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Shannon O'Connell-Persaud
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SPIRITUALITY, RELIGIOSITY, AND PERCEIVED ABILITY TO PROVIDE
SPIRITUAL CARE IN NURSING STUDENTS

BY

SHANNON O'CONNELL-PERSAUD

A dissertation submitted in partial fulfillment of the requirements for the degree

Doctor of Philosophy

Major in Nursing

South Dakota State University

2019
SPIRITUALITY, RELIGIOSITY, AND PERCEIVED ABILITY TO PROVIDE
SPIRITUAL CARE IN NURSING STUDENTS

SHANNON O'CONNELL-PERSAUD

This dissertation is approved as a creditable and independent investigation by a candidate
for the Doctor of Philosophy degree and is acceptable for meeting the dissertation
requirements of this degree. Acceptance of this does not imply that the conclusions
reached by the candidate are necessarily the conclusion of the major department.

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ACKNOWLEDGEMENTS

I dedicate this dissertation to my family; my husband, our children, their spouses, and my princess granddaughter, Evelyn, for all the support, listening, understanding, and patience. A very special thank you our daughter Melissa who was always there to lend a helping hand when I encountered technical difficulties. All of you, along with our fur baby, Lilly, my home office companion, made this journey manageable and successful. I am forever grateful to all of you.

A very special thank you to my dissertation chair, Dr. Mary Minton. Dr. Minton provided endless expertise, encouragement, support, and a gentle nudge when I needed it. Thank you to my dissertation committee members, Drs. Djira, Isaacson, and Mennenga for all the guidance, edits, and insights. Also, a thank you to Dr. Barb Condon. I would not have been on this journey if it had not been for her encouragement.

Lastly, a special thank you for the Jonas Scholarship Foundation for providing support and leadership through my doctoral educational journey.
CONTENTS

LIST OF TABLES .................................................................................................................. x

ABSTRACT .......................................................................................................................... iv

CHAPTER 1: INTRODUCTION .......................................................................................... 1

Purpose .................................................................................................................................. 4

Overarching Mixed Method Question: ................................................................................. 5

Research Question 1: ............................................................................................................. 5

Research Question 2: ............................................................................................................. 5

Research Question 3: ............................................................................................................. 6

Research Question 4: ............................................................................................................. 6

Research Question 5: ............................................................................................................. 7

Research Question 6: ............................................................................................................. 8

Research Question 7: ............................................................................................................. 8

Research Question 8: ............................................................................................................. 8

Qualitative Questions: ......................................................................................................... 9

Definitions and Terms .......................................................................................................... 9

Assumptions ......................................................................................................................... 12

Background and Significance ............................................................................................... 12

Nursing Student Spiritual Care Preparation Framework (NSSpCPF) ................................ 14
CHAPTER 2: REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK

Evolution of Holistic Nursing Practice
Nursing Theory and Spirituality
Spirituality in Nursing
Health Outcomes
Nurse’s Spiritual Awareness
Religiosity
Spiritual Care
Educational Preparedness
Gaps in Spiritual Care

CHAPTER 3: METHODOLOGY

Research Methodology and Design
Philosophical Underpinnings
Study Setting and Sample
Study Population
Study Sample
Inclusion and Exclusion Criteria
Sampling Procedures
Research Question 3: .......................................................................................... 59

Research Question 4: .......................................................................................... 60

Research Question 5: .......................................................................................... 60

Research Question 6: .......................................................................................... 61

Research Question 7: .......................................................................................... 62

Research Question 8 .......................................................................................... 63

Summary of Analysis ......................................................................................... 64

CHAPTER 5: DISUSSION OF FINDINGS .................................................................. 66

Spirituality ........................................................................................................... 66

Limitations ........................................................................................................... 75

Implications for Education .................................................................................. 76

Conclusion .......................................................................................................... 77

REFERENCES ....................................................................................................... 78

APPENDIX A: LOMA LINDA UNIVERSITY INTRODUCTION LETTER .......... 100

APPENDIX B: WESTERN UNIVERSITY INTRODUCTION LETTER ............... 102

APPENDIX C: PARTICIPANT REMINDER LETTER-LOMA LINDA UNIVERSITY
............................................................................................................................... 104

APPENDIX D: REMINDER LETTER-WESTERN UNIVERSITY .................... 106

APPENDIX E: DEMOGRAPHIC INFORMATION SHEET .............................. 108
<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>SPIRITUALITY INSTRUMENT-27©</td>
<td>110</td>
</tr>
<tr>
<td>G</td>
<td>DUKE UNIVERSITY RELIGIOUS INDEX (DUREL)</td>
<td>112</td>
</tr>
<tr>
<td>H</td>
<td>STUDENT SURVEY OF SPIRITUAL</td>
<td>114</td>
</tr>
<tr>
<td>I</td>
<td>PERMISSION TO USE DUREL INSTRUMENT</td>
<td>116</td>
</tr>
<tr>
<td>J</td>
<td>PERMISSION TO USE SPIRITUALITY INSTRUMENT</td>
<td>117</td>
</tr>
<tr>
<td>K</td>
<td>OPEN-ENDED QUESTIONS</td>
<td>118</td>
</tr>
<tr>
<td>L</td>
<td>CITI CERTIFICATION</td>
<td>119</td>
</tr>
<tr>
<td>M</td>
<td>PAIRWISE SPEARMAN CORRELATION-TRADITIONAL FIRST YEAR NURSING STUDENT</td>
<td>120</td>
</tr>
<tr>
<td>N</td>
<td>PAIRWISE SPEARMAN RANK CORRELATION-TRADITIONAL FINAL QUARTER NURSING STUDENTS</td>
<td>121</td>
</tr>
<tr>
<td>O</td>
<td>PAIRWISE SPEARMAN RANK CORRELATION-ACCELERATED FINAL QUARTER NURSING STUDENTS</td>
<td>122</td>
</tr>
<tr>
<td>P</td>
<td>PAIRWISE SPEARMAN RANK CORRELATION-TRADITIONAL FINAL QUARTER AND ACCELERATED FINAL QUARTER NURSING STUDENTS</td>
<td>123</td>
</tr>
<tr>
<td>Q</td>
<td>PAIRWISE SPEARMAN CORRELATION RESULTS SPI-27©, DUREL, AND SSSC-TRADITIONAL SECOND QUARTER NURSING STUDENTS</td>
<td>124</td>
</tr>
<tr>
<td>R</td>
<td>CORRELATION MATRIX</td>
<td>125</td>
</tr>
</tbody>
</table>
APPENDIX S: CORRELATION BETWEEN DEPENDENT VARIABLES-
TRADITIONAL SECOND QUARTER AND FINAL QUARTER NURSING
STUDENTS .............................................................................................................. 126

APPENDIX T: CORRELATION BETWEEN DEPENDENT VARIABLES-
TRADITIONAL FINAL QUARTER AND ACCELERATED FINAL QUARTER
NURSING STUDENTS ............................................................................................... 127

APPENDIX U: INSTRUMENT STATISTICS .................................................................. 128

APPENDIX V: GROUP INSTRUMENT STATISTICS ...................................................... 129

APPENDIX W: CHI-SQUARE Q-Q PLOT-TRADITIONAL SECOND QUARTER
AND FINAL QUARTER NURSING STUDENTS ....................................................... 130

APPENDIX X: CHI-SQUARE Q-Q PLOT- TRADITIONAL FINAL QUARTER AND
ACCELERATED FINAL QUARTER NURSING STUDENTS ...................................... 131

APPENDIX Y: SCATTER PLOT .................................................................................. 132

APPENDIX Z: SCATTER PLOT .................................................................................. 133

APPENDIX AA: SCATTER PLOT ................................................................................. 134
LIST OF TABLES

Table 1 Demographics

Table 2 Pairwise Spearman rank Correlation Research Questions One Through Four

Table 3 Independent t-Test Research Question 5

Table 4 Independent t-Test Research Question 6

Table 5 MANOVA Research Question 7

Table 6 MANOVA Research Question 8
ABSTRACT

SPIRITUALITY, RELIGIOSITY, AND PERCEIVED ABILITY TO PROVIDE SPIRITUAL CARE IN NURSING STUDENTS

SHANNON O’CONNELL-PERSAUD

2019

Objective. The objective of this study was to explore nursing students’ spirituality, religiosity, and perceived ability to provide spiritual care. Background. Nursing students must be prepared to respond to a patient’s spiritual needs. A gap in knowledge exists as to the educational preparedness necessary to provide a nursing student with the ability to respond to a patient’s spiritual need. To address the gap, this study explored the relationships between nursing students’ spirituality, religiosity, and perceived ability to provide spiritual care. Study Setting and Sample. This multi-site study used two accredited nursing programs located in the Western Region of the United States. The convenience sample consisted of traditional second quarter and traditional final quarter nursing students attending a faith-based university and accelerated final quarter nursing students attending a private secular university. Design. This study used a convergent mixed method design that consisted of one overarching mixed method question, eight quantitative research questions and three open-ended qualitative questions. Methods. Data was collected via an online survey using QuestionPro®. The survey consisted of three instruments, a demographic information sheet, and three open-ended questions. The quantitative data were analyzed using descriptive, pairwise Spearman rank correlation, independent t-tests, and MANOVAs. Content analysis will be used to analyze the open-
ended questions and those results are pending. **Results.** Descriptive results showed an ethnically diverse sample (N = 141) of primarily female nursing students. The findings suggested a significant positive relationship between spirituality and intrinsic religiosity in traditional second quarter ($r_s = 0.53, p < .001$), and accelerated final quarter students ($r_s = 0.79, p < .001$). Results for perceived ability to provide spiritual care suggested a marginal (or unadjusted) inverse relationship with dimensions of religiosity and spirituality for all groups of students. The final quarter students’ mean score was significantly higher than accelerated final quarter nursing students for both intrinsic religiosity ($p = .01$) and organizational religious activity ($p = .001$). **Conclusion.** Although significant positive and marginal (or unadjusted) inverse relationships were reported between spirituality, religiosity, and perceived ability to provide spiritual care, the findings were not consistent for all groups. The marginal (or unadjusted) inverse relationships imply that a nursing student may have difficulty differentiating spirituality and religiosity and that nursing students may be faced with a dilemma as to how to include the spiritual dimension in a holistic practice. The pending qualitative data results will be analyzed for convergence or divergence with the quantitative findings.
CHAPTER 1: INTRODUCTION

Historically, nurses have had a prominent role in responding to the spiritual needs of their patients. This is noted with the Catholic religious orders, followed by Florence Nightingale and faith-based community nursing (Bennett & Thompson, 2015; Burkhart & Schmidt, 2012; Caldeira et al., 2016). However, over time, nursing response to a patient’s spiritual needs diminished possibly due to a lack of personal spiritual awareness and the less prominent role of spirituality in nursing (Puchalski et al., 2009). Subsequently, a renewed focus in spiritual care emerged when research demonstrated the benefits of addressing spiritual needs for a patient’s well-being (Balboni et al., 2011). Current professional and educational standards emphasize the importance of responding to a patient holistically that includes responding to a patient’s spiritual needs (Burkhart & Hogan, 2008). In addition, The Essentials of Baccalaureate Education for Professional Nursing Practice includes language requiring that nursing students should be taught to provide comprehensive nursing care within a holistic framework inclusive of the patient’s spiritual dimension (American Association College of Nursing, 2016).

Responding to a patient’s spiritual needs is an integral part of nursing care (Caldeira & Timmins, 2017; Timmins & Calderia, 2017) and has been shown to have a positive impact on patients’ quality of life and health outcomes (Phelps et al., 2012). Conversely, when their spiritual needs are not responded to, patients have reported a lower level of satisfaction with overall health care (Astrow, Wexler, Texeira, He, &
Sulmasy, 2007). A growing body of evidence suggests that nurses feel underprepared to respond to a patient’s spiritual needs (Phelps et al., 2012). This evidence aligns with patients’ reports that nurses generally do not respond to their spiritual needs (Balboni et al., 2011).

This reported lack of a response is generally due to situational barriers (Bennett & Thompson, 2015; Gallison, Xu, Jurgens, & Boyle, 2013). These barriers include insufficient time, belief that a patient’s spirituality is personal, difficulty in distinguishing proselytizing from spiritual care, lack of competence delivering spiritual care, and tension created when nurses’ spiritual beliefs differ greatly from that of their patients (Balboni et al., 2011; Baldacchino, 2011; Johnston Taylor, Mamier, Ricci-Allegra, & Foith, 2017).

In addition to these situational barriers, nurses also identified limited educational preparedness in addressing a patient’s spiritual needs (Cooper, 2012). The emphasis in undergraduate nursing curriculum is on knowledge and skills required to implement science and technology-based nursing care (Garssen, Ebenau, Visser, Uwland, & Groot, 2017). However, focusing on the science of nursing (i.e., work in process, evidence, indications, outcomes) can exclude the art of nursing (e.g. self-awareness, sensitivity, communication, person-centered), which includes attending to a patient’s spiritual needs (Johnston Taylor et al., 2017; Ross et al., 2016). Providing undergraduate nursing students with educational opportunities to grapple with their own spirituality would be an important starting point. These opportunities would provide a foundation for the knowledge and skills needed to confidently attend to a patient’s spiritual needs as part of holistic care (Timmins & Neill, 2013).
Studies have shown that positive outcomes are associated with integrating spirituality content into undergraduate nursing programs. For example, Meryem and Gurler (2014) added spirituality to an integrated nursing curriculum and reported an increase in student awareness of spirituality in the care of patients. Similarly, van Leeuwen et al. (2008), using a pre-posttest design, found that a spirituality course helped to increase nursing students’ knowledge in spiritual care competencies and self-awareness.

Overall, nursing curricula lacks both clarity and consensus about materials and methods for teaching spiritual care (Timmins, Neill, Murphy, Begley, & Sheaf, 2015c). Less than six percent of all nursing curricula include the topic of spirituality (Timmins & Neill, 2013), and there is uncertainty about what specific content best prepares a nurse to attend to patients’ spiritual needs (Pesut, Fowler, Taylor, Reimer-Kirkham, & Sawatzky, 2008).

A first step in educational preparedness is for nursing students to explore their spiritual self-awareness, as such awareness is the strongest predictor of whether patients’ spiritual needs are assessed and addressed (Johnston Taylor et al., 2017; McSherry & Jamieson, 2013). Furthermore, nursing students’ spiritual awareness is positively correlated with the ability to respond to a patient’s spiritual needs, which suggests spiritual awareness opportunities should be incorporated into educational interventions (Chan, 2010; Vlasblom, van der Steen, Knol, & Jochemsen, 2011). Additionally, nurses' religiosity and the perceived ability to provide spiritual care have been positively
associated with attending to a patient’s spiritual needs (Baldacchino, 2008b; Bennett & Thompson, 2015; Van Leeuwen, Tiesinga, Middel, Post, & Jochemsen, 2008).

Current nursing research agrees that it is important to include content in the undergraduate nursing curriculum addressing the provision of spiritual care (Azarsa, Davoodi, Markani, Gahramanian, & Vargaei, 2015; Li-Fen, Yu-Chen, & Dah-Cherng, 2012). A gap in literature exists regarding variables associated with student nurses’ preparedness to respond to a patient’s spiritual needs. In addition, little research has reported the relationships between spirituality, religiosity, and perceived ability to provide spiritual care. Addressing this gap in knowledge will provide results to inform undergraduate nursing curriculum development to support student nurses’ preparedness to respond to patients’ spiritual needs.

Purpose

The purpose of this mixed method study is to explore nursing students’ spirituality, religiosity, and perceived ability to provide spiritual care. Using a convergent mixed method design, this study will include both qualitative and quantitative data. Three questionnaires will operationalize the variables of spirituality, religiosity, and perceived ability to provide spiritual care for the quantitative strand of the study. Simultaneously, the qualitative strand features three open-ended questions to generate nursing student responses about caring for a patient expressing spiritual needs and how spirituality and religiosity influence their ability to respond to patients’ spiritual needs. The sample will include traditional nursing students in their second quarter and final quarter attending a
private faith-based university and accelerated final quarter nursing students attending a private secular university.

**Overarching Mixed Method Question:**

What results emerge from comparing the exploratory qualitative data for nursing students’ perceptions about attending to a patients’ spiritual needs with the outcomes of quantitative data measured on three instruments?

