twice and didn't really provide any support" (Participant 148).
- "My mentor never texted me first" (Participant 115).
- "Really didn't find having a mentor to be beneficial" (Participant 141).

Two final comments to this question were fairly neutral:

- "I felt my peer mentor was present for the program but was not necessarily beneficial. The college does a great job at presenting resources available, so I felt like we just met to talk about the day" (Participant 146).
- "When I met her she did let me know she's very busy with school" (Participant 135).

The second open-ended question posed to respondents about their peer mentoring experience was, *Please provide any comments and/or suggestions for improvement of the Peer*

Mentoring Program. Fourteen participants responded to this question and of those, over half (eight participants, 57.1%) commented on the importance of the mentor's role.

- "Somehow match mentor with mentee with similar schedules" (Participant 118).
- "Make sure the mentor wants to do it, for me we had a meeting day set up but no time. I emailed her for a time and after that she never responded" (Participant 125).
- "Choose mentors willing to provide support throughout the semester" (Participant 148).
- "Make sure the mentor is someone you feel comfortable with" (Participant 103).
- "I know some people did not even talk to their mentors, so emphasizing the importance of participating from both mentor and mentee side" (Participant 152).
- "I think it would have been more beneficial if my peer mentor and I met more often. There were a couple of instances where he forgot to send (email) me resources to help with my studies" (Participant 137).
- "Make sure all mentors participate equally. I had several people ask for study guides because they knew my mentor always sent them to me" (Participant 150).
- "Choose mentors who have materials to help" (Participant 149).

One student responded with an additional suggestion for improvement and another expressed he/she wished to have experienced more of a benefit:

- "An outline of what should be discussed like resources, study tips, etc." (Participant 139).
- "I would really of liked to have received more of a benefit of having one assigned to me" (Participant 135).

The final comments responding to the question, *Please provide any comments and/or suggestions for improvement of the Peer Mentoring Program* yielded positive general feedback about the experience:

- "I just think all students should be able to have a peer mentor" (Participant 109).
- "No complaints. You placed me with a great mentor!! Would definitely recommend you hand pick the mentors again" (Participant 101).
- "It was all around a great experience☺" (Participant 120).
- "…everything was great" (Participant 124).

Summary

In this chapter, data analysis for this non-equivalent control group design, quasi-experimental study with a qualitative component comparing the stress levels of nursing students who have a peer mentor to stress levels of nursing students who do not have a peer mentor while taking an Introduction to Nursing Course was presented. Sample demographics were identified followed by data answering the research questions. Finally, results of additional data analysis were presented, which answered questions regarding the perceptions of peer mentoring from the perspectives of students who had peer mentors.

Regarding the primary research question, "How do stress levels differ in nursing students who have a peer mentor compared to nursing students who do not have a peer mentor while taking an Introduction to Nursing Course in a Bachelor of Science in Nursing (BSN) program at a small, Midwestern, private health professions college?", data analysis found that students who had a peer mentor had slightly lower stress levels than student who did not have a peer mentor. Regarding the first subsidiary research question, "For nursing students who are assigned a peer mentor, how do stress levels differ between the start of the semester and toward the end of the

semester?", data analysis revealed that students who were assigned a peer mentor had lower stress levels at the end of the semester compared to the start of the semester. Concerning the final subsidiary research question, "For nursing students without a peer mentor, how do stress levels differ between the start of the semester and toward the end of the semester?", data analysis identified that students without a peer mentor reported slightly higher levels of stress at the end of the semester. Results of data analysis regarding peer mentees' perception of peer mentoring found that students agreed peer mentoring provided benefits such as academic, balancing school and personal life, and being made aware of support services. Mentees also recommended having a peer mentor to other students. The more often participants met with their peer mentor, the more positive they were about these benefits. Finally, in response to the open-ended question, *Please provide any comments you would like to share about your peer mentoring experience*, students provided mostly positive comments. Many of the responses regarding the open-ended question, *Please provide any comments and/or suggestions for improvement of the Peer Mentoring Program* focused on the attributes of the peer mentor and matching of mentor and mentee. Chapter five will discuss interpretation of these results as well as suggestions for future research.

Chapter V: Discussion and Summary

The purpose of this non-equivalent control group design, quantitative quasi-experimental study with a qualitative component is to compare the stress levels of nursing students who have a peer mentor to stress levels of nursing students who do not have a peer mentor while taking an Introduction to Nursing Course in a Bachelor of Science in Nursing (BSN) program at a small, Midwestern, private health professions college. This study found from the start of the semester to the end of the semester, stress levels of students with a peer mentor decreased while stress levels of students without a peer mentor increased. At the end of the semester, students with a peer mentor reported lower stress levels than students without a peer mentor. This chapter will provide results interpretation within the discovered themes of:

- benefits of having a peer mentor (decreased stress, academic support, balancing school and personal life, and learning about support services);
- importance of the peer mentor's role; and
- benefits of peer mentoring for the mentor.

Finally, this chapter will discuss implications for practice, limitations, and recommendations for future research.

Interpretation of Results

Benefits of Having a Peer Mentor

Nursing students in this study shared benefits of having a peer mentor while taking their first nursing course. These included decreased stress, academic support, balancing school and personal life, and learning about support services.

Decreased stress. A meaningful finding for nursing education is decreased stress for first semester students who had a peer mentor compared to those who did not have a peer mentor.

Nursing students experience stress, especially during their first year of nursing education. Findings of this current study, and others, indicate that having a peer mentor may be one way to decrease stress. This study found that following the peer mentoring program, students in the experimental group (those with a peer mentor) had a lower mean stress level (M = 16.30) than students in the control group (those without a peer mentor) (M = 16.46).

Findings indicate the peer mentoring program in this current research study likely contributed to nursing students' decreased stress. Mentees shared they felt they had someone who was available to answer questions, and someone who was helpful, supportive, and encouraging. For example, mentees noted, “It was nice to have a peer mentor and meet a fellow nursing student who can encourage me” (Participant 137) and “It was a great experience. It was nice being able to talk to someone who has done this before and she gave me great advice” (Participant 120). Considering half of all mentees agreed they would recommend having a peer mentor, it is this researcher’s belief that providing a peer mentoring program can make a positive impact on students. One mentee’s comment illustrates the important impact peer mentoring had on a nursing student in this study:

> Having a peer mentor was very beneficial to me. She helped me a lot with many questions I had. Sometimes I was nervous, but she helped me a lot to relieve my stress. I learned so much from her. It also helped me because I don’t have any friends here because I don’t know anybody. (Participant 109)

In the theoretical framework of Lazarus and Folkman (1984), the “support of compatible peers” (p. 109) was described as a way to deal with stress. This relates closely to this current study’s finding of decreased stress because participants who had peer mentors reported decreased stress toward the end of the semester compared to those who did not have peer mentors.

Additionally, participants revealed many positive aspects of having peer mentors. For example, they described the help they received from their peer mentors, shared their mentors were available to them, were encouraging, and provided them with someone who could answer questions. One mentee stated, "My peer mentor was very supportive, active, and friendly telling me to call or text if I ever had questions about school or just need to talk" (Participant 132). Another shared, "She was very friendly and always eager to answer any questions I had...and was very encouraging" (Participant 101). Such comments from mentees illustrate Lazarus and Folkman's (1984) theoretical framework of dealing with stress through peers' support.

