THE IMPACT OF CHRISTIAN EDUCATION ON UNDERGRADUATE NURSING

STUDENTS' LEVELS OF SPIRITUALITY AND RESILIENCY

by

Lynette Rae Fair

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

Liberty University

2024

THE IMPACT OF CHRISTIAN EDUCATION ON UNDERGRADUATE NURSING

STUDENTS' LEVELS OF SPRITIUALITY AND RESILIENCY

by Lynette Rae Fair

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

Liberty University, Lynchburg, VA

2024

APPROVED BY:

Name and degree, Committee Chair

Name and degree, Committee Member

Name and degree, Committee Member

ABSTRACT

Nursing education must focus on preparing nursing students to be adaptable and resilient in the face of changing circumstances. The problem is there is a lack of research studies focused on evaluating the effect of a Christian college/education setting on nursing students' level of spirituality and resilience. The purpose of this quantitative comparative study was to examine the differences between Christian and non-faith-based pre-licensure baccalaureate nursing education programs for spirituality and resiliency. This descriptive, non-experimental, cross-sectional comparative study utilized two key self-report instruments: the Assessment of Spirituality and Religious Sentiments (ASPIRES) and the Connor-Davidson Resilience Scale (CD-RISC). Data collection occurred through an electronic survey in Qualtrics® including items from both instruments and consent. The sample of baccalaureate pre-licensure students was $N = 85$, Christian ($n = 53$) and non-faith-based ($n = 32$). Data analysis occurred using SPSS and utilized independent samples t-test. An alpha of $< .05$ was considered significant. Hypothesis 1a found no statistically significant difference between the comparison groups for spirituality. The researcher failed to reject the null hypothesis for hypothesis 1a at 95% confidence level where $t(48.74, 83) = -.43$, $p = .336$, one-tailed and Hedge's $g = -.103$. Hypothesis 1b found a statistically significant difference between the comparison groups for resilience. The researcher rejected the null hypothesis at 95% confidence level where $t(59.98, 83) = -1.72$, $p = .045$, one-tailed and Hedge's $g = -.393$. It is recommended future research expand the population beyond the small sample size Controlling demographics and profession faith is recommended to establish two distinct comparison groups and reduce confounding variables.

Keywords: spiritual formation, spirituality, resiliency, undergraduate nursing student, Christian education

Dedication

This manuscript is dedicated to my Lord and Savior Jesus Christ, whose grace has guided my life and demonstrated immeasurable love.

To my loving husband, Tim: you are my biggest support and your encouragement has helped me achieve God's purpose for my life. Your love for Christ and dedication to our family has navigated us through the challenges of life.

To my beautiful children, Krystal, Nikki, and Jesse: Thank you for how you filled the hole in my heart from the loss of your brother. I love you dearly.

To my family: Thank you for your love, prayers, support, and encouragement to reach for goals I never dreamed for myself.

In loving memory of Andrew, my son, Ryan, my nephew, Janet, my sister-in-law, and Fannie, my grandmother. Grandma, your spiritual leadership of the family and prayers are dearly missed.

Acknowledgments

Thank you to my dissertation committee. Each of you made this process a truly enjoyable learning experience.

To Dr. Elizabeth Whorley: thank you for your encouragement, support, and friendship. You provided the exact direction that I needed.

To Dr. Melinda Stephens: thank you for your support, encouragement, and opportunity to grow as a colleague.

To my Church Family: thank you for being my prayer partner and community of faith.

Table of Contents

List of Tables

List of Figures

List of Abbreviations

Accreditation Commission for Education in Nursing (ACEN)

American Association of Colleges of Nursing (AACN)

Assessment of Spirituality and Religious Sentiments (ASPIRES)

Bachelor of Science in Nursing (BSN)

Christian Spiritual Formation (CSF)

Commission on the Collegiate Nursing Education (CCNE)

Connor-Davidson Resiliency Scale (CD-RISC)

Council for Christian Colleges & Universities (CCCU)

Middle States Commission on Higher Education (MSCHE)

National League for Nursing Education Accreditation (CNEA)

New England Commission of Higher Education (NECHE)

Northwest Commission on Colleges and Universities (MWCCU)

Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)

Spiritual Transcendence Score (STScore)

CHAPTER ONE: INTRODUCTION

Overview

The ability of nursing students to adapt to stressful circumstances is a focus for nursing educators. Nursing students experience rigorous academic requirements (Aryuwat et al., 2022; Diffley & Duddle, 2022; Lekan et al., 2018; Mayer et al., 2022) and increased stress due to high-stakes exams (Li & Hasson, 2020; Spurr et al., 2021), evolving clinical situations, and fear of failure (Amsrud et al., 2019; Lekan et al., 2018; Mitchell, 2021). New nursing graduates face increased pressure to orient to their roles quickly (Henshall et al., 2020; Hughes et al., 2022; Li & Hasson, 2020). Nursing educators are tasked with improving nursing student resiliency and equipping them to face these challenges (Amsrud et al., 2019; Hughes et al., 2022; Lekan et al., 2018). Chapter One will briefly discuss the importance of undergraduate nursing student resiliency and the potential impact of spiritual formation in Christian education on nursing student resiliency. Included is a discussion of the concepts of spiritual formation, its relation to Christian education, and nursing student resiliency providing an overview of relevant literature and the historical and theoretical background of the topic.

Background

Nursing graduates are expected to transition quickly to diverse care settings and rapidly apply nursing theory to the practice area. The literature demonstrates that nursing students experience stress and adversity within the educational environment (Mayer et al., 2022; McDermott et al., 2020; Lekan et al., 2018; Rios-Risquez et al., 2018), impacting their retention in the nursing profession (Carneiro et al., 2019; Diffley & Duddle, 2022). Due to the rigors of nursing education, many nursing programs are exploring resilience-building curricula and other methods to help increase undergraduate nursing student resiliency (Chow et al., 2020; Cochran et

al., 2020) Facilitating resilience in nursing students and practicing nurses may help address workplace retention (Henshall et al., 2020). Resilience building curriculum and training has helped promote mental wellness. Studies recommend methods to aid personal resiliency (Kunzler et al., 2022; Mitchell, 2021; Stacey & Cook, 2019). Mehrinejad et al. (2015) concluded that students with higher levels of spirituality show greater resiliency. A study by Won et al. (2018) found that religion impacted levels of resiliency in nursing students. Francis (2019) described the relationship between spiritual maturity and resilience. Fenzel's and Richardson's (2022) findings support spirituality as a personal coping resource. These findings may demonstrate why nurse educators need to support spiritual formation in a comprehensive curriculum which may be more beneficial than offering an occasional stress management class (Fenzel & Richardson, 2022; Francis, 2019; Mehrinejad et al., 2015; Won et al., 2018).