**Research Question 1:**

What is the relationship, if any, between spirituality, religiosity, and perceived ability to provide spiritual care in traditional second quarter nursing students attending a private faith-based university?

H1₀: There is no relationship between spirituality, religiosity, and perceived ability to provide spiritual care in traditional second quarter nursing students attending a private faith-based university.

H1ₐ: There is a relationship between spirituality, religiosity, and perceived ability to provide spiritual care in traditional second quarter nursing students attending a private faith-based university.

**Research Question 2:**

What is the relationship, if any, between spirituality, religiosity, and perceived ability to provide spiritual care in traditional final quarter nursing students attending a private faith-based university?
H2O: There is no relationship between spirituality, religiosity, and perceived ability to provide spiritual care in traditional final quarter nursing students attending a private faith-based university.

H2A: There is a relationship between spirituality, religiosity, and perceived ability to provide spiritual care in traditional final quarter nursing students attending a private faith-based university.

Research Question 3:

What is the relationship, if any, between spirituality, religiosity, and perceived ability to provide spiritual care in accelerated final quarter nursing students attending a private secular university?

H3O: There is no relationship between spirituality, religiosity, and perceived ability to provide spiritual care in accelerated final quarter nursing students attending a private secular university.

H3A: There is a relationship between spirituality, religiosity, and perceived ability to provide spiritual care in accelerated final quarter nursing students attending a private secular university.

Research Question 4:

What is the relationship, if any, between spirituality, religiosity, and perceived ability to provide spiritual care in traditional final quarter nursing students attending a faith-based university and accelerated final quarter nursing students attending a private secular university?
H40: There is no relationship between spirituality, religiosity, and perceived ability to provide spiritual care in traditional final quarter nursing students attending a faith-based university and accelerated final quarter nursing students attending a private secular university.

H4A: There is a relationship between spirituality, religiosity, and perceived ability to provide spiritual care in traditional final quarter nursing students attending a faith-based university and accelerated final quarter nursing students attending a private secular university.

Research Question 5:

What is the difference, if any, between traditional final quarter nursing students attending a faith-based university and accelerated final quarter nursing students attending a private secular university in terms of spirituality, religiosity, and perceived ability to provide spiritual care?

H50: There is no difference between traditional final quarter nursing students attending a private faith-based university and accelerated final quarter nursing students attending a private secular university in terms of spirituality, religiosity, and perceived ability to provide spiritual care.

H5A: There is a difference between traditional final quarter nursing students attending a faith-based university and accelerated final quarter nursing students attending a private secular university in terms of spirituality, religiosity, and perceived ability to provide spiritual care.
Research Question 6:

What is the difference, if any, between traditional second quarter and final quarter nursing students attending a private faith-based university in terms of spirituality, religiosity, and perceived ability to provide spiritual care?

H6₀: There is no difference between traditional second quarter and traditional final quarter nursing students attending a private faith-based university in terms of spirituality, religiosity, and perceived ability to provide spiritual care.

H6ₐ: There is a difference between traditional second quarter and final quarter nursing students attending a private faith-based university in terms of spirituality, religiosity, and perceived ability to provide spiritual care.

Research Question 7:

Are there any differences in traditional second quarter and final quarter nursing students attending a private faith-based university in terms of spirituality, religiosity, and perceived ability to provide spiritual care after adjusting for demographic variables (age, ethnicity, prior spiritual care education)?

Research Question 8:

Are there any differences between traditional final quarter nursing students attending a faith-based university and accelerated final quarter students attending a private secular university in terms of spirituality, religiosity, and perceived ability to provide spiritual care after adjusting for demographic variables (age, ethnicity, prior spiritual care education)?
Qualitative Questions:

1. Describe how you would care for a patient expressing spiritual needs.

2. Describe how spirituality influences your perceived ability to respond to a patient’s spiritual needs.

3. Describe how religiosity influences your ability to respond to a patient’s spiritual needs.

Definitions and Terms

The study applies the following conceptual definitions.

Traditional Nursing Students

The Bachelor of Science degree in nursing is a four-year nursing program that enrolls traditional nursing students. Completion of the baccalaureate program qualifies the graduate to sit for the National Council Licensure Examination Register Nurse (NCLEX-RN) licensing exam (Penprase & Koczara, 2009). In this study, the traditional nursing students are in either the second quarter of their first year or they are in the final quarter of a four year program.

Accelerated Nursing Students

Accelerated nursing programs are for graduates from non-nursing fields who seek a Bachelor’s of Science in Nursing in 12-18 months (Lindley, Ashwill, Cipher, & Mancini, 2017). Like a traditional four-year baccalaureate nursing program, completion of an accelerated nursing programs qualifies graduates to sit for the NCLEX-RN exam. In this study, the accelerated students are in the final quarter of their program. Accelerated nursing students were included in this sample to determine if a different worldview and/or life experiences impacts the study variables. To date, accelerated final quarter
nursing students have not been studied regarding spirituality, religiosity, and perceived ability to provide spiritual care.

*Spirituality*

Spirituality is an ongoing intrapersonal process that manifests as an inner peace and strength derived from a transcendent god, an ultimate reality, or whatever one views as supreme (Lepherd, 2015; Puchalski & Ferrell, 2010; Weathers, McCarthy, & Coffey, 2016). Spirituality is underpinned by a sense of connectedness with others as well as a connection between oneself and one’s surroundings. It embraces the concept of moving toward a destination or goal to find meaning, purpose, and direction in life (Richardson, 2014). Furthermore, spirituality entails an awareness of one’s personal beliefs and views as a fundamental part of preparedness in providing spiritual care to patients (Eckroth-Bucher, 2010; Narayanasamy, 1999). For this study, the definition of nursing students’ spirituality is a connectedness (with oneself, with others, and/or with a higher power), self-transcendence, conservationism, and connectedness with a higher power.

*Religiosity*

Religiosity is a person’s adherence to the beliefs, values, and practices of an organized religious institution (Lopez, Fischer, Leigh, David, & Webster, 2014). Religiosity involves beliefs and practices related to the Transcendent, which is normally referred to in Western religious culture as God, Allah, HaSem, or a Higher Power (Koenig, Perno, & Hamilton, 2017). In Eastern traditions, the Transcendent is variously referred to as Vishnu, Lord Krishnan, Buddha, or the Ultimate Reality (Koenig & Büsßing, 2010). Regardless of the tradition, organized religions commonly have rules to
guide behaviors and doctrines about life and death (Lopez et al., 2014). Religiosity is organized as a community or, practiced in private (Koenig, Perno, & Hamilton, 2016). Overall, religiosity encompasses a person’s behavior, emotions, and thoughts derived from religious beliefs or denominations, and it may include attending a worship service (organizational) and/or private experiences (non-organizational) (Koenig & Büsing, 2010).

Koenig and Bussing (2010) identified three dimensions of religiosity consisting of organizational religious activity (ORA), non-organizational religious activity (NORA), and intrinsic religiosity (IR). ORA involves attendance at religious services and/or membership in a religious organization (Koenig et al., 2016). NORA includes activities performed in private, such as prayer, scripture study, watching religious television or listening to religious radio. IR indicates religious beliefs or experiences. For this study, a nursing student’s religiosity consists of ORA, NORA, and IR.

Perceived Ability to Provide Spiritual Care

Spiritual care is a fundamental component of holistic health care promoting spiritual health and well-being by assessing spiritual needs (Meyer, 2003; Tiew, Creedy, & Chan, 2013a). Nurses who provide spiritual care establish connectedness with patients by: showing concern, sharing common experiences, and/or having spiritual beliefs (Johnston Taylor & Mamier, 2013). Providing spiritual care requires the application of a nursing student’s knowledge of their spirituality, religiosity, and attitudes (Meyer, 2003; Tiew & Creedy, 2010). For this study, nursing students’ perceived ability to provide
spiritual care may be influenced by their personal values, beliefs, attitudes, and knowledge (Meyers, 2003).

**Assumptions**

The proposed study is based on the following assumptions:

1. Spirituality is a universal concept that is important to nurses, nursing students, and patients.
2. Addressing the spiritual needs of patients is part of holistic care.
3. Nurses are vital in providing spiritual care to patients.

**Background and Significance**

Spirituality and religiosity are important in the lives of Americans (Koenig et al., 2017; Pearce et al., 2012). A Gallup poll reports that for 50% of Americans religiosity was “very important” in life while 26% report it as “fairly important” (Gallup Poll, 2018). Similarly, an international survey demonstrated that just over one-third of respondents (34%) considered spirituality to be high or of very high importance in their lives (MacLeod et al., 2012).

A patient’s spirituality and religiosity are often prevalent within a hospital setting and become important to individuals facing emotional stress and physical illness. Both variables are central to how patients cope with terminal illness and provide a source of hope at end of life (Hodge & Horvath, 2011; Nixon & Narayanasamy, 2010; Oxhandler & Parrish, 2017; Phelps et al., 2012). For instance, Peteet and Balboni (2013) interviewed 129 cancer patients and reported that 78% (n = 60) found spirituality and religiosity were important to coping with cancer and influenced end-of-life decision making. Moreover,
Kang et al. (2011) surveyed cancer patients (n = 94) and found that when nurses responded to their patients’ spiritual and religious needs, patients reported a higher quality of life.

Research suggests that when nurses respond to patient’s spiritual needs, patients experience increased health-related quality of life, spiritual well-being, peacefulness, comfort, and serenity at end of life (Astrow et al., 2007; Koenig et al., 2017; Kruse, Ruder, & Martin, 2007). In patients with Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) (Cato et al. 2006) and with cancer (Kang et al., 2001) improved health related quality of life was associated with nurse response to spiritual needs. However, Pearce et al. (2012) surveyed 150 patients with advanced cancer and found that of the 44% (n = 67) who desired to have their spiritual needs addressed only 17% (n = 17) reported receiving this holistic care.

Nurses recognize the positive results of responding to a patient’s spiritual needs as a component of holistic care, but report a lack of education preparedness, skills, perspectives, experience, and comfort in attending to a patients spiritual need (Chen et al., 2017; Chew, Tiew, & Creedy, 2016). Educational preparedness begins at the undergraduate level and should include both experience and knowledge (Ross et al., 2014; Timmins & Neill, 2013). Core textbooks may be a starting point but they vary greatly in the content about spiritual care (Pesut et al., 2008; Timmins, Murphy, Neill, Begley, & Sheaf, 2015a). Because textbooks are used as a primary resource in teaching, nursing students most often rely on them for their nursing knowledge (Timmins & Neill, 2013).
However, spiritual care content is both limited and variable in undergraduate nursing textbooks and little is known about how this content contributes to educational preparedness (McSherry & Jamieson, 2013; Timmins et al., 2015a). Additionally, the lack of textbook content spiritual care may infer that this important component of holistic care is less important than other elements of nursing care (Johnston Taylor, Testerman, & Hart, 2014b; Timmins et al., 2015a). For a nursing student to be prepared to provide holistic care, spiritual care must be integrated across textbooks instead of being relegated to specialized texts (Timmins et al., 2015a). In addition to integrative textbook content, nursing students must also and be provided time for reflective practice to identify a sense of meaning and purpose and to develop as an authentic whole person (Puchalski & Ferrell, 2010).

**Nursing Student Spiritual Care Preparation Framework (NSSpCPF)**

Currently, there is no conceptual framework that incorporates the variables of spirituality, religiosity, and perceived ability to provide spiritual care in the context of undergraduate nursing students. Following a thorough review of existing theoretical models addressing spiritual care, the principal investigator (PI) developed the Nursing Student Spiritual Care Preparation Framework (NSSpCPF). The NSSpCPF hypothesizes positive relationships between the variables of spirituality, religiosity, and perceived ability to provide spiritual care. Exploring these relationships is relevant for understanding nursing student preparedness to respond to patients’ spiritual needs.

The education-based Actioning Spirituality and Spiritual Care in Education and Training (ASSET) informed the NSSpCPF. The ASSET model includes structure
content, process of learning, and outcome of spiritual care education with emphasis on nurses’ self-awareness regarding their personal spiritual beliefs, communication skills, and assessment procedures to improve spiritual care (Narayasamy, 1996b). The NSSpCPF spirituality concept is drawn from the ASSET model.

In the NSSpCPF framework, spirituality is operationalized as a connectedness with others, self-transcendence, self-cognizance, and a connectedness with a higher power. Perceived ability to provide spiritual care is operationalized as personal values, beliefs, attitudes, and knowledge. Religiosity is operationalized using three dimensions: ORA pertains to public religious activities, NORA consists of religious activities performed in private, and IR consists of personal religious commitment or motivation (See Figure 1).

In the nursing literature, both researchers and educators distinguish between spirituality and religiosity as depicted in the NSSpCPF. Religiosity is assumed to be a distinct concept because it refers to a particular set of beliefs held by a person, whereas spirituality is less formal in that it gives meaning to one’s life and can be expressed in art, nature, music, family, or community (McBrien, 2010; Puchalski & Ferrell, 2010; Richardson, 2014). A review of the literature suggests the importance of exploring these two variables in combination with perceived ability to provide spiritual care to better understand nursing student’s preparation for spiritual care. (Johnston Taylor et al., 2014b; McSherry & Jamieson, 2011).
Figure 1. Nursing Student Spiritual Care Preparation Framework
CHAPTER 2: REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK

This chapter consists of a thorough literature review of the concepts of spirituality, religiosity, and perceived ability to provide spiritual care as presented in the NSSpCPF. The following databases were used to conduct the literature review: PubMed, MEDLINE Web of Knowledge, Cumulative Index of Nursing and Allied Health Literature (CINAHL) Plus via Elton B. Stephens Company (EBSCO), Cochrane Database of Systematic Reviews, and The Education Resources Information Center (ERIC) via EBSCO host. The broad search included all articles published from 2002 to present. The search terms used individually and in relationship to nurses, nursing students, and patients were: “nursing history,” “nursing theory,” “nursing standards,” “religiosity,” “religion,” “spirituality,” and “spiritual care.” The search terms used to explore and define the study’s population were “nursing students” and “accelerated nursing students.”

A total of 653 articles were retrieved and 147 articles consisting of qualitative, quantitative, mixed methods, and systematic reviews were included in the literature review. Inclusion criteria for articles included peer reviewed, English language, seminal articles, and scholarship within other health disciplines. Exclusion criteria included editorials, non-peer reviewed articles, and non-English language scholarship.

Evolution of Holistic Nursing Practice

Holistic nursing includes the components of a patient’s physical, psychological, and spiritual dimensions. The components of holistic care were initially addressed in the
Catholic religious orders in the 1600’s, then in the work of Florence Nightingale, and lastly in parish nursing (Baldacchino, 2011; Cooper, Chang, Sheehan, & Johnson, 2013; Cowling, 2015). Catholic religious orders have ministered to the sick since early church history. Their faith embraced the values and beliefs that patients needed to be holistically healed in order to promote synchronization of the body, mind, and spirit (Abbas & Dein, 2011; Newbanks & Rieg, 2011). In the 19th century, Florence Nightingale incorporated the Catholic tradition for nursing care. This care was holistically directed at the human being in its entirety (Attard, Baldacchino, & Camilleri, 2014; Chung, Wong, & Chan, 2007). Nightingale believed that attending to a patient’s spiritual dimension was essential to healing and critical to one’s health (Chung et al., 2007; Murphy, 2007).

Following Florence Nightingale’s model of holistically caring for patients, Dr. Granger Westberg (in the mid 1980’s) conceptualized the idea of parish nursing (Newbanks & Rieg, 2011). Dr. Westberg, a physician and chaplain, started wholistic care clinics in churches using an interprofessional team of physicians, nurses, social workers, and pastoral counselors. Dr. Westberg realized nurses were key to health ministry in the faith setting, such as a church, thereby suggesting the parish nurse role. This role would emphasize integrating the spiritual dimension into the healing process to promote harmony of mind, body, and spirit (Newbanks & Rieg, 2011).

In 1989, Dr. Westberg founded the Health Ministries Association (HMA) (Newbanks & Rieg, 2011). The HMA acknowledged the importance of faith community nurses understanding and attending to patients’ spiritual needs in order to provide holistic care (Newbanks & Rieg, 2011). In 1991, the American Nurses Association (ANA)
approved a request from the HMA to recognize parish nursing as a specialized practice focusing on faith-based health maintenance and health promotion for parishioners and communities (HMA, 2011).