Support for decreased stress is reported in other studies as well. For example, in one study of students who had a peer mentor compared to those who did not, Phinney, et al. (2011) found students who had mentors experienced decreased stress. In another study of first semester students who had a peer mentor compared to those who did not, findings also revealed that those with a peer mentor experienced decreased stress (Collings, et al., 2014). Finally, students not participating in a peer mentoring program were four times more likely than the students in a peer mentoring program to want to leave the university (Collings, et al., 2014).

In addition to comparing stress levels of students with peer mentors to those without peer mentors, this current research study also compared stress levels of students from the start of the semester to the end of the semester. According to research, students in undergraduate nursing programs often experience stress (Beck & Srivastava, 1991; Moscaritolo, 2009). Students who were assigned a peer mentor in this current research study had lower stress levels at the end of the semester ($M = 16.30$) than at the start of the semester ($M = 16.83$). This supports the theme of decreased stress for nursing students with a peer mentor. Nursing student stress is a concern of faculty and the impact of having a peer mentor in this research study on stress is encouraging.

It is this researcher's experience as a nursing educator that students taking their first nursing course find nursing education to be stressful. They are overwhelmed by the amount of academic work, new clinical experiences, and balancing their nursing coursework with other classes, work, and their personal lives. Feeling overwhelmed by coursework, and clinical experiences and demands, has been described as an experience of nursing students (Chernomas & Shapiro, 2013). This study's findings suggest having a peer mentor may be a way to help students cope with the stress of nursing education. Regarding the support mentors provided, mentees shared, "It was all around a great experience☺" (Participant 120) and "She helped me a lot and was available for any questions I had" (Participant 152).

Clinical is also perceived as stressful by students (Elliot, 2002). To deal with this issue, peer mentors are utilized informally by this current study's researcher while serving the role of faculty, during clinical experiences in which some students in the group have health care experience. This researcher pairs students who have experience with those who do not. This practice is looked upon favorably by the students who often share with faculty they feel less anxious when they have the opportunity to work with a peer. A mentee in this current study shared, "I had so many questions about my first clinical experience and my mentor helped so much" (Participant 124). The experience of this faculty is shared by others. Nursing students in a baccalaureate program in Shipton's (2002) study also reported clinical experiences as very stressful. Nursing students experiencing their first clinical found that working with patients for the first time was stressful and they feared making a mistake (Lombardo, et al., 2017). Balancing multiple demands such as courses and clinicals contributed to feeling overwhelmed according to students in Chernomas and Shapiro's (2013) study.

Literature supports findings of this current study. Decreased stress was reported in a peer mentoring program in which mentees stated their mentors helped them to decrease their feelings of academic stress (Lombardo, et al., 2017). Mentees involved in a peer mentoring program increased their efforts to seek out social support, and to cope with stress actively. Also, at the end of the peer mentoring program, they were more optimistic about their approach to stress (Demir, et al., 2014). Additionally, Sprengel and Job (2004) reported a freshman nursing student felt "'more at ease'" (p. 248) when being mentored by a sophomore nursing student at clinical. Finally, a mentee in a peer mentorship program reported that having a peer mentor decreased stress, which allowed for improved performance (Lombardo, et al., 2017).

This current research also studied how stress levels differ between the start of the semester and toward the end of the semester for nursing students without a peer mentor, and found the stress levels of these students increased from the start of the semester ($M = 15.71$) to the end of the semester ($M = 16.46$). It is this researcher's experience as faculty that nursing students taking their first nursing course often underestimate the amount of work, time, and commitment necessary to be successful in their coursework and in clinical. As the semester progresses, often students without support find they have increasing difficulty managing their coursework and all of their additional responsibilities. The finding that stress for nursing students without a peer mentor increased in this study is supported in the literature. Jameson (2014) reported "baccalaureate nursing education is stressful" (p. 603), including academic, clinical, personal, and social aspects. Additionally, Chernomas and Shapiro (2013) address baccalaureate in nursing students' incidence of stress, depression, and anxiety and found nursing students felt "'overwhelmed'" (p. 261) by coursework and personal demands. Stressors reported by first-year nursing students included fear of failure, lack of free time, required study time, the

amount and difficulty of learning material, examinations, grades (Jones & Johnston, 1997), coursework, and lectures (Demir, et al.,2014).

Nursing faculty, as educators, have an obligation to address this stress. Nursing students' learning, academic performance, and clinical performance may be affected by stress (Chernomas & Shapiro, 2013) so it is essential that nursing educators use evidence-based methods that may positively impact students' stress. This study indicates that students without a peer mentor experience not only stress, but stress that increases from the start of the semester throughout the semester. Implementing peer mentoring may impact the decrease of stress levels of nursing students and positively influence nursing students' education.

Academic support. Findings of this current research study suggest peer mentoring may be a useful intervention in supporting nursing students academically. Almost half of participants stated they either agreed or strongly agreed that having a peer mentor benefitted them academically. One participant shared, "Having a peer mentor helped me get answers to many nursing class questions. Otherwise I would not have been sure who to ask" (Participant 119). Other participants revealed academic benefits of having a peer mentor, specifically related to studying and exams. For example, one mentee stated "The study sheets he gave were fantastic!" (Participant 149). Yet another mentee demonstrated the assistance received: "She would tell me ways to study for tests and was very encouraging" (Participant 101). A final mentee shared, "It was nice having someone check in after exams as to how they went" (Participant 139).

Consequently, nursing education should consider making peer mentors available to nursing students. Research supports this recommendation and has also demonstrated the academic benefits of peer mentoring. For example, improved study habits and academic performance were benefits for nursing students who participated in a peer mentoring program

(Lombardo, et al., 2017). Less failure and improved progression were experienced by pharmacy students who were part of a learning community involving mentoring (Moser, et al., 2015). Also, of psychology students in a peer mentoring program, 59% reported their academic work had been positively influenced by the program (Chester, et al., 2013).

Balancing school and personal life. Over half of participants agreed having a peer mentor helped them learn strategies to balance school and their personal lives. Participants reported they gained encouragement and advice from their their peer mentor. One mentee shared, "My peer mentor was very helpful. I'm very organized by nature but he had experience that I didn't and had great pointers" (Participant 134). Due to these findings, it is recommended that peer mentoring be considered as an offering for nursing students. Jameson (2014) reported that individual's personal lives are a source of stress for baccalaureate nursing students. Nursing students reported feeling "'overwhelmed'" (Chernomas and Shapiro, 2013, p. 261) as a result of balancing being a student with working, being a parent, trying to stay healthy, and keeping up with housework and appointments (Chernomas & Shapiro, 2013). When students were able to balance their school demands and their personal lives, they reported decreased anxiety (Chernomas & Shapiro, 2013). In a nursing peer mentoring program, mentees described feeling more secure because of their mentors' support as mentors talked with their mentees about personal challenges (Lombardo, et al., 2017).