There are over 4,300 degree-granting colleges or universities in the United States. Of these, a little over 1,000 consider themselves religiously affiliated (Council for Christian Colleges & Universities [CCCU], 2022). However, a small fraction of higher education institutions under 200 considers themselves Christian (CCCU, 2022). American Association of Colleges of Nursing (AACN, 2022) reports there are over 2,500 nursing schools in the United States. Out of those schools, 950 offer baccalaureate nursing programs. Statistically, the number of faith-based nursing programs is much lower than in non-faith-based nursing schools (AACN, 2022). Still, there are reported benefits to undergraduate nursing students attending faith-based education programs (Goree et al., 2021). Benefits include the student's ability to combine their faith and values with their practice and the integration of faith and learning. In addition, because spirituality and spiritual care are seldom addressed in secular entry nursing programs, Christian education programs report including spiritual care in the curriculum (Burger, 2022) and spiritual

formation leading to higher levels of student spirituality (McRay et al., 2018).

Spiritual formation includes an individual's relationship with God and what they hold sacred and has been a long-standing topic of the church and theological education (Porter et al., 2018; Wilhoit & Howard, 2020). "Spiritual formation is the attitude and posture of learning beyond mere facts that transform perspective, renews the mind, defines character, and is grounded in the heart and soul" (Francis, 2019, p. 502). However, based on the literature review, the concept of spiritual formation in education is not clearly outlined for undergraduate nursing students attending Christian colleges.

A consensus to defining the concept of spiritual formation is a process over time, where the human spirit is formed or given character (Beard, 2017). In the context of Christianity, spiritual formation is a Spirit-driven transformative process that occurs in context with community, utilizes various spiritual practices, and strives to be formed to the characteristics of Christ (Wilhoit & Howard, 2020). Spiritual formation does not occur in occasional attendance of church sermons or bible studies (Beard, 2017; Klink, 2020) but is developed with mentors over time, developing relationships with other believers (Hubing, 2020; McRay et al., 2018; Wilhoit & Howard, 2020). These thinkers also contend that the church is not the only space for spiritual formation. Informal settings within the daily context of Christians' lives are mentorship opportunities. Christian colleges providing curricular and co-curricular activities support spiritual formation within their faith community (McRay et al., 2018).

Evaluating the benefits of a Christian education goes beyond the basic curriculum, biblical courses, and liberal arts requirements. There may be a more significant effect on nursing students' level of spirituality and resiliency who attend a Christian education that focuses on their spiritual formation (transforming thought and perspective through a Christian worldview).

The concept of Christian education is outlined by Holmes (1987), who masterfully describes the construct of the Christian college. The importance of all learning should be in the context of the Creator. There is biblical support for integrating faith in learning and how that learning shapes the student's worldview and ability to manage life (Holmes, 1987; Setran & Wilhoit, 2020).

Christian colleges embracing the concepts of spiritual formation as a way of life in the educational environment can help students apply their spiritual concepts on their own. Faculty creating relational connections between students and the curriculum can emphasize spiritually formative experiences (Setran & Wilhoit, 2020). Steve Garber linked "education not only to the development of a worldview but also to mentors and communities of friendship" (Setran & Wilhoit, 2020, p. 538). Christian education historically encompasses theological foundations, social sciences, and developmental psychology as a framework for the curriculum. However, creating relational connections between teachers, students, and the curriculum can emphasize spiritually formative experiences (Setran & Wilhoit, 2020). The Christian education environment can help students apply their spiritual concepts independently and be guided by mentors (instructors and peers). Christian educators need to cultivate educational and spiritual formation practices that will help students counter false narratives, differing worldviews, and difficult circumstances (Setran & Wilhoit, 2020). Christian education includes basic biblical knowledge, participation in meditation or worship, or integration of faith in the classroom which leads to faculty mentorship with students (Hubing, 2020; McRay et al., 2018; Setran & Wilhoit, 2020; Wilhoit & Howard, 2020).

Historically, spiritual formation was viewed outside Christian education in the early twentieth century. McRay et al. (2018) discuss spiritual formation was viewed as a one-time event that occurred at church revivals or church camps. It was not viewed as discipleship or a

sanctification process. From the 1960s to the 1990s, there was a movement to emphasize spiritual formation supported by the inclusion of social sciences (human growth and development psychology) (McRay et al., 2018). Christian education programs moved to include liberal arts, psychology, and humanities as core curriculum and reduced the amount of emphasis on bible courses (Setran & Wilhoit, 2020). In the 1990s, literature demonstrated a link to the Christian education environment as supportive communities that intertwine education with beliefs and role modeling of behavior (Setran & Wilhoit, 2020). Trends in Christian education called for supporting physical spaces, communal rituals, the use of time, and all aspects of the curriculum to shape students (Hubing, 2020; Setran & Wilhoit, 2020). Most literature discusses Christian education and spiritual formation designated to seminary and theological schools or programs (Beard, 2017; McRay, et al., 2018; Setran & Wilhoit, 2020). Christian education is evaluated in the context of seminaries and pastoral training (Hubing, 2020; Lu, 2021). However, Christian colleges incorporate Christian education principles into all programs and majors.

There needs to be more knowledge about the benefits of Christian education for nursing students. There is little to no research evaluating student outcomes according to the type of education program they attend such as public, private, and faith-based. Hendrix (2020) studied the need for pre-licensure baccalaureate programs in the southeastern United States. This author also found a paucity of research evaluating the differences in nursing outcomes in these education settings (Hendrix, 2020). Milner et al. (2016) examined spiritual care and spiritual assessment in nursing education. These authors discussed the importance of nursing educators, including strategies that promote nursing students' spiritual care and are formative to spiritual development. Astle and Gibson (2017) describe how Christian higher education incorporates Christian values in the curriculum and college community. Integrating faith into the nursing

curriculum is relational and helps students develop the capacity to deal with complex nursing issues (Astle & Gibson, 2017).