While the parish nursing movement was underway, changes were also occurring within hospital organizations. In the 21st century, both nationally and internationally, hospital organizations and educational professional standards recognized the importance of attending to a patient’s spiritual needs, seeing this as integral to holistic health care. (Bennett & Thompson, 2015; Hodge & Horvath, 2011; Salmon, Bruick-Sorge, Beckman, & Boxley-Harges, 2010). Furthermore, hospitals addressed the importance of providing spiritual support to patients during nursing orientation by developing procedures to implement spiritual assessments and in ongoing staff training (Hixson & Loeb, 2018). The Joint Commission (JC), responsible for accrediting hospital organizations in the United States, requires that healthcare organizations develop ways to meet the spiritual needs of clients in the delivery of holistic care (JC, 2017).

Additionally, in nursing education, The Essentials of Baccalaureate Education for Professional Nursing Practice supports the inclusion and implication of spiritual care for nurse practice. The Essentials includes language indicating that a practicing nurse should provide nursing care within a holistic framework that is comprehensive and that focuses on the mind, body, and spirit (AACN, 2016). The ANA professional standards suggest that holistic care is a component of nursing curricula in the Scope and Standards of Nursing Practice (ANA, 2015). Further, the International Council of Nurses’ (ICN) Code
of Ethics states, as part of holistic care, that it is the responsibility of the nurse to support patients’ rights, principles, and spiritual values (ICN, 2012).

**Nursing Theory and Spirituality**

In addition to Florence Nightingale, who embraced the importance of spiritual care and integrating it into a nurse’s bedside practice, many nursing theorists also endorse the spiritual component. Several nurse theorists identify that an essential component of holistic nursing practice is the importance of attending to a patient’s spirituality. Further, it is the responsibility of the nurse to attend to the spiritual needs of patients (Legg, 2011; Nardi & Rooda, 2011; Salmon et al., 2010).

Jean Watson addresses spirituality as a central concept in her theory of human caring. She places this concept under the curative factors of faith-hope and acknowledges that attending to the spiritual needs of the patient promotes holistic nursing and the nurse-patient relationships. Moreover, Watson’s theory emphasizes a deep understanding of a transpersonal human-to-human relationship that sustains inner harmony of the mind, body, and spirit (Watson, 2008). Further, Watson contends that the physiological, psychological, sociocultural, and spiritual dimensions of a patient are interrelated, interdependent, and integral to holistic nursing care (Watson, 2008).

In Neumann’s System Model, individuals are viewed as a complex system consisting of physiological, psychological, sociocultural, developmental, and spiritual variables (Neuman & Fawcett, 2002). A system is considered holistic when any parts of a subpart can be organized into an interrelating whole (Neuman & Fawcett, 2002). Like Watson’s theory, Neumann’s Model emphasizes spirituality as a central concept within
the framework (Neuman & Fawcett, 2002). For example, Neuman endorses a holistic approach to nursing care that is concerned with all variables affecting patients in their individual environments (Neuman & Fawcett, 2002). Further, every individual is born with a spiritual energy force and may not be aware of his/her spirituality. However, over time and through lived experiences, an individual may come to an awareness and understanding of spirituality (Salmon et al., 2010).

Similar to Watson and Neumann, Margaret Newman’s theory of health places spirituality as a major concept (Martsolf & Mickley, 1998). Newman broadly equated the concept of spirituality to include the human interaction between the nurse and patient. The nurse-patient relationship is one of ‘being with’ rather than ‘doing for.’ The nurse-patient relationship leads to the expansion of consciousness for both the nurse and patient. This assists patients to move toward an expanded consciousness and a transcendence from the physical boundary toward a spiritual dimension. To achieve this, a nurse helps the patient to identify his/her patterns of interaction with the environment (Martsolf & Mickley, 1998).

Finally, Parse’s theory of human becoming is based on nine philosophical assumptions and three assumptions regarding human becoming. While none of Parse’s assumptions mention spirituality, the attributes of spirituality including “meaning,” “value,” and “becoming,” are important aspects of her human becoming theory. For example, Parse explains that one assumption about human becoming is freely choosing personal meaning in situations in an intersubjective process of relating value priorities.
From Parse’s perspective, then, nursing practice is the human-universe-health process inclusive of treating a patient holistically (Parse, 1992).

**Spirituality in Nursing**

In both national and international nursing, over the last two decades, the research on spirituality has increased as a topic of significant interest (Hussey, 2009; Timmins, Naughton, Plakas, & Pesut, 2015b). A recent review of the literature illustrated an increased body of knowledge about spirituality including attempts to define the concept (Cockell & McSherry, 2012; Paley, 2015). For example, Ross (2006) conducted a literature review for nursing articles published between 1983 and 2005 and reported 47 papers on the topic of spiritual care in nursing. Cockell and McSherry (2012) provided an overview of 80 research papers on spiritual care in nursing between 2006 and 2012, illustrating an increase in the interest in the topic of spirituality in nursing.

Spirituality in nursing practice and education is a complex concept that lacks a consensus on the definition, how the definition is interpreted, and how the definition is understood (Ellis & Narayanasamy, 2009; Koenig et al., 2017). Additionally, the last four decades have seen a proliferation of definitions of spirituality in nursing research; however, the definitions are often disparate and unconnected (Clarke, 2009). In addition, researchers provide definitions of the concept of spirituality in different ways, making consensus difficult to obtain (Burkhart & Hogan, 2008; Koenig & Büsining, 2010; Lepherd, 2015; Pearce et al., 2012).

However, some nursing scholars believe that the variations in the conceptualization of spirituality are associated with a diversity of culture, individualized
preference, and personal definitions (Reinert & Koenig, 2013). For example, Koenig, McCollough, and Larson (2011) defined spirituality as “a personal quest for understanding answers to ultimate questions about life, about meaning, and about relationships to the sacred or transcendent, which may (or may not) arise from the development of religious rituals and the formation of community” (p. 18). Many definitions contain the concepts of personal meaning, values and beliefs, transcendence, or a connectedness (Koenig et al., 2017). Multiple definitions of spirituality indicate a necessity and need for flexibility of the term to meet particular spiritual needs of a patient (Swinton & Pattison, 2010).

Further, spirituality definitions are varied and dependent on the theoretical standpoint of the particular researcher (Lepherd, 2015). For example, Clarke (2009) conducted a critical reflection on how researchers define the concept of spirituality. Clarke (2009) found that authors often did not cite sources but instead constructed their own definitions. This has a possibility of resulting in a personal bias toward creating a unique body of knowledge (Clarke, 2009). Regardless of the different definitions, a commonality exists that spirituality is personal, dynamic, and influenced by ones’ culture, personal experiences, and religious beliefs (Doka, 2011).

Spirituality is based on foundations from various religious traditions, spiritual movements, belief systems, and contexts (Swinton & Pattison, 2010). One important note is that while individuals may use the term spirituality, each person may utilize it in different ways. According to Swinton and Pattison (2010), the concept of spirituality lacks clarity and is not a neatly wrapped gift which one can’t unpack and apply to all
people, always, and in all circumstances. Rather, the meaning of spirituality is emergent, dialectical, and its meaning is shaped by the context within which it is expressed (Koenig et al., 2017). A lack of clarity and definition with the concept of spirituality exists; however, the lack of clarity and definition should not denote the significance of spirituality (Swinton & Pattison, 2010).

To clarify the concept of spirituality, Weathers, McCarthy, and Coffey (2016) conducted a concept analysis using empirical and conceptual literature. The researchers identified three defining attributes of spirituality: connectedness, transcendence and meaning in life. The conceptual definition proposed states “spirituality is a way of being in the world in which a person feels a sense of connectedness to self, others, and/or a higher power or in nature; a sense of meaning in life; and transcendence beyond self, everyday living, and suffering.” (Weathers et al., 2016, p. 93).

Similar to Weathers et al. (2016) findings, several researchers have identified attributes and characteristics of the concept of spirituality. They commonly describe spirituality in terms of: 1) an individual’s sense of connectedness with self and others, 2) nature, 3) finding meaning and purpose, 4) strength, 5) hope, and 6) a power greater than oneself (Hodge & Horvath, 2011; Koenig & Büssing, 2010; Martins & Caldeira, 2017; Pearce et al., 2012).

**Health Outcomes**

Research consistently demonstrates a significant association between patients’ spirituality and overall health and well-being (Aldwin, Park, Jeong, & Nath, 2014; Balboni et al., 2011; Koenig et al., 2017). Moreover, the effects of spirituality are
positive, including lower levels of psychological distress, decreased depressive symptoms, better health-related quality of life, and decreased morbidity and mortality (Koenig et al., 2017). For example, Balboni et al. (2007) reported that 68% of 230 patients with a life-threatening illness found spirituality to be important to their health. Similarly, a multi-method study (n = 228) explored the influence of spirituality on health. The researchers found that 51% of the patient participants reported their spirituality had a positive effect in terms of providing hope, support, and overall wellbeing thereby increasing their happiness or reducing stress and anxiety (Hilbers, Haynes, & Kivikko, 2010). Kang et al. (2012) surveyed 94 patients using the European Organization for Research and Treatment of Cancer Quality-of-Life for Palliative Care questionnaire. The researchers reported that a patient’s spirituality positively affected their quality of life (p = 0.003).

In the United States and Canada, 50-90% of patients with life threatening illnesses reported spirituality is important for their well-being (Balboni et al., 2011). For example, cancer or cancer treatment can threaten a patient’s spiritual well-being (Rabow & Knish, 2015). Moreover, Rabow and Knish (2015) conducted a retrospective study using a convenience sample of 883 oncology patients and found that greater spiritual well-being was correlated with greater quality of life (p < 0.001) and overall well-being (p < 0.001), with less depression (p < 0.001), with less anxiety (p < 0.001), and fatigue (p < 0.005).

Addressing a patient’s spirituality also optimizes overall well-being, comfort, and quality of life (Balboni et al., 2014; Timmins et al., 2015c). For example, Phelps et al.
(2012) conducted a multi-method study within a multi-institution setting with patients who had advanced cancer. Among patients (n = 160) who had a life expectancy of three months or less, the majority (77.9%) believed that spirituality played a significant role against end-of-life anguish providing them with comfort and quality of life (Phelps et al., 2012). In the same study, patients (41-94%) wanted their healthcare providers to be attentive to their spiritual needs. Further, Phelps et al. (2012) found 85% (n = 69) patients considered attention to their spiritual concerns an important part of care provided by nurses. Similarly, a study by Krause and Hayward (2014) reported highly significant positive associations between spiritual well-being, comfort, and serenity in participants experiencing a life threatening illness.

**Nurse’s Spiritual Awareness**

A nurse’s personal spirituality allows him/her to be sensitive to patients’ spiritual needs, ultimately assisting the nurse in providing holistic care to the patient. Researchers found that a nurse’s personal spirituality was the strongest predictor for providing spiritual care to the patients (Cone & Giske, 2017; Taylor, 2008). For example, Chung, Wong, and Chan (2007) reported nurses’ (n = 61) perception of their own spirituality influenced their ability to provide their patients spiritual care. Further, Bush and Bruni (2008) identified nurses ‘spirituality as a transcendence’ which is a link between one’s spiritual awareness and the ability to ‘connect’ with others. Similarly, Bailey, Moran, and Graham (2009) conducted a qualitative study (n = 22) with registered nurses who had a minimum of 12-months work experience. The study reported that nurses who
acknowledged a personal spiritual awareness increased their likelihood of responding to a patient’s spiritual needs.

A nurse’s spiritual awareness is the strongest predictor of whether a patient’s spiritual needs are assessed and addressed (Baldacchino, 2008b; Bennett & Thompson, 2015; Van Leeuwen et al., 2008). But, before nurses can meet the spiritual needs of patients, they must first develop an understanding and an awareness of their own spirituality (Eckroth-Bucher, 2010; Shores, 2010; Yang & Mao, 2007). Exploring one’s spirituality may provide a nurse with being comfortable and competent to respond to a patient’s spiritual needs (Eckroth-Bucher, 2010; McSherry & Jamieson, 2013). For example, McSherry and Jamieson (2011) used the Spirituality and Spiritual Care Rating Scale to conduct a large online survey to ascertain nurses’ perception of spirituality. The researchers reported that one-half of the nurses claimed their own spiritual self-awareness influenced their ability to provide spiritual care to patients. The study findings also indicated that nurses recognize the importance of their own spirituality as a vehicle that provides them with an ability to respond to their patients’ spiritual needs.

Conversely, a nurse’s lack of understanding about his/her spiritual awareness may underpin the reluctance and therefore the ability of nurses to integrate spirituality into practice, resulting in a deficit in providing holistic care (Chew et al., 2016). Other factors that may affect a nurse’s ability to integrate spirituality in their practice, may be their personal, professional, and social situations (Chew et al., 2016). For example, Tiew et al. (2013) surveyed (n = 66) hospice nurses using the Spiritual Care-Giving Scale. A
reported 54.5% participants considered themselves spiritual and their spirituality enabled them to respond to the spiritual needs of their patients.

In additions, nurse educators need to foster in their students an awareness of his/her personal spirituality prior to responding to a patients’ spiritual needs (Bennett & Thompson, 2015; Giske & Cone, 2012; Giske & Cone, 2015). Further, it is important for nursing students to explore their own spirituality. This will allow them to be sensitive to others’ spirituality (Bennett & Thompson, 2015). Giske and Cone (2015) surveyed fourth year nursing students (n = 745) and noted that 89% of participants reported being aware of their spirituality positively influenced their ability to provide their patients spiritual care. Similarly, Giske and Cone (2012) found a common theme among (n = 42) nursing students. They reported spiritual self-awareness provided the nursing student an ability to be comfortable with attending to the patient’s spiritual needs.

**Religiosity**

Greater than 97% of the world survey reports religion to be important in their lives (Pearce et al., 2012). Out of 143 countries surveyed by Gallup Poll, the most religious are in the Middle East and Africa (Gallup Poll, 2016). Further, in the United States, 53% of Americans reported religion to be an important aspect of daily life and believed in a Universal Spirit or God (Pew Foundation, 2008).

Religiosity entails a set of beliefs and practice and is an expression of spirituality (Pearce et al., 2012). In the broadest sense, religiosity refers to organized religious activities (i.e. public religious activities, prayer groups, or scripture study groups), non-organizational activities (e.g. praying, listening to religious radio) and intrinsic religiosity
(e.g. personal religious beliefs or experiences) (Koenig et al., 2016). Moreover, religious beliefs and practices can act as a bridge for developing spiritual awareness (Koenig & Büssing, 2010). Religiosity encompasses three foci: 1) identifying with a religious affiliation, 2) engaging in religious activities, and 3) believing in religious beliefs (Bjarnason, 2012; Koenig et al., 2016). Regardless of whether an individual’s personal religious practices follow the prescribed teachings of a particular religious movement, religion offers a specific worldview and has health benefits (Daaleman, 2012).

The health benefits associated with religiosity includes coping with illness, medical decision making, mental health, and quality of life (Ford, Downey, Engelberg, Back, & Curtis, 2012; Koenig et al., 2017). Williams, Meltzer, Aria, Chung, and Curlin (2011) reported that many hospitalized patients (N = 3141) desired to have conversations about religiosity with their nurses; however, only 41% of those patients had such a conversation. In a recent multi-center study of 272 patients with advanced illness, 78.8% reported religion provided support for them to cope (Phelps et al., 2012). Similarly, another study indicated that most participants (84%) relied on their religiosity to cope with cancer, and in the same study, religious coping was associated with improved quality of life (Vallurupalli et al., 2012). Furthermore, in 230 patients with a diagnosis of advanced cancer and a prognosis of less than one year, 68% identified private daily religious activities such as prayer and meditation increased from 47% before diagnosis to 61% after diagnosis. In another case, a study with 64 Muslim patients with breast cancer reported a high religiosity (69%). The study concluded that a significant relationship
existed between a patient’s religiosity and his/her quality of life (Zargani, Nasiri, Hekmat, Abbaspour, & Vahabi, 2018).