Learning about support services. Over half of participants also agreed having a peer mentor helped them learn about available support services. Educators and colleges often seek ways to inform students about support services available to students. This current research study's findings indicate peer mentoring may be one way to accomplish this. For example, a participant expressed he/she would not have known who to ask had it not been for the peer

mentor and another participant shared having a peer mentor helped because he/she did not know anyone at the college. Others participants reported they learned about resource information through their peer mentor, for example, one student stated, "She was also able to share resources with me" (Participant 139). Supporting this finding, in a mentoring program found in the literature, mentees reported that their mentors provided them with a variety of information including information about courses, professors, and ways to study. Mentors also gave guidance and resource referrals. This helped mentees to feel less stressed (Lombardo, et al., 2017).

Importance of the Peer Mentor's Role

The importance of the peer mentor's role was illustrated through this current study as students described that their peer mentors helped them, were encouraging, available, and answered questions. This relates closely to Watson's (2008) Caritas Processes, *Developing and Sustaining a Helping-Trusting Caring Relationship* and *Engage in Genuine Teaching-Learning Experience That Attends to Unity of Being and Subjective Meaning-Attempting to Stay Within the Other's Frame of Reference*, which were the focus of this current study's theoretical framework. Within Watson's (2008) *Developing and Sustaining a Helping-Trusting Caring Relationship,* the importance of "authentic listening and hearing, being present for another in the moment" (p. 72), supports statements reported by mentees in this current study. Watson (2008) also stated "the *quality* of the relationship with another person is one of the most significant elements in determining helping effectiveness" (p. 73). Such relationships were also reported as this study's mentees described their mentors as being helpful to them. These connections further demonstrated the importance of the mentor's role in the peer mentoring process. In this study, peer mentors exhibited caring through development of *helping-trusting caring relationships* by listening and being available to their mentees.

Additionally, in this current research, participants revealed the importance of peer mentors and expressed satisfaction with peer mentoring, as well as their mentors. Almost 70% of participants stated they would recommend peer mentoring to other nursing students, sharing: "all students should be able to have a peer mentor" (Participant 109) and "I enjoyed having a peer mentor…I would highly recommend this to new nursing students" (Participant 150), while others reported having a "great mentor" (Participant 101) or a "great experience" (Participant 120). Much research can be found regarding students' positive feelings toward peer mentoring and peer mentors. Research has shown students are positive about peer mentors' help, providing consistently positive comments about this help (Moser, et al., 2015). Additionally, in Lombardo, et al.'s (2017) study, mentees in a nursing peer mentoring program described many positive aspects of their mentors (Lombardo, et al., 2017). Another study reported 70% of students enjoyed the peer mentoring program (Chester, et al., 2013). Mentees in an additional peer mentoring program gave positive feedback about mentors (Dennison, 2010). Because of the positive feedback regarding peer mentors in both this current research study as well as the literature, it is this researcher's recommendation that peer mentoring be made available to nursing students.

As a part of the importance of the mentor's role, a good match or fit between mentors and mentees has been suggested by mentees in this current study. Mentees expressed the importance of committed mentors, sharing that mentors should want to participate in the peer mentoring program, be "willing to provide support throughout the semester" (Participant 148), and understand the importance of participation (Participant 152). One student who had an involved peer mentor and noticed that other mentees gained support from his/her mentor also lent support to this idea, stating it was important for "…all mentors (to) participate equally" (Participant 150).

Also related to a good match or fit, pairing mentees with mentors with whom they feel comfortable was an additional suggestion of mentees. One student suggested "(choosing) mentors who have materials to help" (Participant 149). While mentors were provided with resources in this current study, a future peer mentoring program should heed this suggestion by providing peer mentors with increased information about available resources. More specific recommendations regarding the mentor-mentee match will be provided in the *Implications for Practice* section.

Much support for the importance of the mentor's role and the recommendation of close attention being accorded to mentor- mentee match exists in the literature. The literature also supports participants' comments and suggestions provided in this current research study. According to Barker (2006), a struggle for peer mentoring may be inadequate match between mentors and mentees, including poor communication and lack of expertise. Also, when nursing students viewed their mentors as being shy or quiet, they felt their mentoring experience was not as positive as their classmates' experiences (Sprengel & Job, 2004). In response to such issues, researchers recommended that mentors who fit the profile of what would make a good mentor (Botma, et al., 2013) be selected.

In Lombardo, et al.'s (2017) study, participants in a peer mentoring program for nursing students shared the importance of fit between peer mentors and mentees. They indicated that when similarities existed in "age, gender, country of origin, background in education, language, personality, interests, career goals, role beliefs, preference for method of communication, and scheduling" (Lombardo, et al., 2017, p. 229), the mentor-mentee relationship grew. They also shared they preferred the lack of "strict guidelines on mentoring relationships" (Lombardo, et al., 2017, p. 229), stating it was important for mentors and mentees to decide how to interact based

on their needs and priorities, and that this decreased feelings of pressure. They did appreciate having their roles and responsibilities clarified (Lombardo, et al., 2017). Barker (2006) also noted it was important to identify the relationship's objectives and expectations.

The importance of meeting between mentors and mentees was a valuable finding of this current research study. Participants recommended matching mentees and mentors who had similar schedules. Results indicated the more mentees and mentors met, the more positively they responded to the additional questions regarding academic benefits of peer mentoring, impact of balancing school and personal life, learning support services through peer mentoring, and recommending peer mentoring. It is possible meeting more may have positively impacted responses to these questions or the thoughts and feelings of the participants regarding peer mentoring may have affected how often they chose to meet. These findings suggest peer mentees felt peer mentoring was beneficial and worthwhile. Literature also speaks to the quality of the mentor/mentee relationship, and reports the amount of contact between mentors and mentees has been demonstrated as important related to mentee outcomes (Phinney, et al., 2011). Nursing education should consider these findings when developing programs for nursing students.

Benefits of Peer Mentoring for the Mentor

Although this study's focus was the peer mentee, benefits of peer mentoring for the peer mentor were discovered as well. Email communications to the researcher, who also served as the peer mentoring program coordinator, revealed benefits peer mentors experienced through the peer mentoring process. One student shared: "…I love being able to answer the questions she has. She text(ed) me today when she couldn't log into the computer to pre-lab for clinical- made me feel really good and like a valuable resource" (Mentor 1). Another student agreed with this

feeling of making a difference. He reported his mentee as well as another mentee "reach out almost daily with questions" and shared the following:

> I really think that if this program would continue it would really change the amount of stress and pressure put on a new nursing student. Thank you for giving me this opportunity, it's awesome to be able to help out another student. I wish we had gotten this opportunity last semester. (Mentor 2)

Another mentor expressed feeling inspired by her mentee, sharing the following:

> She seems very nice and a little bit stressed with her many responsibilities but determined to get the education she came here to receive. It's totally inspiring for me to see students with much more on their plate than myself. (Mentor 3)

In addition to comments from peer mentors in this study's peer mentoring program, research has spoken to the benefits of peer mentoring for the mentor as well. For example, Glass and Walter (2000) reported reciprocal caring and learning is often characteristic of peer mentoring as mentors and mentees support each other. Barker (2006) found support of growth and success to be important aspects of the mentor/mentee relationship. Additionally, researchers found that peer mentors and their mentees felt a sense of connection (James, et al., 2014). Research has shown that mentors increased confidence in their knowledge and skills (Christiansen & Bell, 2010), increased confidence in their clinical skills, and confidence with teaching skills and leadership (Dennison, 2010). Senior nursing students who helped first year nursing students with learning experienced benefits. Increased confidence and reinforced learning were benefits to sophomore nursing students who served as mentors to freshman nursing students (Sprengel & Job, 2004), which is the same populations as this current research study. These mentors also experienced decreased anxiety and a less stressful clinical experience

(Sprengel & Job, 2004). Increased self-esteem (Christiansen & Bell, 2010), a sense of contributing (Foster, 2014) and feeling the peer mentoring experience was worthwhile due to positive outcomes for mentees (James, et al., 2014) were added peer mentor benefits reported in the literature. Final literature studies supporting the benefits of peer mentoring for the peer mentor include reported improved communication skills (Ford, 2015; Moser, et al., 2015) and improved leadership skills (Ford, 2015).