The last concept is nursing student resiliency. The theory of resilience is typically described as a process or journey, not only coping with an adverse event but developing a greater ability to deal with future events (Francis, 2019; Morse et al., 2021; Schwalm et al., 2022). Specifically, adverse circumstances include adapting to tragedy, trauma, difficulties, and stressors. Literature also describes resiliency as positive adaptation, mobilizing protective factors, and strengthening over time (Chow et al., 2020; Fenzel & Richardson, 2022; Mitchell, 2021; Won et al., 2018). Resilient individuals have greater flexibility and protect themselves against harmful conditions (Mehrinejad et al., 2015). In a meta-analysis, Schwalm et al. (2022) found factors associated with resilience as "coping ability, self-efficacy, optimism, social support, flexibility, religious and spiritual beliefs, positive emotions, self-esteem, and meaning and purpose in life" (p. 1219). These authors describe spirituality as a process or path to resilience. Won et al. (2018) found that religion impacts levels of resiliency. In most definitions, resilience is the ability to use a significant crisis or difficulty as a growth opportunity and move forward in life with a new perspective (Meybodi & Mohammadi, 2021). Resiliency is strengthened by spirituality and spiritual beliefs. Mehrinejad et al. (2015) show that those whose spiritual beliefs were most vital to them demonstrate higher levels of meaning in life and more patience in managing adverse life events (Mehrinejad et al., 2015).

The original concept of resilience is found in scientific literature in the 1860s. The concept's definitions were brief and formed from the idea of the ability to snap back into place (Morse et al., 2021). In the 1980s, social sciences and psychology started to use the concept of resiliency in the context of childhood development or trauma. Literature during this time frame

was not consistent with definitions or uses. Other terminology was used, such as hardiness and well-being. Later in the late 1990s and early 2000s, concepts of adaption and positive adjustment terms were used. Major studies occurred on resilience from 2002 to 2011 (Morse et al., 2021). However, nursing did not start incorporating these concepts until the early 2000s. The focus on resiliency has increased in nursing and nursing education programs within the last five to 10 years. Exacerbating the nursing student and workforce issues was the coronavirus pandemic in 2020 (Hamadeh et al., 2021). It is believed that nursing education is a formative process itself with the goal of aiding students in managing the adversity of their education by exhibiting confidence and maturity (Lekan et al., 2018).

The acronym of WISDOM developed by Wilhoit and Howard (2020) will serve as the theoretical framework for this study. The beginning of Christian spiritual formation (CSF) is rooted in the Christian foundations of the faith, which are explained with scripture, salvation, and the Spirit. The process of CSF can only begin with an acceptance of the Christian faith and the process of formation guided by the Holy Spirit (Mulholland, 1993; Wilhoit & Howard, 2020; Willard, 1988). Salvation, scripture, and Spirit are the S in the WISDOM framework. WISDOM describes characteristics and behaviors influencing spiritual formation. These include wise planning, intentionality, scripture, salvation and Spirit, discipleship, optimism, and means. Wise planning is described as prayerfully seeking guidance in specific situations. Intentionality is helping others to commit to being different (not worldly). Scripture, salvation, and Spirit are the foundational concepts of the Christian faith. Discipleship is the process of becoming a pupil of and conforming to the likeness of Christ. Optimism is an atmosphere of hope and expectation of change. Means are spiritual practices, Christian community, and relationships (Wilhoit & Howard, 2020). It is clear from the authors that these concepts of spiritual formation are a way of

life for those fully committed to growing in faith.

Wilhoit and Howard (2020) contend that the intentionality of CSF is not merely trying to do better or be better but making plans and engaging in the process of equipping for change. The process includes vision, intention, and means (parts of the WISDOM theoretical framework). These authors contend that vision is a mental picture of what life could be like, the intention is the desire to pursue it, and means are the activities, methods, and life patterns put in place to achieve those desires. When Christians press on through challenging life circumstances, they mature and demonstrate perseverance (Wilhoit & Howard, 2020). Those demonstrating resiliency share common characteristics such as viewing struggles as an opportunity for growth, demonstrating commitment and perseverance, and understanding limits of control and their ability to make choices. Resilient characteristics also include a sense of humor, patience, adaptability, optimism, and faith. Resilient people also engage the support of others, have healthy close attachments, set personal goals, view stress as strengthening, and perceive they can manage through current trials because of successful navigation through previous struggles (Connor & Davidson, 2003; Morse et al., 2021).

Characteristics of resiliency can be viewed within the theoretical framework of CSF WISDOM, including vision, intention, and means. For example, viewing change as an opportunity, setting goals, and exhibiting realistic control over choice can be listed within the vision concept of CSF. Likewise, commitment, deepening intention from past successes, having an action-oriented approach, and tolerating negative affect could be categorized within the intention concept of CSF (Wilhoit & Howard, 2020). Lastly, engaging the support of others, using the strengthening effect of stress, being adaptable to change, and possessing optimism and faith are listed under the means of the CSF WISDOM theoretical framework (Connor &

Davidson, 2003; Wilhoit & Howard, 2020).

Overlapping in the WISDOM theoretical framework is characteristic of optimism. Connor and Davidson (2003) list optimism as a characteristic of resilient people. Optimism for the Christian faith is rooted in the sense that there is a good creation that was impacted by the fall of man (sin) and redeemed or restored through Christ's sacrifice. The optimism of CSF is the reason for hope, and a single negative event does not impact this overall hope or optimism (Wilhoit & Howard, 2020). Connor and Davidson (2003) describe a resiliency trait as tolerance for negative emotions.

A sense of control over the ability to make choices is another characteristic of resiliency listed by Connor and Davidson (2003). Wilhoit and Howard (2020) describe the detriment of learned helplessness. People exhibiting learned helplessness live as though the world is against them, and they do not have a choice in their circumstances. They contend that negativity bias and learned helplessness do not increase CSF, but rather they are in direct conflict with spiritual formation. The authors intend that individuals are to embrace trials, not be passive victims and view them as transformational events. This process trains participants in patience, which is another characteristic of resiliency (Connor & Davidson, 2003).

In summary, nurse educators are tasked with preparing and equipping new graduates to transition to the workforce (Amsrud et al., 2019; Hughes et al., 2022; Lekan et al., 2018). New graduates will need to have strong resiliency to face the demands of the current nursing profession (Henshall et al., 2020; Hughes et al., 2022). Increased spirituality has been connected to increased resiliency in studies in undergraduate students (Caldeira et al., 2016; Fenzel & Richardson, 2022; Mehrinejad et al., 2015). Christian education and colleges support the process of spiritual formation of students (Setran & Wilhoit, 2020) and may increase nursing student

spirituality and build resiliency (Mehrinejad et al., 2015). However, no current studies evaluate the effects of spiritual formation provided by Christian education on undergraduate nursing students' level of resiliency.