**Nurses’ Religiosity**

Religiosity is a partial expression of one’s spirituality underpinned by one’s practiced beliefs, traditions, and ceremonies that are fostered or supported by the community in which the person resides (Alpert, 2010; Koenig et al., 2017). Nurses’ religious beliefs influence how nurses respond to the spiritual dimension of a patient. Landau et al.’s (2017) study assessed the connection between nurses’ and nursing students’ religiosity belief and their perceived ability to providing spiritual care. Fifty-eight percent of the student nurses (n = 87) identified their religiosity to be important compared to 65% (n = 98) of the nurses (p = 0.0003). In addition, both nurses (n = 37) and nursing students (n= 24) reported religiosity positively impacted their perceived ability to provide spiritual care. Thirty-seven nurses (24.8%) and 24 (16%) nursing students reported religiosity positively impacted their perceived ability to provide spiritual care (p = 0.0002).

Further, Johnston Taylor et al. (2014) conducted a cross-sectional phenomenological study with 14 Christian nurses in the United States to describe how nurse’s religiosity motivates them to attend to a patient’s spiritual needs. The researchers reported that participants’ religiosity was a personal resource as they care for patients. Similarly, Lopez et al. (2014) conducted a study to explore first, second, and third year nursing students (n = 483) religiosity and spirituality using the World Health Organization Quality of Life-Spirituality, Religiosity, and Personal Belief Questionnaire.
A reported positive difference was reported in first, second, and third year nursing students between religious affiliations. In addition, respondents need to understand their own religiosity before they can attend to a patient’s spiritual needs.

**Spiritual Care**

Historically, nurses referred patients with spiritual needs to hospital chaplains (Pesut, Reimer-Kirkham, Sawatzky, Woodland, & Peverall, 2012). However, the role of the chaplain has diminished substantially and in some hospitals is nonexistent (Delgado, 2007). Hospitals are facing constricted health care budgets, with as few as 50% currently providing chaplaincy services (Cadge & Bandini, 2015). As chaplaincy services decline (i.e. amidst the requirement of the JC) nurses are expected to assess for patients’ spiritual needs and provide spiritual care. Therefore, it is important for nurses to know what comprises spiritual care (Pesut et al., 2012; Swift, Calcutawalla, & Elliot, 2007).

Ramezani et al. (2013) defined the attributes of spiritual care as a healing presence, a therapeutic use of self, an intuitive sense, an exploration of the spiritual perspective, patient-centeredness, a meaning-centered therapeutic intervention, and the creation of a spiritually nurturing environment. Additionally, Ramezani et al. (2013) reported that spiritual care is a subjective and dynamic concept that is unique and integral aspect of patient care especially for hospitalized patients.

Further, while hospitalized patients face a variety of physical needs; those who care the them must also realize that their patient’s spirit may be ill, as well (Carpenter, Girvin, Kitner, & Ruth-Sahd, 2008). Thus, as part of holistic nursing care, nurses should take into consideration the spiritual aspect of the patient because spiritual needs
commonly arise in the healthcare setting (Balboni et al., 2014; Epstein-Peterson et al., 2015). Understanding and attending to the spiritual needs of a patient begins with a spiritual assessment (Koenig et al., 2017). A nurse completes a spiritual assessment as a component of a comprehensive intake assessment that is essential to provide spiritual care (Johnston Taylor & Brander, 2013; Puchalski et al., 2009). Spiritual assessment fosters an ongoing patient-centered process and enables nurses to provide spiritual care which is important to an individual’s overall health and well-being (McSherry & Jamieson, 2013). Further, Puchalski et al. (2009) proposed that all hospitalized patients should have a documented spiritual assessment conducted at the time of a hospital admission. In addition, spirituality should be reassessed whenever a patient’s condition changes. If a spiritual need is identified, nurses can develop spiritual care interventions to ensure spiritual care is provided (Puchalski, 2006).

Despite a demonstrated need to provide spiritual care, several barriers exist when they conduct a spiritual assessment. For example, Wittenburg, Goldsmith, and Buller (2016) identified that: 1) nurses lack the necessary vocabulary to describe spiritual concerns, 2) nurses have personal issues, 3) nurses lack training on how to provide spiritual care for their patients, and 4) nurses fear that they will be unable to resolve patients’ spiritual issues. Moreover, McSherry and Jamieson’s (2013) international survey of nurses revealed that 23% of the 4054 respondents “sometimes” conducted a spiritual assessment. The participants reported that they experienced both uncertainty and fear surrounding the boundaries between their personal beliefs and professional practice. The researchers also reported a need for greater clarity between a nurse’s personal and
professional boundaries to enable nurses to feel more confident in conducting a spiritual assessment. Another study of hospice/palliative care nurses in a Christian healthcare system found that more than 75% of the sample (n = 984) did not conduct spiritual assessments due to lack of training and time constraints (Johnston Taylor et al., 2017). In contrast, Astrow et al. (2007) and Pearce et al. (2012) reported that 44-91% of nurses do conduct spiritual assessments.

Despite the difficulties many nurses experience when conducting a spiritual assessment, numerous studies suggest that assessing and addressing patients’ spiritual needs results in overall patient satisfaction with health-related quality of life, decreased healthcare costs, and improved quality of life (Astrow et al., 2007; Balboni et al., 2014; Koenig et al., 2017). For example, Oh and Kim (2014) conducted a meta-analysis of 15 studies that involved 14 controlled trials (seven randomized and seven non-randomized) with (n = 889) patients with cancer and concluded that providing spiritual care has a significant effect on spiritual well-being, meaning of life, and depression.

Similarly, Phelps et al. (2012) surveyed 75 patients after discharge from the hospital. Eighty percent of those patients with a life-threatening illness reported that having a nurse respond to their spiritual needs during their hospitalization had a positive impact on their quality of life. Further, researchers used Press Ganey data to report patients had an overall satisfaction with health care when their spiritual needs were responded to (Hodge, Sun, & Wolosin, 2014).

Conversely, patients who do not have their spiritual needs addressed report a significantly lower level of satisfaction with their overall healthcare and their quality of
life. Astrow et al. (2007) surveyed (n = 369) patients in a large eastern city’s outpatient department. The study indicated that 75% of the patients reported at least one spiritual need; however only 18% reported that their spiritual needs were met.

**Educational Preparedness**

Nurses must be prepared to be attentive to all dimensions of holistic care, including the spiritual dimension (Canfield, 2016). Despite both governing and educational bodies requiring nurses to respond to a patient’s spiritual needs, most nurses feel underprepared to do so (Bennett & Thompson, 2015; Callister, Bond, Matsumura, & Mangum, 2004). Moreover, Lewison, McSherry, and Kevern (2015) conducted a systematic literature review confirming that while nurses are aware of their lack of knowledge, understanding, and skill in responding to a patient’s spiritual needs, they have a great desire to become better informed and more skilled in this area.

Research on the impact of teaching spirituality in nursing education programs is on the increase as evidenced by several studies (Carson & Gerardi, 2013; Johnston Taylor et al., 2014b). However, Carson and Gerardi (2013) noticed that from 1993 to 2013, spiritual care education had not undergone any significant change. This stagnation prompted Carson and Gerardi (2013) to develop a spiritual care course designed specifically for third-year nursing students. The semester long didactic course involved using small group discussions, projects, student participation, and guest lecturers. In addition, Carson and Gerardi, (2013) stressed an urgent need for all nursing programs to provide educational content in the topics of spirituality and how to respond to patients’ spiritual needs.
Several nurse researchers concur educational preparedness will provide nursing students the ability to provide spiritual care. Giske and Cone (2012) conducted a literature review to gain knowledge on how undergraduate nursing students learn about spiritual care. Four themes were intrinsic to all articles: (1) the process of learning to provide spiritual care is an art that entails reflection and repeated practice, (2) diminished personal spiritual awareness makes providing spiritual care difficult, (3) pre-posttest are required for learning spiritual care, and (4) pedagogical methods. Teaching methods included reflective journaling, care plans, faculty modeling spiritual caring, and how to effectively build trust with a patient.

Timmins and Neill (2013) literature review focused on what spiritual care content and methods are used to educate nursing students. Only three studies met their inclusion criteria. The results indicated that a one-and three-hour classes sessions improved learner outcomes. However, Timmins and Neill (2013) concluded that there is a paucity of research on how nursing programs and methods are used to educate nursing students on providing spiritual care.

Cone and Giske (2017) found educational preparedness helped nurses to provide spiritual care. The researchers surveyed 172 nurses in diverse care settings and found that over half of the participants reported they had prior spiritual care education and thus were more likely to address a patient’s spiritual needs than their counterparts who had not received spiritual care education. Moreover, Paul, Helo, and Frick (2015) conducted a systematic review to assess the outcomes of spiritual care training. Their results demonstrated that nurses understand the positive effects spirituality has on an individual
life, the success in integrating spirituality in clinical practice, and communication with patients.

Baldacchino (2008) developed and co-taught with a chaplain a dedicated course for teaching spiritual care to nursing students in their final year, using a 28-hour study unit. The course objective was for students to define spirituality and spiritual care, to learn how to attend to a patient’s spiritual needs, and to reflect on their personal spirituality. The course content also included the nursing process to providing spiritual care, how to conduct a spiritual assessment, and discussion of possible ethical issues that may arise when providing spiritual care. In addition to lecture and discussions, small groups, clinical experiences, and case studies were all used to engage students (Baldacchino, 2008a).

Another spiritual care course for nursing students used a workbook entitled, “What Do I Say? Talking with Patients about Spirituality.” The workbook was developed and tested by Taylor, Marimier, Bahru, Anton, and Peterson (2009). According to Taylor et al. (2013), students needed approximately 12 hours to complete the workbook. Pre- and posttest results of the course showed significant improvements in spiritual care knowledge, attitudes, and skills.

Furthermore Balboni et al. (2014) surveyed 118 oncology nurses to explore why nurses were reluctant to assess and address cancer patients’ spiritual needs. Seventy-four percent of the nurses reported that their reluctance to assess and address patients’ spiritual needs was due not only to a lack of time but also to their lack of educational preparedness. The researchers concluded that providing adequate spiritual care education
was a critical next step to meeting the national and institutional guidelines. Similarly, Gallison et al. (2013) surveyed 120 acute care nurses using the Spiritual Care Practice questionnaire. The researchers reported that 61% of the 120 participants scored less than the ideal mean. Most importantly, although 96% of the 114 nurses believed that addressing patients’ spiritual needs are within their professional role, only 48% of the 120 reported even rarely providing spiritual care. The factors that contributed to these nurses’ reluctance to assess and attend to their patient’s spiritual needs were lack of time and a lack of educational preparedness.

McSherry and Jamieson (2011) surveyed 4054 nurses using the Spirituality and Spiritual Care Rating Scale to determine what guidance nurses require to support a patient’s spiritual dimension. They reported 5% of 4054 nurses felt they could “definitely” respond to the patients’ spiritual needs compared to 92% who reported they “sometimes” met the spiritual needs of their patients. McSherry and Jamieson (2011) also reported that 41.3% of 4054 nurses agreed and 38% of 4054 strongly agreed that in nurses receive insufficient education and training in spiritual care. Similarly, 80% of 4054 nurses ‘agree to strongly agree’ that nursing programs need to address spirituality and spiritual care, reinforcing the fact they feel strongly that spirituality and spiritual care are integral topics in nursing education.

Gaps in Spiritual Care

Despite nursing guidelines, patients’ spiritual needs are often overlooked (Legg, 2011; Lind, Sendelbach, & Steen, 2011). Many nurses report the lack of providing spiritual care is due to situational barriers and educational preparedness rather than a lack
of willingness to provide such care (Bennett & Thompson, 2015; Gallison et al., 2013). Situational barriers include insufficient time, nurse’s belief that a patient’s spirituality is personal, difficulty in distinguishing proselytizing from spiritual care, and tension when a patient’s spiritual beliefs differ from a nurse’s beliefs. Chan, Cockell, & McSherry (2012) found that nurses may perceive that spirituality requires spending a large amount of time with patients.

A gap in knowledge exists as to the educational preparedness necessary to provide a nursing student with the ability to respond to a patient’s spiritual need. Clearly, responding to a patient’s spiritual needs is important for well-being and health outcomes; however, the most recent review of nursing literature indicates that nurses are inconsistently responding to the spiritual needs of patients. Therefore, in order to meet educational and institutional guidelines, nursing students need to be educationally prepared to provide spiritual care.
CHAPTER 3: METHODOLOGY

This chapter describes the research design, sample selection, and study setting. Information regarding instrumentation data collection, and data analysis procedures are described. This chapter concludes with ethical considerations and threats to reliability and validity.

Research Methodology and Design

This multi-site study used a convergent mixed method design. Mixed method research is commonly known as the third research paradigm. Mixed method designs use quantitative and qualitative data to best answer and understand the research problem (Creswell & Plano Clark, 2011). Using a convergent mixed method approach will help answer the research questions that cannot be answered by quantitative or qualitative methods alone (Doyle, Brady, & Byrne, 2009).

The convergent design consists of collecting quantitative and qualitative data simultaneously (Creswell & Plano Clark, 2011). The quantitative data were analyzed; however, the qualitative data will be analyzed later. The PI will compare or relate the quantitative and qualitative results. In the final step, the PI interprets to what extent and in what ways the qualitative and quantitative results relate to each other or combine to create a better understanding of the study’s overall purpose (Creswell & Plano Clark, 2011).

The data sources were three self-report questionnaires, a demographic information sheet, and three open-ended questions. Figure 2 depicts the quantitative and qualitative
data sources within the framework of a completed convergent design. Instrumentation is fully described in the instrumentation section of the chapter.

Figure 2. Convergent Mixed Method Design

**Philosophical Underpinnings**

Philosophical assumptions shape how a researcher formulates and seeks information to answer research questions (Doyle et al., 2009). The philosophical underpinning for this study is pragmatism. Pragmatists believe in both subjective (qualitative) and absolute (quantitative) knowledge (Creswell, 2014).

The two central themes of pragmatism are pluralism and humanism (Koopman, 2006). Pluralism is fundamental because humans live in a dynamic world that is constantly changing and evolving (Koopman, 2006). Humanism affirms human beings have the right and responsibility to give meaning and shape to their lives (Clark, 1998). A blend of pluralism and humanism are integral to mixed methods because it combines both
a subjective (qualitative) perspective and an objective (quantitative) report (Koopman, 2006). To answer the quantitative research questions, objective data were collected using the variables of spirituality, religiosity, and perceived ability to provide spiritual care. Subjective data were collected from three open-ended questions.

**Study Setting and Sample**

This multi-site study was conducted with two accredited nursing programs in the Western region of the United States (U.S.). The two sites were a private faith-based university and a private secular university. The private faith-based university has a traditional baccalaureate nursing program. The private secular institution has an accelerated nursing program, where students with non-nursing four-year degrees can seek a Bachelor of Science in Nursing degree.

**Study Population**

The study population consisted of traditional and accelerated baccalaureate nursing students. The traditional nursing students were from a private faith-based university and are either in the second quarter or final quarter of the nursing program. The accelerated students were from a private secular university and were in the final quarter of their nursing program.

**Study Sample**

The convenience sample consisted of participants from the two nursing programs: a) nursing students in their second quarter or final quarter of a traditional nursing program at Loma Linda University College of Nursing, and b) accelerated nursing students in their final quarter at Western University College of Nursing. Using G*Power
software input parameters of an alpha of .05, power of .80, and a medium effect size, the estimated sample size was 90 (Faul, Erdfelder, Buchner, & Lang, 2014). These parameters were selected based on standard practice and to balance statistical conclusion errors, such as Type I and II errors or concluding a false positive or false negative result (Field, 2013).

An alpha of .05 corresponds to a 0.95 probability of a correct statistical conclusion if the hypothesis is true (Field, 2013). The power level results from the selected alpha level; if the alpha is set to .05, then an acceptable beta level (β; i.e., chance of committing a Type II error) is .20 (Cohen, 1992). Because the power level is calculated as 1 - β, the power level would be .80 (Cohen, 1992). A medium effect size was selected and deemed worthwhile to detect as what Cohen (1992) defined as an effect size that represents a “typical” difference that could be detectable by the naked eye.