Implications for Practice

The importance of a strong peer mentoring program cannot be understated and is a major recommendation resulting from this study. Findings indicate peer mentoring may be one way to help nursing students, taking their first nursing course, reduce stress and may also be considered as a method to assist these students with academics, balancing school and their personal lives, and gaining knowledge of support services. Results of this study suggest having a strong peer mentoring program, including emphasis on the peer mentor's role, the mentor-mentee match, and peer mentoring program coordinator's role, is essential.

Availability of a Peer Mentoring Program

It is this researcher's recommendation that a peer mentoring program be in place for nursing students, particularly those taking their first nursing course. Rationale for this recommendation include the results of this study, which indicate having a peer mentor may help reduce stress for first level nursing students, as well as the positive feedback from students concerning the benefits of peer mentoring, specifically the nearly 70% who recommended peer mentoring. A peer mentoring program may provide students with academic and personal benefits as well as introducing them to available support services.

The Peer Mentor's Role and Peer Mentor-Mentee Match

Results of this study indicate an additional practice implication. Based on participant feedback, it is recommended that the peer mentoring program consider the importance of the peer mentor's role and the peer mentor-match. It is a recommendation of this researcher that potential peer mentors apply for the "job" of peer mentors and be required to identify their interest in and commitment to serving as a peer mentor. Peer mentees in this study shared their beliefs that mentors should be committed and willing to be supportive. Regarding the matching of peer mentors and mentees, mentees felt they should be matched with mentors with whom they felt comfortable and had similar schedules. Mentees also shared they experienced enhanced benefits of peer mentoring when they met with their mentor more frequently and had more meaningful meetings. It is this researcher's recommendation that mentors and mentees complete questionnaires to help facilitate the matching process. Questions regarding schedules, preferred method of meeting, and expectations of time commitment should be included. Additionally, peer mentors should be provided with a thorough orientation, including comprehensive information about available support services and how to access them.

Even after careful consideration of mentor-mentee match, it is possible to have an ineffective peer mentor. In this case, this researcher recommends reassignment of peer mentors. Reassignment should be made if it is discovered a poor mentor-mentee match has occurred or if a mentee feels that his/her peer mentor is not effective. When mentor-mentee pairs in a peer mentoring program at Eastern Michigan University were ineffective, reassignments in the pairing was made if possible (Gardiner, et al., 2014). Comments made by peer mentees in this current study about the help they received from their mentors or their observations about some mentors participating at different levels than other mentors speaks to the importance mentees place on

mentors. Pairs who met more often rated their satisfaction with the peer mentoring process higher. For this reason, reassignment should be considered if a match is not successful so the mentee will have an opportunity to experience the benefits of having a peer mentor.

Peer Mentoring Program Coordinator's Role

This researcher recommends the peer mentoring program coordinator have an expanded role including supportive interaction with mentees. Because this study's peer mentoring program coordinator was also the researcher and the course's instructor, support for the peer mentoring program was aimed at the mentors because they were not participants in the study. In an attempt to be fair to all students in the class as well as not influence the study's experiment, no additional support was provided by the peer mentoring program coordinator to mentees that was not provided to all students.

For individuals interested in developing a peer mentoring program, this constraint could be lifted because the concerns of influencing a research study as well as concerns about the unfairness of providing unequal benefit would not apply. All students could be offered a peer mentor giving everyone an opportunity for possible benefits. In this case, the role of the peer mentoring program coordinator could be expanded to provide communication and support and recognition to mentees and to mentors.

Communication. Recommendations for the expanded role of the coordinator include progress of peer mentoring partnership through consistent communication with mentees and mentors. During the peer mentoring program for this current study, the peer mentoring program coordinator emailed and met with mentors to provide encouragement, answer questions, and collaborate to resolve any issues. Through enhanced communication with mentees, the coordinator may identify potential issues and provide support and encouragement. For example,

if issues regarding mentor-mentee match arise, the program coordinator should intervene and collaborate to resolve the issues and if necessary, reassign mentors and mentees. This recommendation was supported by Gardiner, et al. (2014). The peer mentoring program coordinator should also encourage communication between mentors and mentees. Additionally, the coordinator should share with the mentor the expectation that he or she make the initial contact with the mentee. This suggestion is supported by Ford's (2015) research study in which mentors in a peer mentoring experience for nursing students were expected to initiate communication with their mentee. Additionally, the coordinator should provide expectations for mentor-mentee communication such as collaboratively deciding how often they would meet, discussion topics, and communication methods. Lombardo, et al. (2017) discussed similar recommendations based on a nurse peer mentorship program. Finally, while mentors are not expected to be able to answer all of the mentees' questions, it is the role of the peer mentoring program coordinator to provide mentors with information about support services and to encourage them to seek out resources to help their mentees. This recommendation is also supported by Dennison (2010).

Support. At the start of the peer mentoring program, the program coordinator should organize a meeting for mentors and mentees. Lombardo, et al. (2017) recommended a meet-and-greet event. Additionally, the peer mentoring program coordinator should offer mentees support, information, and resources the mentor may not have provided. Arranging and facilitating meetings and social experiences throughout the peer mentoring experience for mentors and mentees should take place as a way to support individuals, to offer opportunities for students to support each other, and for mentors to share ideas regarding how to best support their mentees.

Finally, the peer mentoring program coordinator should encourage mentors "to provide support, answer questions, and make referrals" for their mentee (Phinney, et al., 2011).

Recognition. Additionally, the program coordinator's role should include recognition of peer mentors and mentees throughout the peer mentoring process. Mentors in this study were provided a certificate of appreciation at the start of the semester and again at the end of the semester. They were also provided with donuts at a meeting. They expressed appreciation of both. Financial compensation of peer mentors should be considered when appropriate and possible. Peer mentors were provided $100.00 per quarter in Phinney, et al.'s (2011) study. As a way to recognize mentors and mentees in a positive way, a year-end celebration was recommended by Lombardo, et al. (2017). The researcher of this current study recommends sending emails and notes of encouragement throughout the peer mentoring program, providing pizza lunches for program participants, and honoring peer mentors at graduation

Limitations

Limitations of this study include a small sample size of students who all attended one school- a small, Midwestern, private health professions college. Additionally, all participants were in a BSN program. Both of these limit generalizability. Students may or may not have had prior peer mentoring experience, which may have affected their experience with peer mentoring during this study. Additionally, some mentees reported they spent more or less time communicating with their mentor than other mentees did. Availability of some mentors as well as scheduling conflicts may have impacted the number and quality of mentor-mentee meetings.