Problem Statement

Current literature demonstrates that nursing students must be resilient, adapt to the stressful rigors of education programs and transition into the professional nurse role (Lekan et al., 2018; Mayer et al., 2022). Nursing education programs are exploring a resilience-building curriculum for undergraduate nursing students (Chow et al., 2020; Cochran et al., 2020). Facilitating resilience in nursing students and practicing nurses may help address workplace retention (Henshall et al., 2020). Resilience building curriculum and training has helped promote mental wellness. Studies recommend methods to aid personal resiliency (Kunzler et al., 2022; Mitchell, 2021; Stacey & Cook, 2019). Nursing students need to be resilient, adapt to the stressful rigors of education programs (Aryuwat et al., 2022), and transition into the professional nurse role. Nursing students experience rigorous academic requirements and increased stress due to high-stakes exams and evolving clinical situations (Li & Hasson, 2020; Spurr et al., 2021). Nursing graduates are expected to transition quickly to diverse care settings and rapidly apply nursing theory to the practice area (Henshall et al., 2020; Hughes et al., 2022; Li & Hasson, 2020).

Literature also supports that spirituality is one component of coping and resiliency (Caldeira et al., 2016; Fenzel & Richardson, 2022; Mehrinejad et al., 2015; Schwalm et al., 2022). Christian education programs may cultivate spiritual formation (management of difficult situations) through theological foundations, relationships, and mentorship from spiritually mature faculty, which may not occur in non-faith-based nursing education (Francis, 2019).

However, there is a gap in the literature on the impact of the environment and fostering of spiritual formation on nursing students' resiliency who attend Christian institutions or nursing programs. Studies evaluating the concepts of spiritual formation are based on Christian education and linked to seminary or theological programs. The problem is that there is a lack of research studies focused on evaluating the effect of a Christian college/education setting on nursing students' level of spirituality, and ultimately, their resilience.

Purpose Statement

The purpose of this quantitative comparative study was to examine to what extent differences exist between Christian and non-faith-based pre-licensure baccalaureate nursing education programs for spirituality and resiliency. This cross-sectional comparative study compared two groups of nursing students enrolled in pre-licensure baccalaureate nursing programs at two types of institutions. The first group were nursing students enrolled in a pre-licensure baccalaureate program at a Christian college (X_1) which focuses on spiritual formation. The second group were enrolled at a non-faith-based college or university (X_2) focused on liberal arts. This study compared these two groups of students and their levels of spirituality (Y_1) and resiliency (Y_2).

The independent variable Christian education nursing program (X_1) was defined as a program supporting biblical-based theological Christian tenets, social sciences, and developmental psychology in the curriculum and includes "not only the development of a worldview but also to mentors and communities of friendship" (Setran & Wilhoit, 2020, p. 538). Christian education includes basic biblical knowledge, participation in meditation or worship, or integration of faith in the classroom which leads to faculty mentorship with students (Hubing, 2020; McRay et al., 2018; Setran & Wilhoit, 2020; Wilhoit & Howard, 2020). The non-faith-

based education nursing program (X_2) was defined as a nursing program considered secular or without any faith-based curriculum or mission. The dependent variable spirituality (Y_1) was defined as a "dynamic connection with self, others, nature or God" (Meybodi & Mohammadi, 2021, p. 983). The dependent variable resilience (Y_2) was defined as the ability to use a significant crisis or difficulty as a growth opportunity and move forward in life with a new perspective (Meybodi & Mohammadi, 2021).

Significance of the Study

Nursing graduates are expected to transition quickly to diverse care settings and rapidly apply nursing theory to the practice area. The literature demonstrates that nursing students experience stress and adversity within the educational environment (Mayer et al., 2022; McDermott et al., 2020; Lekan et al., 2018; Rios-Risquez et al., 2018), impacting their retention in the nursing profession (Carneiro et al., 2019; Diffley & Duddle, 2022). Due to the rigors of nursing education, many nursing programs are exploring resilience-building curricula for undergraduate nursing students. Nursing programs are exploring methods to help increase undergraduate nursing student resiliency (Chow et al., 2020; Cochran et al., 2020). Facilitating resilience in nursing students and practicing nurses may help address workplace retention (Henshall et al., 2020). Resilience building curriculum and training has helped promote mental wellness. Studies recommend methods to aid personal resiliency (Kunzler et al., 2022; Mitchell, 2021; Stacey & Cook, 2019). Mehrinejad et al. (2015) concluded that students with higher levels of spirituality show greater resiliency. A study by Won et al. (2018) found that religion impacted levels of resiliency in nursing students. Francis (2019) describes the relationship between spiritual maturity and resilience. Fenzel and Richardson (2022) supports spirituality as a personal coping resource. These findings may demonstrate why nurse educators need to support spiritual

formation in a comprehensive curriculum which may be more beneficial than offering an occasional stress management class (Fenzel & Richardson, 2022; Francis, 2019; Mehrinejad et al., 2015; Won et al., 2018).

There is little knowledge about the benefits of Christian education for nursing students. There needs to be more research evaluating student outcomes according to the type of education program they attend, such as public, private, and faith-based (Hendrix, 2020). It is difficult to find studies conducted on the effect of a Christian education program cultivating spiritual formation on students' levels of spirituality and resiliency. Spiritual formation is "the attitude and posture of learning beyond mere facts that transforms perspective, renews the mind, defines character, and is grounded in the heart and soul" (Francis, 2019, p. 502). Because spirituality and resiliency are integrated, it is important to study an environment that supports more than biblical tenets but includes integration of faith and faculty mentoring.

This study adds a body of knowledge of nursing science that is not currently available. Because the number of Christian colleges providing undergraduate nursing education is much smaller than secular and public institutions (AACU, 2022), the benefits of understanding if components of Christian education and spiritual formation aid in equipping those students for adversity is immeasurable (Hughes et al., 2022). Additionally, results may enlighten the choice of nursing students to include spiritual formation in their nursing education and better serve nurses who feel called to the profession.

Research Questions

RQ1: To what extent does a difference exist between pre-licensure baccalaureate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for spirituality (Y_1) and resilience (Y_2)?

RQ1a: To what extent does a statistically significant difference exist between pre-licensure baccalaureate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for spirituality (Y_1)?