**Inclusion and Exclusion Criteria**

To be considered for study inclusion, participants must be in the second quarter or final quarter of the traditional nursing program and the final quarter of the accelerated nursing program. Additional inclusion criteria were participants must be at least 18 years of age, must be able to read, write, and understand English. No exclusionary criteria based on race, gender, religious preference, or other demographics apply.

**Sampling Procedures**

After the PI received institutional review board (IRB) approval from SDSU, Loma Linda, and Western universities, the program directors at each of the study sites emailed the introduction letter to traditional second quarter, traditional final quarter, and
accelerated final quarter students via institutional email (see Appendix A, B). The letter introduced the PI and included survey details (time to complete, voluntary participation, implied consent, incentive, anonymity, confidentiality, instructions to access the survey, counseling administrator contact information, PI personal contact information, and link to survey). The PI contacted the program directors to send reminder emails two weeks after the initial invitation.

**Instrumentation**

In this study, three instruments and three-open ended questions were delivered via QuestionPro®, an online format. Included with the three instruments was a demographic information sheet (see Appendix E) that collected the following data: age, gender, religious preference, ethnicity, prior spiritual care education, type of nursing program, type of university, and placement nursing program. The instruments are described below.

**Spirituality Instrument-27©**

The Spirituality Instrument-27© (SpI-27©; see Appendix F) was used to measure student nurses’ spirituality (Weathers, 2017). The SpI-27© is a 27-item self-report Likert scale questionnaire that measures spirituality and consists of five-subcales: connectedness with others, self-transcendence, self-cognizance, conservationism, and a connectedness with a higher power. The instrument was rigorously developed based on item generation from a concept analysis, a review of theoretical and empirical literature, and an appraisal of instruments measuring spirituality. The SpI-27© demonstrated high reliability with alpha coefficient ranging from 0.82 to 0.91 and content validity was established (Weathers, 2016). Participants responded to this instrument on a five-point
Likert scale ranging from (1) *strongly disagree* to (5) *strongly agree* to items such as “I can relate well to other” and “I am aware of my own thoughts, feelings, and actions”. A mean composite score was calculated after reverse scoring the appropriate items; higher scores indicate higher spirituality. The estimated time to complete the scale was 15 minutes.

**The Duke University Religion Index**

The Duke University Religion Index (DUREL; see Appendix G) is a brief, comprehensive instrument that was used to measure student nurses’ religiosity (Koenig & Büssing, 2010). The instrument has been used in a sample of nursing students and nurses (Hafizi, Koenig, Arbabi, Pakrah, & Sagha zadeh, 2014; Ng, Yee, Subramaniam, Loh, & Moreira, 2015; Nurasikin & Syarina z, 2010). The DUREL consists of a five-item questionnaire that assesses three major dimensions of religiosity consisting of ORA, NORA, and IR. ORA involves attending a religious service or participating in other religious activities (scripture, study groups). NORA includes religious activities performed in private, such as prayer, watching religious TV, or listening to religious radio. IR refers to a personal religious commitment. The DUREL has demonstrated high reliability with alpha coefficient ranging from 0.78-0.90 and high convergent validity with other measures of religiosity \( r = 0.71-0.86 \) (Koenig & Büssing, 2010).

Participants responded to this instrument on a five-point Likert type scale ranging from (1) *definitely not true of me* to (5) *definitely true of me* to items such as: “How often do you attend church or other religious meetings” and “My religious beliefs are what really lie behind my whole approach to life.” The scores were computed separately for
each dimension since subscale scores may cancel out the effects of each other when analyzed as a composite score. For ORA (one item) and NORA (one item), scores may range from 1-6, whereas IR (three items) scores may range from 3-15. Higher scores indicate higher religiosity. The estimated time to complete the scale was less than five minutes.

**Student Survey of Spiritual Care**

The Student Survey of Spiritual Care (SSSC; Appendix H) is a nine-item questionnaire that was used to measure the student nurses’ perceived ability to provide spiritual care. The SSSC demonstrates a high reliability with alpha coefficient of 0.84 (Meyers, 2003). The scale has been used with baccalaureate nursing students (Meyers, 2003). The instrument was tested in a pilot study, by the developer, using undergraduate nursing students and content validity was established (Meyer, 2003). This Likert-type instrument scores items on a six-point scale ranging from (1) *strongly disagree* to (6) *strongly agree* for items such as “Spiritual care is an essential component of holistic nursing care” and “I feel adequately prepared to provide spiritual care.” Lower scores indicate higher perceived ability to provide spiritual care. A mean composite score was used after reverse coding was done. The estimated time to complete the scale is 10 minutes.

**Open-Ended Questions**

Three open-ended questions were constructed based on the quantitative, qualitative, and mixed method nursing literature findings (Baldacchino, 2008b; Johnston Taylor & Brander, 2013; Timmins et al., 2015a). The open-ended questions were
intended to provide a students' perspective that may further inform educational preparedness. The open-ended questions were placed at the end of the questionnaire versus at the beginning so participants would answer all the questionnaires first and not be overwhelmed by having to answer the open-ended questions. The conceptual definition of religiosity, defined in Chapter One, was provided as the participant may not be familiar with this variable.

**Data Collection Procedures**

Data were collected through QuestionPro®. The participants completed the demographic questionnaire, DUREL, SpI-27®, SSSC, and three open-ended questions. Participants’ qualitative and quantitative responses were automatically saved to the QuestionPro® server for later downloading. The survey was open for two weeks. A reminder email was sent out one week after the initial invitation to remind and encourage participants to respond. The PI closed the survey one week following the reminder email.

As part of collecting survey data, researchers must address response rates (Dillman, Smyth, & Christian, 2014). Nonresponse rates occur when the characteristics of the respondents differs from those who choose not to respond (Dillman, Smyth, & Christian, 2015). For example, if responses are primarily from participants who have a positive attitude toward the study topic and those who have negative attitudes are underrepresented, then results would be biased. While a higher response rate does not guarantee minimal nonresponse error, it is important to recognize that higher response rates reduce the likelihood of nonresponse error and provide greater credibility to survey results than do lower response rates (Dillman et al., 2015).
Another way to increase response rates is to establish trust (Dillman et al., 2015). Respondents are more likely to complete the survey when they trust the PI will provide the benefits as promised (Dillman et al., 2015). Legitimate surveys have a PI who identifies himself/herself and answers participants’ email questions which helps to assure the respondents that the survey can be trusted (Dillman, et al., 2015). These strategies potentially increase the response rates while simultaneously reducing nonresponse rates (Dillman et al., 2015). An additional another way to increase response rates is to offer an incentive (Cho et al., 2013). Each participant was immediately given a $5.00 Amazon gift card (electronically delivered) if they completed all surveys and answered all the open-ended questions.

**Data Analysis**

After downloading the data from QuestionPro®, it was uploaded to IBM SPSS Statistics for Windows, Version 25.0 (IBM SPSS Statistics, 2018). The PI calculated descriptive statistics, including means and standard deviations for continuous scores, frequencies, and percentages for categorical variables. The analyses for each research question are described and each statistical inference was performed at a significance level of 0.05.

For this study, Cronbach alphas were calculated for the SpI-27®, DUREL, and SSSC to determine the reliability for each instrument. The Cronbach’s alpha coefficients were evaluated using the guidelines suggested by Kellar and Kelvin (2013) where > .9 excellent, > .8 good, > .7 acceptable, > .6 questionable, > .5 poor, and ≤ .5 unacceptable
This study explored eight research questions. Questions one through four hypothesize relationships between the variables of spirituality, religiosity, and perceived ability to provide spiritual care in each group of participants. A pairwise Spearman rank correlation coefficient is the non-parametric test to assess the degree of linear relationship between the three variables as measured by the SpI-27©, ORA, NORA, IR, and SSSC (Polit & Beck, 2013).

Correlation coefficient, \( r_s \), vary from 0 (no linear relationship) to 1 (perfect linear relationship) or -1 (perfect negative linear relationship). The positive coefficient indicates a direct relationship, as one variable increases the other variable also increases. The marginal (or unadjusted) coefficient indicates an inverse relationship; as one variable increases the other variable decreases. Cohen's standard was used to evaluate the correlation coefficient; where 0.10 to 0.29 represents a weak association between the two variables, 0.30 to 0.49 represents a moderate association, and 0.50 or larger represents a strong association (Cohen, 1988).

To address research question five and six, an independent sample \( t \)-tests was conducted. This statistical test was conducted to assess if differences exist on a dependent variable (measured by SpI-27©, ORA, NORA, IR, and SSSC) by an independent variable (traditional second quarter, traditional final quarter, accelerated final quarter).

Prior to interpreting the results of the independent \( t \)-test, the PI assessed the assumptions of normality and homogeneity of variance. Normality assumes that the score is normally distributed (bell-shaped) and the PI used the one sample Shapiro-Wilk test
Homogeneity of variance assumes that both groups have equal variance and the PI used the Levene’s test for equality of variance (Levene, 1960).

To address research questions seven and eight, the PI conducted MANOVAs which looked for differences among multiple dependent and independent variables simultaneously (Keller & Kelvin, 2013). The MANOVA creates a linear combination of the dependent variable to create a grand mean and assess whether there are group differences on the set of dependent variables. The MANOVA applies an $F$-test to determine if there are any significant differences at a significance level $\alpha = .05$.

A MANOVA was conducted to assess if there were significant differences in the linear combination of SpI-27©, ORA, NORA, IR, and SSSC between the levels of age, ethnicity, and prior spiritual care education. A multivariate normality Chi-square distribution was done (Appendix W). No multivariate outliers were detected. A correlational matrix was calculated (Appendix R).

To assess the assumption of multivariate normality, the PI calculated the squared Mahalanobis distances for the model residuals and plotted against the quantiles of a Chi-square distribution (DeCarlo, 1997; Field, 2013). In the scatterplot, the solid line represents the theoretical quantiles of a normal distribution. Multivariate normality can be assumed if the points form a relatively straight line. Strong deviations could indicate that the parameter estimates are unreliable and multivariate normality cannot be assumed. The scatterplot demonstrated normality (see appendix Z, AA).

**Multivariate outliers.** To identify influential points in the model residuals, Mahalanobis distances were calculated and compared to a $\chi^2$ distribution (Newton &
An outlier was defined as any Mahalanobis distance that exceeds 20.52, the 0.999 quantile of a $\chi^2$ distribution with 5 degrees of freedom (Kline, 2015). Two observations were detected as outliers for traditional second quarter and final quarter nursing students (Appendix U). Three observations were detected as outliers for traditional final quarter and accelerated final quarter nursing students (Appendix V). The outliers were not significant as they were minimal in number (Polit & Beck, 2013).

**Absence of multicollinearity.** A correlation matrix was calculated to examine multicollinearity between the independent variables. All variable combinations had correlations less than 0.9 in absolute value, indicating the results are unlikely to be significantly influenced by multicollinearity. The correlation matrix is presented in Appendix R.

**Qualitative Data Analysis**

Due to the volume of qualitative data collected and an abbreviated timeline for data analysis, the graduate student advisory committee agreed to allow the reporting and analyses of the qualitative data to occur after the dissertation defense. The qualitative data will be analyzed with an expert nurse researcher in qualitative data techniques and will be interpreted with the quantitative results to identify convergence or divergence.

Content analysis will be used to analyze the qualitative data responses to the three open-ended questions (Appendix I). Content analysis is a systematic and objective means of describing and quantifying data (Elo & Kyngau, 2008). The aim of using content analysis is to attain a condensed and broad description of the phenomenon.
Rigor

Rigor of the qualitative analysis will be maintained by having two team members describe and code the data. The PI will be guided by a nurse researcher with expertise in qualitative data analysis. The team members will first review the narrative data from the qualitative questions (Vaismoradi, Turunen, & Bondas, 2013). The analysis will begin with each team member reading the data independently and coding the participant’s descriptions for the purpose of comparison and description (Vaismoradi et al., 2013). After independently coding the data, the team members will individually create categories of codes using inductive reasoning. The team members will meet and discuss their independent findings until an agreement is reached on the categories.

To ensure trustworthiness, the analysis process and the results will be described and report in enough detail to ensure those reading the results will have a clear understanding of how the analysis was carried out and its strengths and limitations (Elo & Kyngau, 2008). To increase the reliability of the study, the analysis of the data will be reported in detail. To ensure transferability, the PI will provide a clear description of the context selection, data collection, and process of analysis (Elo & Kyngau, 2008).

Mixed Method Interpretation

In a convergent mixed method design, the results from the qualitative data (three-open-ended questions) and quantitative data (spirituality, religiosity, perceived ability to provide spiritual care) responses are compared to determine if the findings confirm or deny each other (Creswell, 2013). The quantitative data (three questionnaires) and qualitative data (three open-ended questions) were collected concurrently. An
independent analysis of the quantitative data (spirituality, religiosity, and perceived ability to provide spiritual care) was completed while the content analysis of the qualitative data (three open-ended questions) is pending. Following content analysis, qualitative and quantitative results will be compared for the purpose of drawing conclusions or inferences from the combination of the results (Creswell & Plano Clark, 2011).

Confidentiality, Implied Consent, and Protection of Human Subjects

The protection of human rights is a critical aspect of any study (DeVaus, 2001). Protection of human rights involves the provision of informed consent, voluntary participation, protecting participants from harm, and maintaining confidentiality. The IRB from both institutional sites (private faith based, private secular) reviewed and approved this study before it was conducted. Protection of human subjects followed the guidelines of the Declaration of Helsinki (WHO, 2007).

QuestionPro is the online survey platform that was used to collect the data. QuestionPro is a Health Information Portability and Accountability (HIPAA) compliant. A student was considered to have provided implied consent once he/she entered the survey. The elements in the implied consent included an introduction letter, brief description of the study, the potential risks and benefits, and assurance of data confidentiality (Polit & Beck, 2012). The students were informed that the data were shared with the research team, but that their responses were kept confidential and cannot be traced back to them personally. Students had the option not to participate in the study. Students were informed that either participation or nonparticipation will not influence
their academic standing. All participants who completed the surveys and open-ended questions were immediately eligible for a $5 Amazon electronic gift card.

All research carries an element of risk (Polit & Beck, 2017). Risks to participate in the study include the loss of 30 minutes of time due to completing the surveys and potential loss of confidentiality. To reduce the risk of loss of confidentiality, no personally identifying information was collected, the participants’ information was coded, demographic data were presented in aggregate form, participant data was stored on a laptop in a locked room in the PI’s office, and only the PI and study team had access to the data collected. Benefits from this study outweighed the known risks.

**Threats to Reliability and Validity**

The sample used in this study was traditional second and final quarter nursing students from a private faith-based and private secular universities from the Western region of the United States. Threats to external validity includes inappropriate generalizations (Onwuegbuzie, 2000). Generalizations were not made beyond the study topic, population, and setting. The sample did not include other regions of the country; therefore, generalizability of the findings was limited. Random sampling was not utilized; thus, generalizability is further limited. Threats to internal validity are not applicable to this study as it is an exploratory research design. (Onwuegbuzie, 2000).
CHAPTER 4: FINDINGS

This chapter presents the descriptive and the inferential statistical analysis using quantitative data obtained through a demographic information survey (Appendix E) and three instruments: 1) Spirituality-27 2) DUREL and, 3) SSSC. The findings of this study are limited to the quantitative analysis. The content analysis of the qualitative data is pending.

Data Analysis Procedure

Data were cleaned in SPSS by recoding age, gender, ethnicity, semester in program, and religious affiliation to use a numeric code for groups. Data labeling and formatting was completed for measurement categories, specifying missing values, variable formatting, data labeling, and specifying types of variables.

Description of Study Sample

A total of 265 nursing students were invited to take the survey. A total of 222 nursing students responded. Of the 222 of the nursing student respondents, 81 surveys had a significant amount of missing data. Therefore, quantitative data analysis is based on a sample of 141 nursing student participants. In contrast, all study participants (N = 222) responded to the three open-ended questions.

The participants (N = 141) exceeded the power analysis. The sample size was also sufficient to establish relationships between the dependent variables (spirituality, religiosity, and perceived ability to provide spiritual care). The sample consisted of traditional second quarter (n = 53), traditional final quarter (n = 43) nursing students attending a private faith-based university and accelerated final quarter (n = 45) nursing
students attending a private secular university. Most of the ethnically diverse sample were female, Christian, and nearly half had prior spiritual care education (Table 1).