This research study was not a true experiment so it is not possible to conclude that the independent variable, peer mentoring, was the only factor that had an impact on participants' stress levels. While nursing students were all in the Introduction to Nursing Course and many

were taking other courses together, some had different courses. Students were in different clinicals with different clinical instructors and had other possible influences on stress such as number of courses they were taking, number of hours worked, and other obligations such as family and parenting.

A final limitation of this study is that the researcher also served as faculty for the Introduction to Nursing Course as well as the peer mentoring program coordinator. Due to the fact that the researcher did not wish to influence results of the study, or provide unequal benefits to students in the experimental group, encouragement in being active participants of the peer mentoring process was aimed at the peer mentors and not the mentees who were also the researcher's students.

Future Research

Studying the Effects of Peer Mentoring for Different Demographics

While exploratory analysis did not reveal any relationships between demographic data and stress levels for students who did or did not have peer mentors, suggested future research includes studying the effects of peer mentoring for different demographics. A larger sample size, specifically of males, non-whites, and single parents, all of whom were in small number in this study, would aid in this pursuit. Further exploration of the impact of peer mentoring on stress levels of students who work a certain amount of hours each week, have or do not have past health care experience, are first-generation students, or are a certain age range may provide beneficial data as well. For example, Admi's (1997) study reported no significant difference in stress levels between nursing students who were younger compared to those who were older, but a significant difference between students based on their previous nursing experience. At the start of clinical, those without experience reported stress levels that were significantly higher than

students with past nursing experience. Stebleton, et al. (2014) found first-generation students reported feeling stressed more frequently than non-first generation students. Further research may provide additional data regarding which students may benefit most from peer mentoring.

Studying the Benefits of Peer Mentoring for Peer Mentors

This study's focus was the peer mentee; however, future research regarding the benefits of peer mentoring for the peer mentor is recommended. In addition to benefits of peer mentoring reported by peer mentors in the peer mentoring program of this current research study, advantages and benefits of peer mentoring for the peer mentor have been reported in the literature supporting future research in this area.

Larger Sample Size

A larger sample size is also recommended for future research, as well as studying the effects of peer mentoring on stress levels of students from disciplines other than nursing, and studying peer mentoring at larger institutions. Including students who were taking the course for a second time may yield data about whether or not peer mentoring could be successful in decreasing stress for students repeating a course.

Increasing length of the Peer Mentoring Program

Increasing the length of the peer mentoring program is a recommendation for future research. The peer mentoring program for this research study was eight weeks and may have yielded more useful data had the program been longer. Timeframes of peer mentoring programs in the research literature vary. Some research studies, specifically when dealing with clinical settings, had fairly short time periods for their peer mentoring programs. For example, in Li, et al.'s (2011) study of the effects of peer mentoring on nursing student stress, peer mentoring lasted four weeks, the length of the clinical course. Similarly, a peer mentoring experience was

the focus Ford's (2015) study in which nursing students were mentored by more experienced nursing students for six weeks. Longer peer mentoring programs may also be found. In one study of mentoring for college freshman, mentors were recruited in the fall followed by a mentoring program that lasted a little longer than five months, running from late November through early May (Phinney, et al., 2011). The effects of mentoring on nursing students' stress were studied by Demir, et al. (2014), based on a 14 week mentoring program. Additional research has studied the results of peer mentoring which lasted an entire academic year. In one such study of a peer mentoring program for first year college students, students were assigned a mentor during welcome week (Collings, et al., 2014) and in another study of nursing students, a nurse peer mentorship program lasted the duration of the academic year (Lombardo, et al., 2017).

Studying Additional Areas in Which Peer Mentoring May Provide Benefits

Stress is not the only area in which peer mentoring may provide benefits. In addition to studying the effects of peer mentoring on the stress levels of students, research regarding peer mentoring's effect on academic performance, clinical confidence, resiliency, retention, student satisfaction, student engagement, resource utilization, and self-efficacy may provide additional findings regarding benefits of peer mentoring. Studying the impact of peer mentoring specifically on the clinical aspect of nursing education may yield helpful results as well.

Summary

The purpose of this study is to compare the stress levels of nursing students who have a peer mentor to stress levels of nursing students who do not have a peer mentor while taking an Introduction to Nursing Course in a Bachelor of Science in Nursing (BSN) program at a small, Midwestern, private health professions college. Students in this study who had a peer mentor reported less stress than those without a peer mentor and when comparing stress levels of

students with a peer mentor from the start of the semester to the end of the semester, stress levels decreased. For those without a mentor, during the same time frame, stress levels increased. In this chapter, interpretation of results was presented within themes. These included benefits of having a peer mentor (decreased stress, academic support, balancing school and personal life, and learning about support services), importance of the peer mentor's role, and benefits of peer mentoring for the mentor. Finally, this chapter discussed study limitations as well as recommendations for future research, such as studying the effects of peer mentoring for different demographics, studying the benefits of peer mentoring for peer mentors, a larger sample size, increasing the length peer mentoring, and studying additional areas in which peer mentoring may provide benefits.

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Appendix A

Perceived Stress Scale (PSS)

INSTRUCTIONS: The questions in this scale ask you about your feelings and thoughts during THE LAST MONTH. In each case, please indicate your response by placing an "X" over the circle representing HOW OFTEN you felt or thought a certain way.

	Never	Almost Never	Sometimes	Fairly Often	Very Often
	0	1	2	3	4
1. In the last month, how often have you been upset because of something that happened unexpectedly?	○	○	○	○	○
2. In the last month, how often have you felt that you were unable to control the important things in your life?	○	○	○	○	○
3. In the last month, how often have you felt nervous and "stressed"?	○	○	○	○	○
4. In the last month, how often have you felt confident about your ability to handle your personal problems?	○	○	○	○	○
5. In the last month, how often have you felt that things were going your way?	○	○	○	○	○
6. In the last month, how often have you found that you could not cope with all the things that you had to do?	○	○	○	○	○
7. In the last month, how often have you been able to control irritations in your life?	○	○	○	○	○
8. In the last month, how often have you felt that you were on top of things?	○	○	○	○	○
9. In the last month, how often have you been angered because of things that were outside your control?	○	○	○	○	○
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	○	○	○	○	○

Appendix B

Consent Letter and Form

ADULT CONSENT FORM

IRB#: CSM 1709 NMC_15 **Approval Date: 8/16/17 8/18/17** **Expiration Date: 9/30/18 8/18/18**

Title of this Research Study. THE EFFECTS OF PEER MENTORING ON THE STRESS LEVELS OF NURSING STUDENTS

Dear Nursing Student,

You are invited to take part in this research study. The information in this form is meant to help you decide whether or not to take part. If you have any questions, please ask.

Why are you being asked to be in this research study?
You are being asked to be in this study because you are a nursing student enrolled in an Introduction to Nursing Course.

What is the reason for doing this research study?
Nursing students often experience stress and peer mentoring may be one way to help students with this stress. The purpose of this study is to compare the stress levels of nursing students who have a peer mentor to stress levels of nursing students who do not have a peer mentor.

What will be done during this research study?

Pretest will be completed and demographic data will be obtained.
Students will complete the Perceived Stress Scale tool by answering 10 questions on a Likert scale. Students will answer demographic questions.