RQ1b: To what extent does a statistically significant difference exist between pre-licensure baccalaureate nursing student who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for resilience (Y_2)?

Definitions

1. *Christian Education* - A program or institution supporting biblical-based theological Christian tenets, social sciences, and developmental psychology in the curriculum and includes "not only the development of a worldview but also to mentors and communities of friendship" (Setran & Wilhoit, 2020, p. 538). Christian education includes basic biblical knowledge, participation in meditation or worship, or integration of faith in the classroom which leads to faculty mentorship with students (Hubing, 2020; McRay et al., 2018; Setran & Wilhoit, 2020; Wilhoit & Howard, 2020).

2. *Non-faith-based* - Any program or institution considered secular or without any faith-based curriculum or mission (Kuh & Gonyea, 2006).

3. *Resiliency* - The ability to use a significant crisis or difficulty as a growth opportunity and move forward in life with a new perspective (Meybodi & Mohammadi, 2021).

4. *Spirituality* - The "dynamic connection with self, others, nature or God" (Meybodi & Mohammadi, 2021, p. 983).

5. *Spiritual Discipline* - An activity that draws believers into a relationship with Christ and other such as biblical knowledge, participation in meditation or worship, and community (Willard, 1988)

6. *Spiritual Formation* - A process over time where the human spirit is formed or given

   character (Beard, 2017). Spiritual formation in the context of Christianity is a Spirit-

   driven transformative process that occurs in context with community, utilizes various

   spiritual disciplines, and strives to be formed to the characteristics of Christ (Hubing,

   2020; Klink, 2020; McRay et al., 2018; Wilhoit & Howard, 2020). Christian spiritual

   formation includes basic biblical knowledge, participation in meditation or worship, or

   integration of faith in the classroom which leads to faculty mentorship with students

   (Hubing, 2020; McRay et al., 2018; Setran & Wilhoit, 2020; Wilhoit & Howard, 2020).

CHAPTER TWO: LITERATURE REVIEW

Overview

Chapter Two is a discussion of the theoretical framework for the study and a review of related literature. The theoretical framework for this study was based on Wilhoit and Howard's (2020) CSF WISDOM, a Christian education framework. The review of related literature includes the concepts of spiritual formation, spiritual disciplines, Christian education, resiliency, its relationship to spirituality, and nursing education.

Theoretical Framework

The theoretical support for this study was Wilhoit and Howard's (2020) CSF theoretical framework of WISDOM and the concepts of spiritual formation, spiritual disciplines, Christian education, resiliency, its relationship to spirituality and nursing education. Prominent thinkers on spiritual formation include Mulholland, Foster, Willard, and Wilhoit (Beard, 2017; Gruenberg & Asumang, 2019). These thinkers distinctly describe its transformative benefits. The concept of spiritual formation through daily spiritual practices forms a believer's ability to face adversity by increasing faith and spirituality (Wilhoit & Howard, 2020). The spiritual formation process moves beyond resiliency or stress management classes. Nursing students attending Christian education programs which foster spiritual formation through spiritual disciplines inherently change their character to manage difficult circumstances.

WISDOM Framework

The WISDOM theoretical framework was developed by Wilhoit and Howard (2020), affiliated with Wheaton College. These authors' areas of expertise are spiritual formation and disciplines. Wilhoit, an emeritus professor at Wheaton College, and Howard have authored *Discovering Lectio Davinia: Bringing Scripture into Ordinary Life* (Wilhoit & Howard, 2012).

Wilhoit also co-authored with Willard, another prominent thinker on spiritual formation the

publication, *Spiritual Formation as If the Church Mattered: Growing in Christ through*

Community (Wilhoit & Willard, 2008). Wilhoit has extensive teaching and key presentations on

the subject. Howard has authored and co-authored on the topic of spiritual formation. The recent

publication includes *A Guide to Christian Spiritual Formation: How Scripture, Spirit,*

Community, and Mission Shape Our Souls (Howard, 2018). The grounds for their WISDOM

framework are rooted in scripture, theology, and best practices in spiritual formation. Wilhoit

and Howard's (2020) purpose for the WISDOM framework was to develop a usable model

originated in the complexities of spiritual formation for others to apply the principles in practice.

The beginning of CSF is rooted in the Christian foundations of the faith, which is

explained with scripture, salvation, and Spirit. The process of CSF can only begin with an

acceptance of the Christian faith and guided by the Holy Spirit (Mulholland, 1993; Wilhoit &

Howard, 2020; Willard, 1988). Salvation, scripture, and Spirit are the S in the WISDOM

framework. WISDOM describes characteristics and behaviors influencing spiritual formation.

These include wise planning, intentionality, scripture, salvation, and Spirit, discipleship,

optimism, and means.

Wise planning is described as prayerfully seeking guidance in specific situations.

Although wise planning is listed first in the WISDOM framework, Wilhoit and Howard (2020)

discuss this component as the practical application of the previous concepts. The authors contend

that unequal or excessive application of components of CSF may lead to an imbalance in

spirituality (Mulholland, 1993; Wilhoit & Howard, 2020). An example of imbalance is reading

scripture. Believers may become pious with scriptural knowledge and place value in the amount

of scripture knowledge and recall. However, they may be unable to reflect and apply scriptural

concepts to change or form their character. Wise planning is a balance of thinking and doing while using contemplative practice (Wilhoit & Howard, 2020).

Intentionality is helping others to commit to being different (not worldly). Wilhoit and Howard (2020) agree with Willard (1988) that practicing spiritual disciplines for spiritual growth and maturity is not an attempt to do better next time with sheer will. The authors describe the process of achieving goals and intention as the desire to achieve goals and seek out means to do so. Like resiliency characteristics, intention in spiritual formation increases with past successes. Spiritual formation is a purposeful and intentional development by committed believers to progress and grow in Christ-like character (Wilhoit & Howard, 2020).

Scripture, salvation, and Spirit are the foundational concepts of the Christian faith and the S portion of WISDOM. Wilhoit and Howard (2020) contend that the basis for CSF and their framework is derived from scripture. Additionally, the Christian viewpoint is that CSF must start with Christ's salvation. Acceptance of Christ is a starting point in which the Holy Spirit starts the process of spiritual maturity (Wilhoit & Howard, 2020). Other major thinkers support this viewpoint on CSF (Lu, 2021; Mulholland, 1993; Willard, 1988).