Table 1 *Demographics*

<table>
<thead>
<tr>
<th>Variables</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>21-25</td>
<td>74 (52)</td>
</tr>
<tr>
<td>26-30</td>
<td>32 (22)</td>
</tr>
<tr>
<td>30-34</td>
<td>21 (15)</td>
</tr>
<tr>
<td>31-35</td>
<td>8 (6)</td>
</tr>
<tr>
<td>36-40</td>
<td>4 (3)</td>
</tr>
<tr>
<td>&gt; 41</td>
<td>1 (1)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>92 (64)</td>
</tr>
<tr>
<td>Male</td>
<td>33 (23)</td>
</tr>
<tr>
<td>Prefer to not state</td>
<td>15 (10)</td>
</tr>
<tr>
<td>Non-binary third gender</td>
<td>1 (1)</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>45 (31)</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>37 (26)</td>
</tr>
<tr>
<td>Black or African American</td>
<td>6 (4)</td>
</tr>
<tr>
<td>Native Hawaiian or Pacific Islander</td>
<td>4 (3)</td>
</tr>
<tr>
<td>Caucasian/White</td>
<td>49 (34)</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Missing</td>
<td>1 (1)</td>
</tr>
<tr>
<td><strong>Prior Spiritual Care Education</strong></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>61 (43)</td>
</tr>
<tr>
<td>No</td>
<td>80 (56)</td>
</tr>
<tr>
<td><strong>Type of Nursing Program</strong></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Science in Nursing</td>
<td>98 (69)</td>
</tr>
<tr>
<td>BSN Accelerated Nursing Program</td>
<td>44 (31)</td>
</tr>
<tr>
<td><strong>Quarter in Program</strong></td>
<td></td>
</tr>
<tr>
<td>Second Quarter</td>
<td>53 (37)</td>
</tr>
<tr>
<td>Final Quarter</td>
<td>43 (30)</td>
</tr>
<tr>
<td>Accelerated Final Quarter</td>
<td>45 (31)</td>
</tr>
<tr>
<td><strong>Religious Affiliations</strong></td>
<td></td>
</tr>
<tr>
<td>Religion</td>
<td>Count</td>
</tr>
<tr>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>Christian</td>
<td>89</td>
</tr>
<tr>
<td>Catholic</td>
<td>38</td>
</tr>
<tr>
<td>Jewish</td>
<td>3</td>
</tr>
<tr>
<td>Muslim</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>17</td>
</tr>
<tr>
<td>None</td>
<td>3</td>
</tr>
</tbody>
</table>

*Note. Due to rounding errors, percentages may not equal 100%*

**Descriptive Statistics**

The scores were computed for the SpI-27®, ORA, NORA, IR, and SSSC using the entire sample of students (Appendix U). The mean score for SpI-27® was 100.23 with a possible score between 67-127. A higher score indicates greater spirituality. The mean score for ORA was 3.76 and NORA 3.23 with a possible score between 1-6. The mean score for IR was 13.23 with a possible score between 5-18. For the ORA, NORA, and IR, a lower score indicates greater religiosity. The mean score for SSSC was 27 with a possible score between 11-37. A lower score indicates a greater perceived ability to provide spiritual care.

**Results of Research Question Analysis**

To explore research questions one through four, a pairwise Spearman rank correlation coefficient analysis was conducted. Although the study’s framework depicts positive relationships, nondirectional hypotheses were used due to the exploratory nature of the study. Given the limited positive significant relationships and preponderance of the marginal (or unadjusted) inverse relationships, posthoc scatterplots were completed to assess for confounders (Appendix Z, AA). No confounders were detected. Significant results for research questions one through four are reported in Table 2. All relationships
that were not significant are in Appendix M. The hypotheses for research questions one through four were partially supported. The marginal (or unadjusted) inverse relationships will be further discussed in Chapter Five.

**Research Question 1: What is the relationship, if any, between spirituality, religiosity, and perceived ability to provide spiritual care in traditional second quarter nursing students attending a private faith-based university?**

The pairwise Spearman rank correlation coefficient results suggested one significant positive relationship between spirituality and intrinsic religiosity with a reported small effect size of 0.29 (Table 2). The correlation indicates that as spirituality increases, intrinsic religiosity tends to increase.

Two significant marginal (or unadjusted) inverse relationships were reported between spirituality and perceived ability to provide spiritual care and between organizational religious activity and perceived ability to provide spiritual care. Both of these results have a moderate effect size. The relationship indicates, for example, as spirituality increases, perceived ability to provide spiritual care decreases and as organizational religious activity increases, perceived ability to provide spiritual care decreases.
Table 2

*Pairwise Spearman rank Correlation Research Questions One Through Four*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variable</th>
<th>$r_s$</th>
<th>$p$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (n = 53)</td>
<td>Spirituality (SpI-27®) - Religiosity (IR)</td>
<td>0.53</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Spirituality (SpI-27®) - Perceived Ability to Provide Spiritual Care (SSSC)</td>
<td>-0.44</td>
<td>&lt; 0.01</td>
</tr>
<tr>
<td></td>
<td>Religiosity (ORA) - Perceived Ability to Provide Spiritual Care (SSSC)</td>
<td>-0.36</td>
<td>0.01</td>
</tr>
<tr>
<td>2 (n = 43)</td>
<td>Religiosity (NORA) - Perceived Ability to Provide Spiritual Care (SSSC)</td>
<td>-0.47</td>
<td>&lt; .001</td>
</tr>
<tr>
<td></td>
<td>Religiosity (IR) - Perceived Ability to Provide Spiritual Care (SSSC)</td>
<td>-0.59</td>
<td>&lt; .001</td>
</tr>
<tr>
<td></td>
<td>Spirituality (SpI-27®)- Perceived Ability to Provide Spiritual Care (SSSC)</td>
<td>-0.34</td>
<td>0.03</td>
</tr>
<tr>
<td>3 (n =45)</td>
<td>Spirituality (SpI-27®) - Religiosity (IR)</td>
<td>0.33</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>Spirituality (SpI-27®) - Perceived Ability to Provide Spiritual Care (SSSC)</td>
<td>-0.40</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Religiosity (IR) - Perceived Ability to Provide Spiritual Care (SSSC)</td>
<td>-0.45</td>
<td>0.01</td>
</tr>
<tr>
<td>4 (n = 88)</td>
<td>Spirituality (SpI-27®) - Perceived Ability to Provide Spiritual Care (SSSC)</td>
<td>-0.33</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Religiosity (IR) - Perceived Ability to Provide Spiritual Care (SSSC)</td>
<td>-0.39</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Research Question 2: What is the relationship, if any, between spirituality, religiosity, and perceived ability to provide spiritual care in traditional final quarter nursing students from a private faith-based university?
For this research question, three significant marginal (or unadjusted) inverse relationships were suggested between: 1) non organizational religious activity and perceived ability to provide spiritual care, 2) spirituality and perceived ability to provide spiritual care, and 3) intrinsic religiosity and perceived ability to provide spiritual care. The correlational coefficient for all marginal (or unadjusted) inverse relationships indicated a moderate effect size.

These results indicate, for example, that as non-organizational religious activity, intrinsic religiosity, and spirituality increase, perceived ability to provide spiritual care decreases.

**Research Question 3: What is the relationship, if any, between spirituality, religiosity, and perceived ability to provide spiritual care in accelerated final quarter nursing students attending a private secular based university?**

Three significant relationships were suggested for research question three. The significant positive relationship between spirituality and intrinsic religiosity indicates as spirituality increases so does intrinsic religiosity. This result had a moderate effect size.

Two significant marginal (or unadjusted) inverse relationships were reported between spirituality and perceived ability to provide spiritual care, and between intrinsic religiosity and perceived ability to provide spiritual care. Both correlation coefficient was reported to have a moderate effect size which indicates, for example, as spirituality increases, perceived ability to provide spiritual care decreases, and as intrinsic religiosity increases, perceived ability to provide spiritual care decreases.
Research Question 4: What is the relationship, if any, between spirituality, religiosity, and perceived ability to provide spiritual care in traditional final quarter nursing students attending a faith-based university and accelerated final quarter nursing students attending a private secular university?

For this research question, two significant marginal (or unadjusted) inverse relationships were reported between spirituality and perceived ability to provide spiritual care, and between intrinsic religiosity and perceived ability to provide spiritual care with (Table 2). The correlation coefficient for both marginal (or unadjusted) inverse relationships have a moderate effect size. These results indicate that an increase in spirituality is associated with a decrease in perceived ability to provide spiritual care. Likewise, an increase in intrinsic religiosity is associated with a decrease in perceived ability to provide spiritual care.

To explore research questions five and six, a two-tailed independent sample t-test was conducted to assess for mean differences on spirituality, dimensions of religiosity, and perceived ability to provide spiritual care between traditional final quarter and accelerated final quarter, and between traditional second quarter and final quarter nursing students.

Research Question 5: What is the difference, if any, between traditional final quarter nursing students attending a private faith-based university and accelerated final quarter nursing students attending a private secular university in terms of spirituality, religiosity, and perceived ability to provide spiritual care?
The findings suggest significant differences in organizational religiosity and intrinsic religiosity with mean scores higher in the traditional final quarter nursing students. The confidence intervals (Table 3) include a range of values providing a 95% certainty of the mean of the sample. A narrow interval, e.g. organizational religious activities and intrinsic religiosity shows little difference between the lower and upper limit of the confidence interval. This finding indicates a more precise estimate than does a wide interval. The hypotheses for research question five was partially supported.

Table 3

Independent t-Test Research Question 5

<table>
<thead>
<tr>
<th>Variables</th>
<th>p value</th>
<th>t</th>
<th>df</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spirituality (SpI-27®)</td>
<td>0.471</td>
<td>-2.09</td>
<td>86</td>
<td>(-12.63, -0.32)</td>
</tr>
<tr>
<td>Religiosity (ORA)</td>
<td>0.001</td>
<td>2.42</td>
<td>85</td>
<td>(.13, 1.37)</td>
</tr>
<tr>
<td>Religiosity (NORA)</td>
<td>0.279</td>
<td>2.91</td>
<td>85</td>
<td>(.29, 1.55)</td>
</tr>
<tr>
<td>Religiosity (IR)</td>
<td>0.011</td>
<td>1.95</td>
<td>86</td>
<td>(-0.03, 2.84)</td>
</tr>
<tr>
<td>Perceived Ability to Provide Spiritual Care (SSSC)</td>
<td>0.185</td>
<td>-1.32</td>
<td>86</td>
<td>(-4.53, 0.92)</td>
</tr>
</tbody>
</table>

Research Question 6: What is the difference, if any, between traditional second quarter and final quarter nursing students attending a private faith-based university in terms of spirituality, religiosity, and perceived ability to provide spiritual care?
The findings suggest no significant mean differences in terms of spirituality, religiosity, and perceived ability to provide spiritual care between traditional second quarter and final quarter nursing students (Table 4). The hypothesis was not supported for this research question.

Table 4

Independent t-Test Research Question 6

<table>
<thead>
<tr>
<th>Variables</th>
<th>p value</th>
<th>t</th>
<th>df</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spirituality (SpI-27®)</td>
<td>0.753</td>
<td>-0.96</td>
<td>94</td>
<td>(-9.30, 3.24)</td>
</tr>
<tr>
<td>Religiosity (ORA)</td>
<td>0.974</td>
<td>-0.91</td>
<td>91</td>
<td>(-0.66, 0.25)</td>
</tr>
<tr>
<td>Religiosity (ORA)</td>
<td>0.745</td>
<td>-0.84</td>
<td>92</td>
<td>(-0.82, 0.33)</td>
</tr>
<tr>
<td>Religiosity (IR)</td>
<td>0.162</td>
<td>-0.78</td>
<td>94</td>
<td>(-1.68, 0.74)</td>
</tr>
<tr>
<td>Perceived Ability to Provide Spiritual Care (SSSC)</td>
<td>0.214</td>
<td>1.23</td>
<td>94</td>
<td>(-0.97, 4.11)</td>
</tr>
</tbody>
</table>

To answer research questions seven and eight, a multivariate analysis of variance (MANOVA) was conducted. A MANOVA assesses whether mean differences among groups on a combination of dependent variables are likely to have occurred by chance.

Research Question 7: Are there any differences between traditional second quarter and final quarter nursing students attending a faith-based university in
terms of spirituality, religiosity, or perceived ability to provide spiritual care adjusting for demographic variables (age, ethnicity, prior spiritual care education)?

The MANOVA results (Table 5) were not significant. This result indicates that the linear combination of spirituality, religiosity, and perceived ability to provide spiritual care was similar for each demographic, i.e., age, ethnicity, and prior spiritual care education.

Table 5

**MANOVA Research Question 7**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$F$</th>
<th>df</th>
<th>$p$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.2</td>
<td>15</td>
<td>0.27</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1.39</td>
<td>20</td>
<td>0.13</td>
</tr>
<tr>
<td>Prior Spiritual Care Education</td>
<td>0.31</td>
<td>5</td>
<td>0.90</td>
</tr>
</tbody>
</table>

Research Question 8: Are there any differences between traditional final quarter nursing students attending a faith-based university and accelerated final quarter year nursing students’ attending a private secular university in terms of spirituality, religiosity, or perceived ability to provide spiritual care adjusting for demographic variables (age, ethnicity, prior spiritual care education)?

The MANOVA results (Table 6) were not significant. The hypothesis for research question eight was not supported.

Table 6

**MANOVA Research Question 8**
<table>
<thead>
<tr>
<th>Variable</th>
<th>$F$</th>
<th>df</th>
<th>$p$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>120.96</td>
<td>20</td>
<td>0.512</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1.33</td>
<td>15</td>
<td>0.186</td>
</tr>
<tr>
<td>Prior Spiritual Care Education</td>
<td>2.04</td>
<td>5</td>
<td>0.084</td>
</tr>
</tbody>
</table>

**Qualitative Data**

A 100% response rate was achieved for the three open-ended questions (N = 222). The pending content analysis of the qualitative results will be interpreted for convergence or divergence with the reported quantitative finding.

**Summary of Analysis**

The demographic results showed the participants were from a ethnically diverse population of Asian, Hispanic, and Caucasions. The majority of the sample were female between the ages of 21-30, Christian (non Catholic), with nearly half having had prior spiritual care education. The Cronbach’s alpha for the SpI-27® was 0.95. DUREL was 0.91, and SSSC were 0.81. According to guidelines by Kellar and Kelvin (2013), the Cronbach’s alpha results were excellent for both the SpI-27 and the DUREL; results were good for the SSSC.

A pairwise Spearman rank correlation coefficient indicated two positive relationships between spirituality and intrinsic religiosity in traditional second quarter and accelerated final quarter nursing students. Perceived ability to provide spiritual care suggested nine marginal (or unadjusted) inverse relationship with dimensions of religiosity and with spirituality for all groups of students. The hypothesis was partially supported for research questions one through four.
Independent *t*-tests findings indicated no significant mean differences between traditional second quarter and final quarter nursing students; therefore, the hypothesis was not supported. There was a significant mean difference reported between traditional final quarter and accelerated quarter final year nursing students in organizational religious beliefs and intrinsic. Therefore, the hypothesis was partially supported. The MANOVAs showed no differences.
CHAPTER 5: DISCUSSION OF FINDINGS

This chapter presents a discussion of the quantitative results related to exploring spirituality, religiosity, and perceived ability to provide spiritual care in nursing students. The results represent relationships and differences in a sample of traditional and accelerated baccalaureate nursing students (N = 141). As the qualitative data analysis is pending, the discussion of findings is limited to the quantitative results and, therefore, does not include discussion of convergence or divergence of data results.

**Spirituality**

For traditional second quarter and accelerated final quarter nursing students, a positive relationship was suggested between spirituality and one dimension of religiosity, specifically, intrinsic religiosity which is one’s personal beliefs or experience. This finding can be interpreted within the multiple ways spirituality and religiosity are viewed. For example, individuals may see the two concepts as being separate and may consider him/herself either spiritual or religious (Aldwin et al., 2014). Another view is that spirituality is a part of religiosity or that spirituality may be the larger part within religiosity, thus, individuals perceive both within themselves (Altmeyer et al., 2015).