Participant Initials _____

ADULT Consent Form - PAGE TWO

Students will be assigned to groups.
Nursing students will be assigned to groups based on their scores so the same number of students with different stress scores are in each group. A pretest will first be administered to all participants. Next, participants will be assigned to groups based on their scores. This will result in both groups having the same number of participants with high, medium, and low stress scores. All participants have an equal chance to be assigned to each group. Students in one group will be assigned a peer mentor. Students in the other group will not be assigned a peer mentor.

No further action, until taking the posttest, will be required by students in the group who are not assigned a peer mentor.

Peer mentoring experience.
For students in the group who are assigned a peer mentor, the peer mentoring experience will begin. Students will be oriented to the peer mentoring program and will be given materials to explain the peer mentoring program including:

- The mission of the Peer Mentoring Program
- The Peer Mentoring Program Values
- Goals of the Peer Mentoring Program
- Definition of peer mentoring
- Advantages of peer mentoring
- Research about the peer mentoring relationship
- Attributes about peer mentee
- The role of the peer mentee
- Peer mentor roles and attributes
- Peer Mentee assignment and contact information
- How often to meet: Mentees and mentors are required to meet at least once a week in person or by phone or email throughout the semester.
- The peer mentoring relationship
- What to do if questions/issues arise
- Support Services available

Posttest will be completed.
Near the end of the semester, both groups of students will complete the Perceived Stress Scale tool by answering 10 questions on a Likert scale.

What are the possible risks of being in this research study?
There are no known risks to you from being in this research study.

Participant Initials _____

ADULT Consent Form - PAGE THREE

What are the possible benefits to you?
You are not expected to get any direct benefit from being in this research study.

What are the alternatives to being in this research study?
You can choose not to participate in this research study.

What will being in this research study cost you?
There is no cost to you to be in this research study.

Will you be paid for being in this research study?
You will not be paid or compensated for being in this research study.

What should you do if you have a concern during this research study?
Your well-being is the major focus of every member of the research team. If you have a concern as a direct result of being in this study, you should immediately contact one of the people listed at the end of this consent form.

How will information about you be protected?
Reasonable steps will be taken to protect your privacy and the confidentiality of your study data. The only persons who will have access to your research records are the study personnel, the Institutional Review Board (IRB), and any other person or agency required by law. The information from this study may be published in scientific journals or presented at scientific meetings but your identity will be kept strictly confidential.

What are your rights as a research participant?
You have rights as a research participant. These rights have been explained in this consent form and in The Rights of Research Participants that you have been given. If you have any questions concerning your rights, talk to the investigator or call the Institutional Review Board (IRB), telephone (402)-399-2400.

What will happen if you decide not to be in this research study or decide to stop participating once you start?
You can decide not to be in this research study, or you can stop being in this research study ("withdraw") at any time before, during, or after the research begins. Deciding not to be in this research study or deciding to withdraw will not affect your relationship with the investigator, with the College of Saint Mary, or Nebraska Methodist College.

You will not lose any benefits to which you are entitled.

If the research team gets any new information during this research study that may affect whether you would want to continue being in the study, you will be informed promptly.

Participant Initials _____

ADULT Consent Form - PAGE FOUR

Documentation of informed consent.
You are freely making a decision whether to be in this research study. Signing this form means that (1) you have read and understood this consent form, (2) you have had the consent form explained to you, (3) you have had your questions answered and (4) you have decided to be in the research study.

If you have any questions during the study, you should talk to one of the investigators listed below. You will be given a copy of this consent form to keep.

If you are 19 years of age or older and agree with the above, please sign below.

Signature of Participant: Date: Time:

My signature certifies that all the elements of informed consent described on this consent form have been explained fully to the participant. In my judgment, the participant possesses the legal capacity to give informed consent to participate in this research and is voluntarily and knowingly giving informed consent to participate.

Signature of Investigator: Date:

Authorized Study Personnel.

Principal Investigator: Kristen McNulty Phone: (402) 681-7444

Secondary Investigator: Dr. Kristi Preisman Phone: (402) 399-2602

Participant Initials _____

Appendix C

Peer Mentoring Program Handout in Outline Format (Adapted from Student Power Point)

Peer Mentoring Program

NMC Nursing Students

Peer Mentoring Program Mission

Our peer mentoring program provides BSN students with the opportunity to support each other so that they may successfully progress through their educational experiences.

-Supportive of the Mission of Nebraska Methodist College (NMC)

Peer Mentoring Program Values

*Caring- Individuals involved in the peer mentoring program are focused on the well-being of each other and demonstrate this through kindness and mutual support.

*Respect- Individuals involved in the peer mentoring program acknowledge that all people have worth and demonstrate this through honest communication and accepting behaviors.

*Two of the five core values of NMC with definitions adapted.

Goals of the Peer Mentoring Program

- Goal #1: Nursing students taking the Introduction to Nursing course will be able to have a peer mentor to provide support and encouragement.
- Goal #2: Nursing students who have successfully completed the Introduction to Nursing course will have the opportunity to practice their leadership and communication skills by serving as peer mentors.
- Goal #3: Peer mentors and mentees will experience positive mutually beneficial relationships.

Peer Mentoring Program

Reasons for/ Purposes of the Program

A. Stress of students

- Students in their first level of nursing education often experience stress (Li, Wang, & Lin, 2011)
- Peer mentoring may lead to support and encouragement (Sims-Giddens, Helton, & Hope, 2010).
- Students look favorably to peer mentors' help (Moser, et al., 2015).
- Stress in nursing education is of concern because it may hinder a student's learning, academic performance, and well-being (Jimenez, Navia-Osorio, & Diaz, 2010) and it is believed that having a peer mentor may provide advantages for the mentee (Washington University, 2015).

B. Advantages of Peer Mentoring for the **Mentee**

- Improved progression, less failure (Moser, et al., 2015)
- Increased confidence and self-esteem (McIntosh, Gidman, & Smith, 2014; Christiansen & Bell, 2010; Kelly and McAllister, 2013; Sprengel, & Job, 2004; Giordana, & Wedin, 2010)
- Decreased stress (Bensfield, Solari-Twadell, & Sommer, 2008)
- Emotional support (Christiansen & Bell, 2010)

C. Advantages of Peer Mentoring for the **Peer Mentor**

- Increased confidence (Christiansen & Bell, 2010)
- Improved communication skills (Moser, Berlie, Salinitri, McCuistion, & Slaughter, 2015)
- Improved skills (Yates, Cunningham, Moyle, & Wollin, 1997)
- Improved self-esteem and sense of contributing (Christiansen and Bell,2010; Foster, 2014)

Peer Mentoring Definition

Peer mentoring is a process by which a nursing student provides support and encouragement to a less experienced nursing student. The mentor serves as a role model for the mentee who must be motivated to be successful in his or her educational endeavors as well as being open to learning from the mentor. The mentor-mentee relationship must be mutually respectful (Li, Wang, Lin, & Lee, 2010; McIntosh, Gidman, & Smith, 2014; Waisman Center, 2006; Washington University in St. Louis web site, 2015).