Discipleship is the process of becoming a pupil of and conforming to the likeness of Christ. Spiritual formation includes discipleship, and the two concepts are intertwined (Tennant, 2005; Wilhoit & Howard, 2020). Wilhoit and Howard (2020) suggest that the intention to follow Christ leads to discipleship and a change in Christian values. This change or forming invades every part of the Christian's life to form their worldview guiding their character. The authors also describe discipleship as community support (Wilhoit & Howard, 2020). Mulholland (1993) contends there is a relationship in the community of God's people, and spiritual formation is to benefit others in the community of believers and non-believers.

Optimism is an atmosphere of hope and expectation of change. Wilhoit and Howard (2020) describe optimism as grounded in the Christian faith, believing salvation through Christ has given believers hope and thankfulness. This faith-based optimism should permeate through difficult life circumstances. The authors contend that this optimism combats negative events and learned helplessness. Their framework is based on scripture and describes optimism as a vital viewpoint that helps believers to press on in difficult situations (Wilhoit & Howard, 2020). The authors support the Christian worldview of optimism and its link to perseverance through scripture. Optimism and hope are key components of resilient character traits (Connor & Davidson, 2003).

Means are spiritual practices (disciplines), Christian community, and relationships (Wilhoit & Howard, 2020). It is clear from the authors that these concepts of spiritual formation are a way of life for those fully committed to growing in faith. The authors related that the concept of means includes "relationships, practices, situations and such through which the Holy Spirit works" (p. 17). Means are practices of spiritual discipline such as reading and reflection on scripture, prayer, enduring trials, and Christian fellowship. Spiritual disciplines are practices that increase the ability of the believer to respond to the world and others in a Christ-like manner (Howard & Wilhoit, 2020).

Wilhoit and Howard (2020) describe the components and outcomes of spiritual formation within the WISDOM framework. The authors describe outcomes such as the ability to mature, persevere through difficult life circumstances, and maintain hope and optimism. These outcomes overlap with resiliency traits and characteristics. For this study which seeks to learn if spiritual formation impacts nursing students' resiliency, it is important to note that Wilhoit and Howard describe resiliency traits as part of Christ-like character. Unfortunately, there needs to be more

studies determining the effect of the process of Christian spiritual formation on a specific

population outside of theological or seminary education. The following section will discuss

related literature and concepts of spiritual formation, spiritual disciplines, Christian education,

resiliency, and its relationship to spirituality and nursing education.

Related Literature

Christian Spiritual Formation

The foundation of the WISDOM CSF theoretical framework starts with understanding

the concept of Christian spiritual formation. Christian spiritual formation starts at salvation but

does not stop at that point. Prominent thinkers on the topic of CSF agree that spiritual formation

is a process of the Holy Spirit (Beard, 2017; Klink, 2020; McRay et al., 2018) using spiritual

disciplines to transform believers into the likeness of Christ for the purpose of God's glory

(Hubing, 2020; Mulholland, 1993; Wilhoit & Howard, 2020; Willard, 1988). Willard (1988)

contends that everyone, not just Christian believers, experiences a process of spiritual formation.

It is a question of what type (Tennant, 2005). In his work *The Spirit of the Disciplines*, Willard

(1988) explains that one's experiences lead to the transformation of the person and their spirit

developing the characteristic of God. Mulholland (1993) agrees with Foster and Willard that

everyone is in the process of spiritual formation because every decision or reaction made shapes

people into the character of Christ or a negative and destructive person in relationships. Christian

spiritual formation is the process of becoming like Christ's character for the sake of others

(Mulholland, 1993). Wilhoit and Howard (2020) contend that the intentionality of CSF is not

merely trying to do better or be better but making plans and engaging in a the process of

equipping for change. When Christians press on through challenging life circumstances, they

mature and demonstrate perseverance or develop Christ-like character (Wilhoit & Howard,

2020). Prominent thinkers on CSF agree that a believer's acceptance of the grace provided by Christ's sacrifice is a transformation of behaviors and responses to be radically different from the world's view (Mulholland, 1993; Tennant, 2005; Wilhoit & Howard, 2020; Willard, 1988). Mulholland (1993) describes this new nature when dealing with adversities and circumstances that disrupt the lives of believers. Christians are not immune to adversity and uncontrollable circumstances such as loss or grief. The ability to experience adversity with hope or optimism is derived from a more profound meaning connected to Christ's sacrifice. Spiritual maturity or formation occurs during the moments when believers exhibit patience in the face of their life experiences (Mulholland, 1993).

Spiritual Disciplines

The definition of a spiritual discipline is an activity that draws believers into a relationship with Christ and others (Willard, 1988). Disciplines connect believers to Christ and develop habits that help them face adversity (Willard, 1988). The use of spiritual disciplines in spiritual formation develops a unity with God in all aspects of believers' lives (Tennant, 2005). Just as daily practices of exercise and a healthy diet build a stronger body that is ready for physical endurance, incorporating daily spiritual practices builds endurance

> when crisis comes we will find we have not only God's grace to stand by us, "but our own nature also". The crisis passes without disaster, and our souls, instead of being devastated, can actually acquire a stronger attitude toward God. (Willard, 1988, p. 118)

Continual practice of spiritual disciplines is only part of the goal. People whose goal is to demonstrate an outward appearance of spiritual life through disciplines do not aim to exist in the fullness of God and develop Christ-like character. The point of spiritual practices is that these activities become nature (Willard, 1988).

Key spiritual disciplines are biblical and spiritual reading, prayer, and reflection (Mulholland, 1993; Willard, 1988). However, Christians are meant to be in the world, interacting with others, not hiding their influence to demonstrate Christ-like character. Holistic spiritual formation includes corporate and social aspects in a believer's life, which are Christian community and relationships (Hubing, 2020; Mulholland, 1993; Setran & Wilhoit, 2020).

Biblical and Spiritual Reading

First and foremost, scripture is the basis for the Christian worldview, in that all scripture is ordained by God and life-breathed by the Holy Spirit. Bavinck (2019) masterfully describes the basis of the Christian worldview and how all knowledge originates from God. Bavinck presents arguments from varying worldviews on religion, science, and education. Believers do not compartmentalize their faith, but all of life outside religious practice is formed and used for God's glory (Bavinck, 2019).