Regardless of the variation in views, spirituality denotes a broader search for meaning and purpose, connection with self, others, and transcendence (Weathers, 2016). Intrinsic religiosity concerns a religious belief or an experience that a person may carry over into everyday life or how one approaches situations in life (Koenig, 2017; Ruder, 2009). According to Koenig and Bussing (2010), individuals have two realms of existence. The outer realm is where one interacts with the outer world (i.e. spirituality)
and the inner realm is where they interact with the self-transcendence (i.e. intrinsic religiosity). The study findings suggest that second quarter and accelerated quarter final view spirituality and intrinsic religiosity as both variables being a part of the other.

Conversely, no significant relationship was reported between spirituality and intrinsic religiosity for traditional final year nursing students. In this study, the traditional final quarter students have spent more time in their nursing program than the other student groups. It is possible that as nursing students progress in a nursing program, they may confuse spirituality and religiosity (Best, Butow, & Olver, 2016; Johnston Taylor et al., 2017). This may create inner conflict for the nursing student who may find that religious beliefs and practices are required to promote a patient’s spiritual well-being (Mamier, Johnston Taylor, & Winslow, 2018). Perhaps adding to the inner conflict, is that the nursing code of ethics does not allow nurses to proselytize or introduce their religion at the bedside (Johnston Taylor, Park, & Pfeiffer, 2014a).

Additionally, the final quarter nursing student may come to the realization of how sensitive the topic of spirituality is, the importance of their interpersonal skills, their personal beliefs, attitudes, and a ‘way of being,’ as they are all separate from religiosity (Gallison et al. 2013; McSherry and Jamieson, 2013). As final quarter nursing students have had more clinical experience, they are aware they are lacking in spiritual development and/or making a connection between spirituality and religiosity (McSherry & Jamieson, 2013; Ruder, 2013). Meyer (2003) reported that for final quarter nursing students attending a faith-based university, a specific focus on spirituality in a clinical experience resulted in a positive relationship between spirituality and religiosity.
Educational experiences like this are relevant for supporting nursing students’ understanding of the connection between spirituality and religiosity.

Significant marginal (or unadjusted) inverse relationships were reported between spirituality and perceived ability to provide spiritual care in all groups. However, nearly half of the nursing students reported having prior spiritual care education. This finding may suggest nursing students who have not had opportunities to explore their own spirituality may not have a clear perception of their professional nursing role in providing spiritual care (Astrow et al., 2007; Timmins & Neill, 2013). Similar to this study’s findings, Chung, Wong, and Chan (2007) reported nursing students’ spirituality was not related to their perceived ability to provide spiritual care. In contrast, Cavendish et al. (2004) and McSherry and Jamieson (2013) reported nurses’ spirituality was associated with perceived ability to provide spiritual care. However, a nurse’s experience may influence their perceived ability to provide spiritual care.

While this study’s findings suggested relationships, there are predictive studies which support spirituality as a predicator variable for perceived ability to provide spiritual care. For example, Bennett and Thompson (2015), Wu et al. (2015), and Ross et al. (2014) reported final year nursing student’s spirituality predicted their ability to provide spiritual care.

**Religiosity**

In this study, there were reported significant marginal (or unadjusted) inverse relationships between ORA, NORA, IR and SSSC that differed between groups.
However, a common finding among all groups was that ORA, NORA, and IR was not positively related with SSSC.

Around the world, nurses and nursing students report being religious (Johnston Taylor et al., 2014a). In this study, the majority of the nursing students reported themselves to be Christian (non-Catholic) or Catholic. Taylor et al. (2019) reported a very weak correlation between one dimension of religiosity (non-organizational religious beliefs) and perceived ability to provide spiritual care in practicing nurses. This study finding may imply a nursing students’ inability to differentiate ‘religious care’ from ‘spiritual care’ or a misunderstanding of what encompasses perceived ability to provide spiritual care (Johnston Taylor et al., 2014a). For example, Kroning and Yoon (2017) reported nursing students who participated in a clinical training session did not observe nurses praying with or praying for a patient, therefore, they felt the nurse was not providing spiritual care. On the other hand, nurses express anxiety over distinguishing between the perceived ability to provide spiritual care and proselytizing (Gallison et al., 2013). The anxiety expressed by many nurses is a reason for their inability to provide spiritual care (McSherry & Jamieson, 2013).

Similar to this study’s findings, Hafizi et al. (2015) reported an inverse correlation between religiosity and perceived ability to provide spiritual care, although in a sample of practicing nurses. In this study, nursing students could be negatively affected by confronting life threatening situations and human suffering in clinical settings, particularly in religious patients. This may give the nursing student the impression that their religious beliefs and values have no relevance for their perceived ability to provide
spiritual care (Koenig, 2012). Subsequently, this may force nursing students to shift their attention to the technical aspects of care rather than focusing on the spiritual component of care (Hafizi et al. 2014).

While this current study explored relationships between and religiosity and perceived ability to provide spiritual care, several studies have used religiosity as a predictor for perceived ability to provide spiritual care. For example, Musgrave and McFarlan (2004), Stranahan (2001), Koenig et al. (2017), and Lopez et al. (2014) reported nursing students’ religiosity predicted their perceived ability to provide spiritual care. The current study found a significant inverse relationship between religiosity and perceived ability to provide spiritual care in all groups. Additionally, in traditional final quarter, accelerated final quarter, and the combination of both groups, a significant marginal (or unadjusted) inverse relationship was reported between IR and SSSC. A significant marginal (or unadjusted) inverse relationship was reported between NORA and SSSC in final quarter nursing students. Additionally, a significant marginal (or unadjusted) inverse relationship was reported between ORA and SSSC. These findings suggest the study’s framework may need to be revised and tested as a predictor model using perceived ability to provide spiritual care as the outcome. Further, adding an educational intervention could be tested for effect in perceived ability to provide spiritual care.

In addition to relationships, differences were explored between traditional final quarter year and accelerated final quarter nursing student’s religiosity and perceived ability to provide spiritual care. The current study findings reported differences in terms
of ORA and IR with mean scores higher in the traditional final quarter nursing students. ORA involves public religious activity and IR is a religious belief or experience.

This finding may imply a difference in the nursing programs’ curriculum. Nardi and Rooda (2011) reported the curriculum of a faith-based school included required a religious course as a requirement for graduation. A faith-based university curriculum may be inclusive of religious courses; whereas, a private secular university may not have the same requirement (Taylor et al., 2019). In this study, curriculum components were not assessed for description.

Similarly, Sanders et al. (2015) and Meyer (2002) reported while nursing students attending a faith-based university scored high on a religiosity scale compared to students from a secular university, they did not perceive themselves to be able to provide spiritual care. Conversely, in terms of a nursing students’ religiosity, the findings of the current study differ from Johnston Taylor (2014) who reported no mean differences between nursing students attending a private faith based or secular university. Regardless if a nursing student attends a private faith based or private secular university, inconsistency of the findings acknowledges that religiosity may need to be considered in relationship to perceived ability to provide spiritual care when addressing future studies, nursing curriculum, and in secular universities.

**Perceived Ability to Provide Spiritual Care**

In this study, marginal (or unadjusted) inverse relationships were reported between spirituality and perceived ability to provide spiritual care and between religiosity and perceived ability to provide spiritual care. These findings included all groups of
students. A consideration for the significant marginal (or unadjusted) inverse relationships may be a nursing student’s fear of offending a non-religious patient and difficulty differentiating proselytizing from perceived ability to provide spiritual care (Johnston Taylor et al., 2014a). However, when a nursing student fully understands the nonreligious nature of spirituality, even though they are similar concepts, this barrier may disappear (Johnston Taylor, 2013). Additionally, nursing students may not have a clear understanding that one may attend to a patient’s spiritual needs exclusive of a reference to God and religion (Hodge, 2015). Tiew et al. (2013) reported that nursing students acknowledged the importance of responding to a patient’s spiritual need but may not have the educational preparedness, e.g., understanding the non-religious nature of spirituality.

Further, for a nursing student to have a perceived ability to provide spiritual care, they should be provided an opportunity to discover and develop their spirituality. Several researchers have reported a positive relationship between spirituality and perceived ability to provide spiritual care in nursing student samples that were provided an opportunity to develop their spirituality (Aksoy & Coban, 2017; Chism & Magnan, 2009; Cone, 2013; Li-Fen et al., 2012; Vlasblom et al., 2011). In contrast, Aksoy and Coban (2017) used a sample of nursing students and Tiew et al. (2013) used a sample of palliative care nurses; both researchers reported student nurses or practicing nurse’s spirituality was not positively correlated with their perceived ability to provide spiritual care.
A possible difficulty may be in the definition of perceived ability to provide spiritual care. It has been argued by Paley (2007) that the concept is a ‘bendy word’ that one can define to mean anything depending on the contexts of spiritual care usage. At one end of the scale spiritual care cannot be provided outside a belief in God; whereas, on the other end of the scale, spiritual care goes beyond religious affiliation that strives for a meaning and purpose in life (Narayanasamy & Narayanasamy, 2008). Regardless, there are several definitions for spiritual care. However, the definitions which often times are very wordy and nursing students may have a difficult time understanding the content (McSherry, Gretton, Draper, & Watson, 2008), leading to a lack of clarity regarding perceived ability to provide spiritual care.

The significant marginal (or unadjusted) inverse relationships between perceived ability to provide spiritual care and religiosity differs from research in which positive relationships between religiosity and perceived ability to provide spiritual care were reported for practicing nurses (Musgrave & McFarlane, 2004; Stranahan, 2001). Tiew et al. (2013) reported positive relationships between perceived ability to provide spiritual care and intrinsic religiosity in final year nursing students (n = 45). Further, Creedy, Chan, and Moon (2013) reported final year nursing student’s religiosity predicted their perceived ability to provide spiritual care.

In the current study, nearly half of the nursing students did have prior spiritual care education, but this did not predict their perceived ability to provide spiritual care. The current study findings do not concur with McSherry and Jamieson (2011) and Cone and Giske (2016). The researchers reported practicing nurses who did not receive
adequate educational preparedness had lower scores on perceived ability to provide spiritual care. Whereas, Taylor et al. (2009), Lovanio and Wallace (2007), and Wallace and O’Shea’s (2007) studies showed marked improvement in nursing students’ personal spiritual growth after a spiritual care intervention that supported their perceived ability to provide spiritual care.

The current study did not explore the extent or content of prior spiritual care education. It may be that the students’ prior spiritual care education was not inclusive of personal spiritual growth. Wu and Lin (2011), Li et al. (2013), and Cone and Giske (2016) reported practicing nurses who received spiritual care education in nursing school had reported high mean scores on spirituality and perceived ability to provide spiritual care. The findings of this study and other studies further reiterate the need for undergraduate nursing educational preparedness to include developing one’s spiritual awareness to enable one to respond to patients’ spiritual needs (Rankin & DeLashmutt, 2006).

No differences were reported in sample demographics, i.e., (age, ethnicity, prior spiritual care education) between the student groups in terms of spirituality, religiosity, and perceived ability to provide spiritual care. Like this study, several researchers reported there were no significant differences between the age of the practicing nurses and their perceived ability to provide spiritual care (Abbell et al., 2018; Chung et al., 2014; Mamier, Johnston Taylor, & Wehtje Winslow, 2019; Tiew et al., 2015). Tiew at el. (2013) reported nursing students between age 21-26 may have similar levels of spirituality regardless of the age range (Tiew, Kwee, Creedy, & Chan, 2013b). In relation
to ethnicity, a similar finding was reported by Nardi and Rooda (2011) who suggested that ethnicity was not a predictor of spirituality.

**Limitations**

The study sample included a convenience sample that was limited to a private faith-based and private secular university in a Western Region of the United States; therefore, the findings may not be generalized to other nursing populations or other parts of the country. The curriculums may be different between a private faith-based university versus a private secular university. The majority of the study participants were Christian (non-Catholic) and Catholic. Therefore, study finding may not be generalized to other religious affiliations. Although men were included in this study, fewer male nursing students responded to the survey resulting in the inability to explore gender differences. This limitation needs to be further explored to determine if males’ perceptions are different than females in regard to spirituality, religiosity, and perceived ability to provide spiritual care.

Additionally, the participants in this study may have been under stress due to the time of year the survey was distributed, as this was in the same time period in which nursing students may have been studying for final exams (Tiew et al., 2013a). Other limitations to the study include participants who responded to the survey may have had an interest in the topic and the responses may be different from those who wished not to participate. Further, spirituality, religiosity, and perceived ability to provide spiritual care are sensitive and complex topics that may have deterred nursing students from participating (Chew et al., 2016).
Further, within the QuestionPro online format, participants were not required to answer all items of each survey due to the potential for perceived sensitivity and lack of comfort with the subject (Johnston et al., 2014; McSherry & Jamieson, 2011). This meant the participant could skip an item but still proceed within each instrument of the survey. However, the survey was constructed to require that the participants answer the last question in every instrument in order to proceed to the next, and all open-ended questions had to be answered in order to receive the incentive ($5.00 electronic Amazon gift card). A consistent non-random pattern was recognized in that 81 participants only answered the first and last item of each survey and a 100% response rate was achieved.

**Implications for Education**

As nursing education strives to place emphasis on the spiritual domain of holistic nursing, the quantitative findings of this study indicate reflective preparation may be an important intervention to be incorporated in the NSSpCPF. Nursing students may need to be provided opportunities to understand spirituality in their own lives in order to provide spiritual care (Mirlashari, Warnock, & Jahanbani, 2017). For some nursing students, spiritual care may be intuitive but most may need to develop the knowledge and skills for providing competent spiritual care (Johnston Taylor et al., 2017). The humanistic skills (i.e. compassion, empathy, dignity, respect, support) require an awareness and growth in one’s spirituality (Koenig et al., 2017; Puchalski, Vitillo, Hull, & Reller, 2014). Reflective preparation is an important component of professional development that enables one to identify sense of meaning and purpose and to develop as an authentic
whole person (Puchalski & Ferrell, 2010). Implications will be forthcoming after interpreting quantitative and qualitative data for convergence or divergence.

**Conclusion**

The NSSpCPF that guided this study conceptualized relationships between spirituality, religiosity, and perceived ability to provide spiritual care in traditional first, final, and accelerated final quarter nursing students and to explore the variables that may inform the educational preparedness to respond to a patient’s spiritual needs. Study findings suggested limited positive and marginal (or unadjusted) inverse relationships in all groups and among the groups of nursing students. The marginal (or unadjusted) inverse relationships imply difficulties and challenges in differentiating between the spirituality and religiosity. Therefore, an intervention, such as reflective preparation (Puchalski & Ferrell, 2010) could be added to the framework to further explore nursing student understanding of spirituality and religiosity.

Additionally, no relationships were reported between spirituality and perceived ability to provide spiritual care and between religiosity and perceived ability to provide spiritual care. This finding suggests the framework may need to be revised using spirituality, religiosity, and adding reflective practice as predictors of perceived ability to provide spiritual care. Additional research implications would be to longitudinally assess change in these variables from the first semester of a nursing program to the final semester and to other private faith-based and secular universities. Finally, the pending analysis of qualitative data for convergance or divergence with the quanitative findings may provide additional insight for nursing student educational preparedness.
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APPENDIX A: LOMA LINDA UNIVERSITY INTRODUCTION LETTER

Hello,

My name is Shannon O’Connell-Persaud. As a nursing doctoral student at South Dakota State University College of Nursing, I am interested in exploring nursing students’ preparedness for responding to a patient’s spiritual care needs. I am inviting you to participate in an online survey which will take between 20-25 minutes of your time. Please consider your participation as an opportunity to advance nursing science. In appreciation, you will receive a $5.00 Amazon electronic gift card upon survey completion. To participate, please read the Survey Details below. Survey participation implies consent. Please print a copy of this page for your records.

SURVEY DETAILS

You must be 18 years of age to participate. The survey should take between 20-25 minutes. Participation in this survey is voluntary and will not affect your current or future relationship with your university. You are free to complete all, some, or none of the survey. Although you are not required to complete all survey questions, you must complete the survey to be eligible for the $5.00 Amazon electronic gift card. You have the right to withdraw at any time without penalty. If you have any questions, you may contact myself and/or the survey administrator Dr. Lisa Roberts at Loma Linda University (909) 558-1000 or email lroberts@llu.edu

If you experience any ongoing anxiety or health issues during or after answering the questions, contact the Loma Linda University counseling center at (909) 558-6050 ext. 66050.
The survey contains no information that can identify you. Your responses will be anonymous and confidential. There are no additional benefits to you to participate in the survey.