Peer Mentoring Relationship

Assumptions of this program include that the mentors and mentees meet as assigned and maintain a relationship that includes the following:

- The mentor-mentee relationship includes commitment on the part of the mentor and mentee (Sims-Giddens, Helton, & Hope, 2010).
- The mentor-mentee relationship includes initiative on the part of the mentor and mentee (Sims-Giddens, Helton, & Hope, 2010).
- The mentor-mentee relationship includes cooperation on the part of the mentor and mentee (Sims-Giddens, Helton, & Hope, 2010).
- The mentor-mentee relationship includes communication skills between the mentor and mentee (Sims-Giddens, Helton, & Hope, 2010).
- The peer mentor supports learning (McIntosh, Gidman, & Smith, 2014).

Peer Mentor Attributes

The peer mentor is a student who is one level ahead in the nursing program than the mentee. The peer mentor must fit a set of characteristics:

- The peer mentor must be a good leader (Moser, Berlie, Salinitri, McCuistion, & Slaughter, 2015).
- The mentor must be aware of his/her "roles and responsibilities in supporting students…" (McIntosh, Gidman, & Smith, 2014, p. 360).
- The peer mentor must be a good role model, a good student, and be professional.

- The peer mentor must "be motivated, self-confident, enthusiastic and open…" (Li, Wang, Lin, & Lee, 2010) and friendly (Kelly & McAllister, 2013).

Suggestions for attributes of a **peer mentor**. Provided by NRS 101 students- Thank you!!

- Kind, caring, understanding
- Responsible, reliable
- Organized, plan-oriented
- Leader
- Flexible (also on times to meet)
- Nonjudgmental
- Generous, available with time
- Positive attitude, friendly
- Open minded
- Patient
- Good communication skills, able to communicate via text, email, phone, etc.
- Good listener
- Encouraging, supportive
- Compassionate
- Relatable, easy to talk to, approachable
- Understanding of class requirements, knowledgeable, experienced
- Willing to help
- Honest
- Able to relate their experience to what the mentee is going through
- Non-intimidating
- Trustworthy
- Mature
- Sympathetic
- Knows who to ask for information
- Keeps appointments with mentee
- Motivating
- Understanding of the stress the mentee might be experiencing

Peer Mentor Role

- Be supportive
- Be available
- Listen to your mentee, listen more than talk
- Share experiences
- Help mentee access additional resources
- You are not meant to tutor the mentee, just listen, share, support
- Help celebrate successes

- Meet with your mentee at least once a week (in person, by phone, etc.)
- Most of all: CARE! ☺

Peer Mentee Attributes

A Bachelor of Science in Nursing (BSN) student in the first level of his or her program. The mentee must be eager to learn, committed, and motivated (McIntosh, Gidman, & Smith, 2014).

Suggestions for attributes of a **peer mentee**. Provided by NRS 101 students- Thank you!!

- Willing to learn, eager
- Good listener/listening skills
- Accepts feedback, advice, constructive criticism (and use it)
- Organized
- Prepared
- Willing to communicate with mentor
- Not scared to ask questions
- Curious
- Eager to learn
- Open-minded, open to new ideas
- Committed
- Hard working
- Drive to succeed
- Willing to try new study habits
- Willing to ask questions
- Responsible
- Motivated
- On time to meet with mentor
- Engaged in learning
- Positive attitude
- Wants to improve/do well

Peer Mentee Role

- Be open
- Communicate with your mentor
- Ask for what you need
- Be engaged
- Be eager to learn
- Be curious

- Share successes
- Meet with your mentor at least once a week (in person, by phone, etc.)
- Most of all: CARE! ☺

Support Services Available (list from NMC's Office of Student Engagement provided to students)

- *We are all here to help.*
- *We want you to be successful.*

Peer Mentoring Program Coordinator

Please contact me at any time with any questions.

- Kristen McNulty, MSN, RN, Assistant Professor

  kristen.mcnulty@methodistcollege.edu
  (402) 354-7015
- I am happy to help you with:

  -Peer mentoring or mentee roles
  -Making contact with mentor/mentee
  -Making contact with support persons
  -Any other questions or issues

Face to Face Orientation- Peer Mentors

1. Peer Mentor roles and attributes
   -Peer mentee roles and attributes also shared
2. Peer Mentee assignment and contact information
3. How often to meet
4. The peer mentoring relationship
5. What to do if you have questions/issues

Face to Face Orientation- Peer Mentees

1. Peer Mentee roles and attributes
   -Peer mentor roles and attributes also shared
2. Peer Mentee assignment and contact information
3. How often to meet
4. The peer mentoring relationship
5. What to do if you have questions/issues

Nursing 101 Study Skills – Tips (List provided by the Office of Student Engagement.)

Develop these habits to be successful!

Habit 1: Mange your time
- For a nursing student, this is priority number 1.
- Use a weekly planner to figure out when you will be in class study, work, sleep, and spend time with family and friends.
- Prioritize.
- Delegate tasks to others.
- Use a semester planner to proactively organize your time.

Habit 2: Study smart
- Don't cram.
- Divide studying into approximately hour-long sessions, then take a short break, then re-focus.
- Avoid distractions! No TV or social media while studying.

Habit 3: Ask for help.
- Don't wait for a low grade to seek help. Use SI, tutoring, study groups, and student support staff.
- When you do get a low grade, don't stick your head in the sand. Talk to your instructor and revisit effective study strategies.

Habit 4: Focus
- Again, avoid distractions!
- Find a place to study that works for you.
- Don't multi-task. Task-switch. Focus on one thing.

Habit 5: Breathe
- When you feel stressed, take 30 seconds to do some deep slow breathing.
- Deep slow breaths before an exam can calm your nerves and get your mind focused.
- With practice, you will use this techniques frequently to reduce anxiety and improve your mindfulness and performance.

Habit 6: Reward yourself!
- Finish your homework: reward!...Submitted a paper: reward!...Finished studying for a test: reward!...Get a good grade: reward!...Make it through a semester: big reward!
- Ongoing cycle: Set goal, achieve it, reward yourself.

Adapted from *7 Habits of Highly Effective Nursing Students* by Philip Murphy (2015): http://minoritynurse.com/7-habits-of-highly-effective-nursing-students

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Appendix D

IRB Change Form Approval from College of Saint Mary

October 5, 2017

Kristen McNulty
16264 Holmes St.
Omaha, NE 68135

Dear Kristen,

I received your Change of Protocol form to request a modification of your study *The Effects of Peer Mentoring on the Stress Levels of Nursing Students*, IRB Number CSM 1709.

Your proposed changes to add questions to gain more information about participants' experiences do not affect the benefits or risks of your study. Therefore you have permission to make your proposed modifications.

Sincerely,

Dr. Vicky Morgan
Associate Dean Graduate Studies
IRB chair

cc: Dr. Kristi Preisman

Appendix E

March 12, 2018

Kristen McNulty
16264 Holmes St.
Omaha, NE 68135

Dear Kristen,

I received your Change of Protocol form to request a modification of your study *The Effects of Peer Mentoring on the Stress Levels of Nursing Students*, IRB Number CSM 1709.

Your proposed changes to consider mentors' comments does not affect the benefits or risks of your study. Therefore you have permission to make your proposed modifications.