A foundation of the Christian faith is the Word of God inspired by the Holy Spirit to the authors of the bible (Issler, 2012; Maddix, 2018; Mulholland, 1993). Scripture is not only meant to be instructional but also to shape and transform believers into the likeness of Christ (Wilhoit & Howard, 2020; Willard, 1988). Reading scripture is more than information for historical content but is transformative and plays a significant role in the believer's spiritual formation (Mulholland, 1993; Willard, 1988). Spiritual readings move beyond biblical expertise and allow the reader to reflect on applying God's Word to their lives (Issler, 2012; Maddix, 2018; Wilhoit & Howard, 2020). Formative reading of the Holy scripture or *lectio divina* focuses on reflection and guides faith and formation (Maddix, 2018; Mulholland, 1993; Muto, 2012).

Students of God's Word must have an instructional perspective of the scriptures. The instructional perspective helps believers know the history and origin of God and his design for

the believer. This biblical knowledge or instructional learning is the foundation for formational reading with the goal of reflection and transformation. There are distinct differences between informational and formational reading. Informational reading is an analytical review done to master the text, and a primary goal is completion with basic knowledge. Formational reading is viewing the text as an encounter with God and contemplating its meaning (Maddix, 2018; Mulholland, 1993; Muto, 2012; Willard, 1988).

Prayer

Prayer is described as a spiritual discipline of conversing and communicating with God. However, prayer goes beyond a spiritual practice which Willard (1988) discusses prayer as a consistent, ongoing conversation meant to guide and grow spiritual strength and maturity (Palmer, 2020). Prayer is another discipline not meant to be checked off, like a list of items to accomplish. Willard (1988) contends that when believers pray often and see the responses to prayer, it strengthens the Christian's pattern to adopt prayer as a means of transparency and confession. Prayer becomes a method to open ourselves in relationship to Christ and seek who God wants believers to be (Mulholland, 1993). Prayer has two-fold components of praise and intercession. Praise focuses on God's goodness and increases spiritual thanksgiving, which is linked to optimism. Intercessory prayer is asking on behalf of others and should be selfless and seek God's will (Palmer, 2020).

Reflection

Spiritual practices are not about the act of completing the practice. Whether in prayer, formational spiritual reading, community, and relationships, reflection is the process of being vulnerable to reflect on one's being and internalize change (Mulholland, 1993; Wilhoit & Howard, 2020; Willard, 1988). Reflection may occur during times of solitude and silence as well

as within a supportive Christian community which challenges believers to evaluate biblical principles and adverse life circumstances against their own character (Mulholland, 1993; Wilhoit & Howard, 2020; Willard, 1988). Holmes (1987) describes a God-given drive to understand and seek to organize ideas. Humans are reflective in nature and desire to see things as organized and unified. Christian reflection seeks to know how life is unified in God (Holmes, 1987).

Christian Community and Relationships

Wilhoit and Howard (2020) describe how the work of the Holy Spirit is to develop Christ-like character in individuals and communities. These authors contend that CSF is relational and within a supportive community. The benefits of a Christian community include helping others through difficult experiences and supporting each other in prayer (Wilhoit & Howard, 2020). By definition, spiritual formation is a process of transforming believers into the likeness of Christ for the purpose of God's glory (McRay et al., 2018; Mulholland, 1993; Wilhoit & Howard, 2020; Willard, 1988). This definition means for the sake of others because God's will is that others may know Him (Lu, 2021; Mulholland, 1993).

Spirituality is a connection that may occur without a divine origin and is not unique to Christianity. This connection could occur within oneself or externally with nature (Meybodi & Mohammadi, 2021). Unique to Christian spiritual formation is corporate spirituality, which utilizes the meeting of believers to build spiritual strength and maturity (Mulholland, 1993). The concept of community is rooted in scripture. The community of faith is to be used to balance spirituality and maturity in believers by pointing to scriptural truth, confronting sin, and nurturing each other in the wholeness of Christ (Klink, 2020; Mulholland, 1993). The spiritual discipline of community is building deeper relationships with other believers to benefit and promote their growth in Christ. These relationships may happen in worship services, small

groups, and gatherings (Hubing, 2020; Willard, 1988). Wilhoit and Howard (2020) contend that believers are to focus on an authentic, loving community which is the essence and image of Christ.

Evaluating the concepts of CSF and spiritual disciplines leads to the need to understand the design of Christian education. To be clear, not all educational institutions communicating a religious affiliation offer components of spiritual disciplines that aid in student CSF (Holmes, 1987). There are studies evaluating spiritual formation and education but these focus on seminary or theological institutions (Beard, 2017; McRay et al., 2018; Setran & Wilhoit, 2020) as well as pastoral training (Lu, 2021).

Christian Education

This study seeks to determine differences in nursing student outcomes based on the type of education setting they attend. There is a need to define and discuss Christian education and the components impacting student formation and outcomes. The CCCU (2023) describes Christian education as incorporating biblical truth into all academics and integrating faith into all classroom instruction. This integration of faith goes beyond college chapel and permeates all learning (CCCU, 2023).

Arthur Holmes (1987) is a leading thinker on Christian education, and his publication *The Idea of a Christian College* details why Christian education is distinctive from secular education. Students often choose Christian colleges for a secondary reason, such as the environment being less conducive to risky behaviors. However, education should encourage the student to think independently with new skills. Christian education skills include the ability to analyze information and judgment through the lens of the Christian worldview and make an impact on those in the community. The point of a Christian education is not to isolate students in a safe

environment but prepare them to impact worldly influences (Esqueda, 2014; Holmes, 1987; Kim, 2020). Integrating Christian education brings unity and works against the idea that Christianity and education are different paths. Christian education is not about Christians delivering secular education. Instead, academics should be viewed from a foundational Christian viewpoint and challenge students to understand the subject matter from the Christian worldview. These tracks are not parallel but intertwined (Bavinck, 2019; Holmes, 1987). Christian education is built on scriptural foundations with a mission to cultivate Christian scholarship and faculty to instruct and develop students from the Christian worldview (Eckel, 2009).

Another distinction of a Christian college is that it occurs in the undergraduate setting and includes liberal art and preparation for calling and vocation. A Christian college views vocation as more than a career or ministry and believes it permeates all the student is or will do (Holmes, 1987). The secular world seeks to compartmentalize religion as secondary and irrelevant to career or academic thought. A Christian college works against compartmentalization by integrating faith into the college community, including academics, co-curricular activities, and spiritual formation (Esqueda, 2014; Holmes, 1987). The foundations of the Christian college education are based on scriptural theology and guided by the Holy Spirit (Esqueda, 2014). The pursuit of the knowledge of scripture is partnered with the reflection and understanding of God's revelation. Christian learning, known as purposeful learning, should encourage students to seek truth and its unifying purpose for God (Holmes, 1987).