To begin taking the survey, just click on this link.

or copy and paste the URL below into your internet browser:

If you have any questions, please feel free to call or email me at (941) 773-7713 or email Shannon.oconnellpersaud@jacks.sdstate.edu

Thank you in advance for your valuable input.

Shannon O’Connell-Persaud, RN

Jonas Nurse Scholar
APPENDIX B: WESTERN UNIVERSITY INTRODUCTION LETTER

Hello,

My name is Shannon O’Connell-Persaud. As a nursing doctoral student at South Dakota State University College of Nursing, I am interested in exploring nursing students’ preparedness for responding to a patient’s spiritual care needs. I am inviting you to participate in an online survey which will take between 20-25 minutes of your time. Please consider your participation as an Opportunity to advance nursing science. In appreciation, you will receive a $5.00 Amazon electronic gift card upon survey completion. To participate, please read the Survey Details below. Survey participation implies consent. Please print a copy of this page for your records.

SURVEY DETAILS

You must be 18 years of age to participate. The survey should take between 20-25 minutes. Participation in this survey is voluntary and will not affect your current or future relationship with your university. You are free to complete all, some, or none of the survey. Although you are not required to complete all survey questions, you must complete the survey to be eligible for the $5.00 Amazon electronic gift card. You have the right to withdraw at any time without penalty. If you have any questions, you may contact myself and/or the survey administrator Dr. Patricia Shakhsir at Western University (909) 623-6116 or email pshakhshir@westernu.edu.

If you experience any ongoing anxiety or health issues during or after answering the questions, contact the counseling center at (626) 391-8508.
The survey contains no information that can identify you. Your responses will be anonymous and confidential. There are no additional benefits to you to participate in the survey.

To begin taking the survey, just click on this link:

or copy and paste the URL below into your internet browser:

If you have any questions, please feel free to call or email me at (941) 773-7713 or email Shannon.oconnellpersaud@jacks.sdstate.edu

Thank you in advance for your valuable input.

Shannon O’Connell-Persaud, RN

Jonas Nurse Scholar
APPENDIX C: PARTICIPANT REMINDER LETTER-LOMA LINDA UNIVERSITY

Hello,

As a friendly reminder, if you have not participated in this survey, please consider.

My name is Shannon O’Connell-Persaud. As a nursing doctoral student at South Dakota State University College of Nursing, I am interested in exploring nursing students’ preparedness for responding to a patient’s spiritual care needs. I am inviting you to participate in an online survey which will take between 20-25 minutes of your time. Please consider your participation as an opportunity to advance nursing science. In appreciation, you will receive a $5.00 Amazon electronic gift card upon survey completion. To participate, please read the Survey Details below. Survey participation implies consent. Please print a copy of this page for your records.

SURVEY DETAILS

You must be 18 years of age to participate. The survey should take between 20-25 minutes. Participation in this survey is voluntary and will not affect your current or future relationship with your university. You are free to complete all, some, or none of the survey. Although you are not required to complete all survey questions, you must complete the survey to be eligible for the $5.00 Amazon electronic gift card. You have the right to withdraw at any time without penalty. If you have any questions, you may contact myself at 941-773-7713 or email Shannon.oconnellpersaud@jacks.sdstate.edu. If you experience any ongoing anxiety or health issues during or after answering the questions, contact Loma Linda University counseling center at (909) 558-6050 ext. 66050.
The survey contains no information that can identify you. Your responses will be anonymous and confidential. There are no additional benefits to you to participate in the survey.

To begin taking the survey, click on the link or copy and paste the URL below into your internet browser:

https://studentsurvey2019.questionpro.com

Thank you in advance for your valuable input.

Shannon O’Connell-Persaud, RN

Jonas Nurse Scholar
APPENDIX D: REMINDER LETTER-WESTERN UNIVERSITY

Hello,

As a friendly reminder, if you have not participated in this survey, please consider.

My name is Shannon O’Connell-Persaud. As a nursing doctoral student at South Dakota State University College of Nursing, I am interested in exploring nursing students’ preparedness for responding to a patient’s spiritual care needs. I am inviting you to participate in an online survey which will take between 20-25 minutes of your time. Please consider your participation as an opportunity to advance nursing science. In appreciation, you will receive a $5.00 Amazon electronic gift card upon survey completion. To participate, please read the Survey Details below. Survey participation implies consent. Please print a copy of this page for your records.

SURVEY DETAILS

You must be 18 years of age to participate. The survey should take between 20-25 minutes. Participation in this survey is voluntary and will not affect your current or future relationship with your university. You are free to complete all, some, or none of the survey. Although you are not required to complete all survey questions, you must complete the survey to be eligible for the $5.00 Amazon electronic gift card. You have the right to withdraw at any time without penalty. If you have any questions, you may contact myself and/or the survey administrator Dr. Patricia Shakhsir at Western University (909) 623-6116 or email pshakhshir@western.edu.

If you experience any ongoing anxiety ORA health issues during or after answering the questions, contact Western University counseling center at (626) 391-8508.
The survey contains no information that can identify you. Your responses will be anonymous and confidential. There are no additional benefits to you to participate in the survey.

To begin taking the survey, just click on this link:

https://studentsurvey2019.questionpro.com

or copy and paste the URL below into your internet browser:

If you have any questions, please feel free to call or email me at (941) 773-7713 or email Shannon.oconnellpersaud@jacks.sdstate.edu

Thank you in advance for your valuable input.

Shannon O’Connell-Persaud, RN

Jonas Nurse Scholar
<table>
<thead>
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<tr>
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<td>Prefer to self-describe</td>
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<td>Asian/Pacific Islander</td>
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<tr>
<td>Question</td>
<td>Option 1</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------------------------------</td>
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<td>Prior spiritual care education</td>
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<td>Type of University</td>
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<td>Quarter in Program</td>
<td>Second Quarter</td>
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<td>Accelerated Final Quarter</td>
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<td></td>
<td>Buddhist</td>
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<tr>
<td></td>
<td>Muslim</td>
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APPENDIX F: SPIRITUALITY INSTRUMENT-27©

Please indicate your level of agreement with the following statements by circling the appropriate number that corresponds with the answer key.

KEY:
1. Strongly Disagree
2. Disagree
3. Uncertain
4. Agree
5. Strongly Agree

1. I have a general sense of belonging e.g. to society, to the world.
2. I feel supported by my friends and/or family.
3. I feel a part of the community in which I live.
4. I feel I belong somewhere.
5. My life is empty.
6. I spend time with my friends and/or a family.
7. I feel needed by my friends and/or a family.
8. I am disappointed with my live.
9. I can relate well to others.
10. I am able to deal with a difficult life event e.g. illness
11. I am able to focus on the positive lessons to be learned during bereavement.
difficult life events e.g. illness, bereavement.

13. I am free to take a stand event in the worst possible situations.

14. I am able to accept death as a part of life.

15. I am free to choose how I respond to any situation life,

16. I accept my life as it is.

17. My life can be whatever I want it to be.

18. I am able to adjust to changes in my life.

19. I regard difficult time and stressful events in life as challenges

20. I take time to think about my life.

21. I try to understand who I am.

22. I am aware of my own thoughts, feelings, and actions

23. I take some “space” or “quite” time

24. I feel a responsibility to preserve the planet

25. I am concerned about the earth being destroyed.

26. I feel a connection to nature.

27. I pray to a Higher Power if something is bothering me.

28. I am aware of a Higher Power (God, the Universe, the Angels, etc.)
APPENDIX G: DUKE UNIVERSITY RELIGIOUS INDEX (DUREL)

Directions: Please circle the number in front of the answer that most accurately describes your usual behavior of belief.

How often do you attend church or other religious meetings?
1. More than once a week
2. Once a week
3. A few times a week
4. A few times a year
5. Once a year or less
6. Never

How often do you send time in private religious activity, such as prayer, meditation, or Bible study?
1. More than once a day
2. Daily
3. Two or more times a week
4. Once a week
5. A few times a month
6. Rarely or never

In my life, I experience the presence of the Divine (i.e. God)
1. Definitely true of me
2. Tends to be true
3. Unsure
4. Tends not to be me
5. Definitely not true

My religious beliefs are what really lie behind my whole approach to life.

1. Definitely true of me
2. Tends to be true
3. Unsure
4. Tends not to be true
5. Definitely not true

I try hard to carry my religion over into all other dealings in life.

1. Definitely true of me
2. Tends to be true
3. Unsure
4. Tends not to be true
5. Definitely not true
APPENDIX H: STUDENT SURVEY OF SPIRITUAL

DIRECTIONS: Please indicate your response by circling the appropriate letters indicating how to respond to the statements.

Mark:

“SA” if you STRONGLY AGREE

“A” if you AGREE

“AM” if you ARE MORE than DISAGREE

“DM” if you DISAGREE MORE than AGREE

“D” if you DISAGREE

“SD” if you STRONGLY DISAGREE

There is no “right or “wrong” answer. Please respond to what you think or how you feel at this point in time.

1. Spiritual care in an essential component of holistic nursing care. SA A AM SM S SD
2. Spiritual well-being is an important part of health promotion. SA A AM SM S SD
3. I have sufficient knowledge to conduct a spiritual assessment. SA A AM SM S SD
4. I am able to identify spiritual distress. SA A AM SM S SD
5. I am not interested in the topic of spirituality. SA A AM SM S SD
6. I feel adequately prepared to provide spiritual care. SA A AM SM S SD
7. I respond to spiritual distress by listening and being concerned. SA A AM SM S SD
8. I feel spirituality is a personal matter that should not be discussed.
with the patient.

9. I respond to spiritual distress by asking the patient and/or a family if they have any special practices that help them express their spirituality.

10. There is not enough time to provide spiritual care.
APPENDIX I: PERMISSION TO USE DUREL INSTRUMENT

From: Harold Koenig, M.D.  harold.koenig@duke.edu
Subject: RE: DUREL Instrument
Date: January 23, 2019 at 7:06 PM
To: Shannon O'Connell-Persaud scp1410@gmail.com

Yes, you have permission

---Original Message---
From: Shannon O'Connell-Persaud [mailto:scp1410@gmail.com]
Sent: Tuesday, January 23, 2019 6:07 PM
To: Harold Koenig, M.D. <harold.koenig@duke.edu>
Subject: RE: DUREL Instrument

Hello Dr. Koenig,

I am currently working on my dissertation. My dissertation topic is related to spiritual care perspective and perceived ability to provide spiritual care in baccalaureate nursing students.

I am seeking your permission to use the DUREL scale to measure first and fifth semesters nursing students religiosity. The scale will be electronically delivered to nursing students who consent to participate in the pilot study.

Thank you in advance for your consideration of my request.

Best,
Shannon O'Connell-Persaud
APPENDIX J: PERMISSION TO USE SPIRITUALITY INSTRUMENT

Hi Shannon,

I am away from the office and traveling home to Ireland for Christmas so I don't have access to all of my files.

Please note the following conceptual definitions for each subscale:

- **Connectedness with Others** is defined as the sense of belonging a person feels with others and with a larger society. The nine items within this subscale pertain to time spent with friends and family, feelings of support from friends and family, ability to relate to others, and feeling part of a community.

- **Self-Transcendence** is defined as a person's ability to use their own inner resources to reach a level of acceptance and adjustment during a difficult life event. The nine items within this subscale relate to the ability to deal with a difficult life event and to focus on the positive, the ability to accept life, beliefs about freedom to change one's life, and the ability to accept death as a part of life.

- **Self-Cognisance** is defined as the extent to which a person feels connected to oneself. The four items in this subscale pertain to time spent reflecting on life, and awareness of personal thoughts, feelings, and actions.

- **Conservationism** is defined as the extent to which a person feels connected to nature and the earth. The three items in this subscale focus on concerns for the earth and a sense of responsibility to preserving the planet.

- **Connectedness with a Higher Power** is defined as the extent to which a person is aware of and feels related to a Higher Power. The two items in this subscale pertain to an awareness of a Higher Power and praying to a Higher Power.

The instrument was developed according to a framework that defined spirituality as meaning in life, connectedness (with oneself, with others and/or with a higher power) and transcendence. The 27 item Spl-27 emerged after factor analysis of a 44-item instrument that was developed from a rigorous item generation process and focus groups with individuals with chronic illness (as this is the sample I tested it with). I have no objections to anyone using all of the instrument or just some of the subscales. Furthermore, I have no objections to releasing the original version of the instrument for further testing with different samples. However, please note that it will be the New Year before I can forward you the original scale if you would like to use it.

Best Wishes,

Elizabeth.
APPENDIX K: OPEN-ENDED QUESTIONS

1. Describe how you would care for a patient expressing spiritual needs.

2. Describe how spirituality influences your perceived ability to respond to a patient’s spiritual needs.

3. Describe how religiosity influences the ability to respond to a patient’s spiritual need.
APPENDIX L: CITI CERTIFICATION

This is to certify that:

Shannon O'Connell-Persaud

Has completed the following CITI Program course:

Basic/Refresher Course - Human Subjects Research (Curriculum Group)
Social/Behavioral Research Course (Course Learner Group)
2 - Refresher Course (Stage)

Under requirements set by:

South Dakota State University

Verify at www.citiprogram.org/verify/?w4ecd2a96-1309-4d86-b4a8-1bb7b99600cb-30414160
APPENDIX M: PAIRWISE SPEARMAN CORRELATION-TRADITIONAL FIRST YEAR NURSING STUDENT

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<tr>
<td>SpI-27®-NORA</td>
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<td>.068</td>
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<tr>
<td>SpI-27®-SSSC</td>
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<td>.001</td>
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<tr>
<td>ORA-IR</td>
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<td>NORA-SSSC</td>
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<td>IR-SSSC</td>
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*Note.* The confidence intervals were computed using $\alpha = 0.05$; $n = 53$
### APPENDIX N: PAIRWISE SPEARMAN RANK CORRELATION-TRADITIONAL FINAL QUARTER NURSING STUDENTS

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<td>-0.52 - 0.05</td>
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*Note.* The confidence intervals were computed using $\alpha = 0.05$; $n = 43$
## APPENDIX O: PAIRWISE SPEARMAN RANK CORRELATION-ACCELERATED FINAL QUARTER NURSING STUDENTS

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*Note.* The confidence intervals were computed using $\alpha = 0.05; n = 45$; Holm corrections used to adjust $p$-values.
APPENDIX P: PAIRWISE SPEARMAN RANK CORRELATION-TRADITIONAL FINAL QUARTER AND ACCELERATED FINAL QUARTER NURSING STUDENTS

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### APPENDIX Q: PAIRWISE SPEARMAN CORRELATION RESULTS SPI-27®, DUREL, AND SSSC-TRADITIONAL SECOND QUARTER NURSING STUDENTS

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<td>ORA-IR</td>
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*Note.* The confidence intervals were computed using $\alpha = 0.05$; $n = 93$
APPENDIX R: CORRELATION MATRIX

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APPENDIX S: CORRELATION BETWEEN DEPENDENT VARIABLES-TRADITIONAL SECOND QUARTER AND FINAL QUARTER NURSING STUDENTS

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APPENDIX T: CORRELATION BETWEEN DEPENDENT VARIABLES-
TRADITIONAL FINAL QUARTER AND ACCELERATED FINAL QUARTER YEAR
NURSING STUDENTS

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### APPENDIX U: INSTRUMENT STATISTICS

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## APPENDIX V: GROUP INSTRUMENT STATISTICS

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APPENDIX W: CHI-SQUARE Q-Q PLOT-TRADITIONAL SECOND QUARTER AND FINAL QUARTER NURSING STUDENTS
APPENDIX X: CHI-SQUARE Q-Q PLOT- TRADITIONAL FINAL QUARTER AND ACCELERATED FINAL QUARTER NURSING STUDENTS
APPENDIX Y: SCATTER PLOT

Religious Affiliation

Christian  Catholic  Jewish  Muslim  Other

Bachelor of Science in Nursing
Accelerated Nursing Program