Sincerely,

Dr. Vicky Morgan
Associate Dean Graduate Studies
IRB chair

cc: Dr. Kristi Preisman

Appendix F

Modification Approval from the Research Institution

NEBRASKA METHODIST COLLEGE
THE JOSIE HARPER CAMPUS
720 North 87th Street | Omaha, NE 68114 | (800) 335-5510 | MethodistCollege.edu

October 11, 2017

Kristen McNulty
Nebraska Methodist College
720 N. 87th Street
Omaha, Nebraska 68114

Dear Kristen,

This letter is to formally notify you that the requested modification to your research study, "The Effects of Peer Mentoring on the Stress Levels of Nursing Students," **IRB # NMC2017_15** has been approved.

You are authorized to modify this study on October 11, 2017. The study approval is remains valid until August 18, 2018.

If it should continue beyond that period, you will need to seek continuing review and update the IRB on the research project by submitting the Annual Continuance Request form. You must also advise the IRB in writing when the project is completed or discontinued by submitting the IRB Conclusion of Study Report. If any unanticipated risks to the participants occur, these should be reported to IRB within 48 hours by submitting the IRB Adverse Event Report. Any changes in protocol will require that you submit a new IRB document. All forms are found at https://my.methodistcollege.edu/ICS/IRB/ and should be submitted via Nebraska Methodist College's IRB email: IRB@methodistcollege.edu

If you have any questions, please contact Dr. Marla Kniewel, IRB Chairperson at IRB@methodistcollege.edu.

Sincerely,

Marla D. Kniewel, EdD MSN RN
IRB Chairperson
Nebraska Methodist College

Appendix G

NEBRASKA METHODIST COLLEGE
THE JOSIE HARPER CAMPUS
720 North 87th Street | Omaha, NE 68114 | (800) 335-5510 | MethodistCollege.edu

March 12, 2018

Kristin McNulty MSN RN
Nebraska Methodist College
720 N 87th Street
Omaha NE 68114

Dear Ms. McNulty,

This letter is to formally notify you that the requested modification to your research study, "The Effects of Peer Mentoring on the Stress Levels of Nursing Students," **IRB # NMC2017_15** has been approved.

You are authorized to modify this study on March 12, 2018. The study approval is remains valid until August 18, 2018.

If it should continue beyond that period, you will need to seek continuing review and update the IRB on the research project by submitting the Annual Continuance Request form. You must also advise the IRB in writing when the project is completed or discontinued by submitting the IRB Conclusion of Study Report. If any unanticipated risks to the participants occur, these should be reported to IRB within 48 hours by submitting the IRB Adverse Event Report. Any changes in protocol will require that you submit a new IRB document. All forms are found at https://my.methodistcollege.edu/ICS/IRB/ and should be submitted via Nebraska Methodist College's IRB email: IRB@methodistcollege.edu

If you have any questions, please contact Dr. Marla Kniewel, IRB Chairperson at IRB@methodistcollege.edu.

Sincerely,

Marla D. Kniewel, EdD MSN RN
IRB Chairperson
Nebraska Methodist College

Appendix H

Peer Mentoring Questionnaire

Instructions: Please place an "X" over the circle which best represents your answer to each question.

	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
1. Having a peer mentor was beneficial to me academically.	○	○	○	○	○
2. Having a peer mentor helped me learn ways to balance school with my personal life.	○	○	○	○	○
3. Having a peer mentor helped me learn about support services available to me.	○	○	○	○	○
4. I would recommend having a peer mentor to other nursing students.	○	○	○	○	○

Instructions: Please answer the following five questions (continued on the following page).

1. What types of meeting did you and your peer mentor have? Please indicate with an "X" next to each type of meeting that applies. Please select all that apply.

   In person _____
   Telephone _____
   Text _____
   E-mail _____
   Other _____ (please specify type) _____

2. How often did you and your peer mentor meet in person? _____

3. How often did you and your peer mentor meet by telephone/text/e-mail? _____

Please complete questions on following page.

4. Please provide any comments you would like to share about your peer mentoring experience.

5. Please provide any comments and/or suggestions for improvement of the Peer Mentoring Program.

Appendix I

Permission to Use Email Quote or Personal Statement

Dear Peer Mentor,

Thank you for serving as a peer mentor for a nursing student last semester. Your contributions are greatly appreciated. Your email comments about the peer mentoring process were helpful in identifying the benefits of peer mentoring for the mentor. I am seeking your permission to utilize your email quote(s) and/or emailed personal statement(s) in my dissertation, presentations, and possible future publications of my study: The Effects of Peer Mentoring on the Stress Levels of Nursing Students. The purpose of this study is to compare the stress levels of nursing students who have a peer mentor to stress levels of nursing students who do not have a peer mentor. Should you grant your permission, please sign and date below. Thank you for your consideration.

I authorize Kristen McNulty to use my email quote(s) and/or personal statement(s) in her dissertation, presentations, and possible future publications of her study: The Effects of Peer Mentoring on the Stress Levels of Nursing Students.

Signature:

Date:

Appendix J

Institutional Review Board's Letter of Approval from College of Saint Mary

August 16, 2017

COLLEGE OF SAINT MARY

Dear Ms. McNulty,

Congratulations! The Institutional Review Board at College of Saint Mary has granted approval of your study *The Effects of Peer Mentoring on the Stress Levels of Nursing Students*. Your CSM research approval number is **CSM 1709**. It is important that you include this research number on all correspondence regarding your study. Approval for your study is effective through September 30, 2018. If your research extends beyond that date, please submit a "Change of Protocol/Extension" form which can be found in Appendix B at the end of the College of Saint Mary Application Guidelines posted on the IRB Community site.

Please submit a closing the study form (Appendix C of the IRB Guidebook) when you have completed your study.

Good luck with your research! If you have any questions or I can assist in any way, please feel free to contact me.

Sincerely,

Vicky Morgan

Dr. Vicky Morgan
Director of Teaching and Learning Center
Chair, Institutional Review Board * irb@csm.edu

Appendix K

Institutional Review Board's Letter of Approval from the Research Institution

NEBRASKA METHODIST COLLEGE
THE JOSIE HARPER CAMPUS
720 North 87th Street | Omaha, NE 68114 | (800) 335-5510 | MethodistCollege.edu

August 18, 2017

NMC2017_15
IRB APPROVED Renewed
VALID UNTIL 8-18-2018

Kristen McNulty
Nebraska Methodist College
720 N. 87th Street
Omaha, Nebraska 68114

Dear Kristen,

This letter is to formally notify you that your research study, "The Effects of Peer Mentoring on the Stress Levels of Nursing Students," **IRB # NMC_15**has been approved and given expedited status authorized by 45 CFR §46.110.

You are authorized to begin this study on August 18, 2017. This approval is valid for 1 year, until August 18, 2018. If it should continue beyond that period, you will need to seek continuing review and update the IRB on the research project by submitting the Annual Continuance Request form. You must also advise the IRB in writing when the project is completed or discontinued by submitting the IRB Conclusion of Study Report. If any unanticipated risks to the participants occur, these should be reported to IRB within 48 hours by submitting the IRB Adverse Event Report. Any changes in protocol will require that you submit a new IRB document. All forms are found at https://my.methodistcollege.edu/ICS/IRB/ and should be submitted via Nebraska Methodist College's IRB email: IRB@methodistcollege.edu

If you have any questions, please contact Dr. Marla Kniewel, IRB Chairperson at IRB@methodistcollege.edu.

Sincerely,

Marla D. Kniewel, EdD MSN RN
IRB Chairperson
Nebraska Methodist College