A liberal arts education for college students is meant to expand their thinking and challenge them to evaluate who they are as a being and how they fit into the world, develop critical appraisal skills, and become conscious of societal needs. The point of a Christian liberal arts education is liberal education and to view life as a whole, not separate faith and intellect, and

develop the human person into the fullness of God (Holmes, 1987). Students can view the question of who they are and what the solution is through a central view of scripture and how God relates to his creation (Esqueda, 2014). Ultimately students need to work through the alternative viewpoints of liberal arts and determine the Christian worldview on the matter (Holmes, 1987). In this way, faith is integrated into the learning community.

Kuh and Gonyea (2006) describe the historical context of American higher education and its roots in religious-based institutions. Faith-based colleges number far less than secular colleges. A fraction of the students are practicing their religious beliefs and developing their personal spirituality. Liberal colleges are meant to expose students to deeper meaning through the subject matter. Depending on the institution's environment, it can support or inhibit spiritual growth linked to spiritual and character formation (Kuh & Gonyea, 2006).

Integrations of Faith and Learning

Integration of faith and learning in Christian education is determined to remove the dualism between one's faith and intellectual pursuits. Understanding integration means faith is incorporated within every aspect of one's life and eventually forms their character (Holmes, 1987). Badley (2009) speaks to the concepts of faith-learning integration "incorporation of the one into the other; fusion of the two; seeking correlations between the two; dialogical where conversation is fostered between faith and scholarship" (p. 10). Additionally, one can conduct their intellectual pursuits with the perspective of the Christian viewpoint, integrate their faith with a role model and witness to others, and simply apply biblical principles into lessons (Badley, 2009). This concept seems radical for scholarship that traditionally keeps faith and scholarship separate. Marsden (1997) makes a case for Christian scholarship, which is a uniquely Christian worldview studying all aspects of life. Seeking knowledge is human nature, and

Christians believe this drive is planted by God, the creator. The world, meaning everything in nature, points to the knowledge of God and His truth. Developing wisdom is the unification of knowledge and God's purpose to change believers' character (Bavinck, 2019).

Eckel (2009), in a dissertation evaluating the integration of faith and learning outcomes on two populations, focused on students from a Christian education and students from a secular education. This study supports that the basis for all Christian education is the study of the theological foundations of the Christian faith. Christian educators are tasked with understanding the theological foundations and developing students' ability to reflect on the subject matter from the Christian perspective (Eckel, 2009). Additionally, educators may speak about worldview and the relationship of life, but over time a disconnect may occur between what they say and how they live. Educators must role model their worldview in a way that permeates all of who they are and demonstrate the unity of their faith and their subject matter (Garber, 2007).

Few studies that seek quantitative data on integrated faith and learning outcomes in Christian education (Horner, 2020; Kim, 2020). Most Christian colleges incorporate biblical studies as foundations of Christian theology and integration of faith in the curriculum in all majors (CCCU, 2023). Horner (2020) sought to learn the relationship between biblical studies, academic rigor, and the integration of faith and learning in the classroom. This study found that the best impact on academic outcomes occurred when biblical studies were paired with the integration of faith and learning about the subject matter.

Kim (2020) evaluated three key Christian college student outcomes: integrating faith and learning, critical thinking, and the importance of developing a worldview. Kim evaluated the concepts of faith-learning integration supporting Holmes's approach of positive attitude and called to learning, demonstrating Christian principles within the teachers' and students'

characters. Additionally, the primary goal of faith-learning integration is a development of a life perspective through the lens of Christian beliefs (Kim, 2020). College forms students' perspectives and develops their ability to appraise and reflect critically. Christian college environments can positively impact students' worldview development. Faculty and their teaching methods, student engagement with academics, and spiritual disciplines affect faith-learning integration outcomes (Kim, 2020).

Christian College as Community

The transition to adulthood occurs between the ages of 18 and 25 (Madewell & Ponce-Garcia, 2016). During this age range, adolescents emerging into adults formulate their worldview and concept of self. At this time, emerging adults are learning who they away from their family and determining their own beliefs and faith (Palmer, 2020). The college environment can positively or negatively impact students' development of their worldview (Kim, 2020). The environment and community that develops friendships and mentors relating how the Christian worldview invades everyday life is aiding student spiritual formation (Setran & Wilhoit, 2020).

An important aspect of spiritual formation is the Christian community (Wilhoit & Howard, 2020). Holmes (1987) describes the college's responsibility in providing a community for students to live and grow. Community and activities are what attract students to colleges. Some community components are faculty and student relationships, leadership opportunities, and athletics. Additionally, Christian colleges provide a community of like-minded peers and faculty with Christian values (Holmes, 1987). Community is built when those interacting have common values and interests. The college itself becomes small affinity groups supporting students with common goals with academics and personal pursuits. These community and groups intertwine beliefs and behaviors (Setran & Wilhoit, 2020). Colleges as community are primarily an

academic community with the goal of education and knowledge. The culture of a college is to be about learning. However, at a Christian college, the culture should be about faith and learning (Holmes, 1987).

Garber (2007) describes community as seeing how life is lived and determining what beliefs one will hold. Because of the forming time of emerging adulthood, environment and worldly culture can affect individuals. Community combats negativity and cynacism (Garber, 2007). Students need to see those in the community as real people applying their faith in real world situations (Setran & Wilhoit, 2020). In this way, the college community can aid spiritual formation outside of formal education settings (Beard, 2017; Lu, 2021, McRay et al., 2018).

Christian Nursing Education

Nursing has its roots in Christianity (Milner et al., 2016; O'Brien, 2022; Sanders et al., 2016; Shelly et al., 2021). Before the Christian era, nursing had roots in ancient cultures and was influenced by early cultures such as Egypt, Greece, and Rome. Hebrew culture also influenced nursing because of the public health components of religious law (O'Brien, 2022). While caring for the ill or infirmed occurred in early history, the rise of Christianity grew the concept of centralized nursing care. Christian beliefs called believers to care for the poor and ill. Deacons appointed to help church leadership were tasked with this responsibility. Many times the church became community hospitals without medical providers. Nurses managed the care and comfort of the infirmed (Hargate, 2014; Shelly et al., 2021). Monasteries in the Middle Ages gave rise to hospitals which later were disbanded in the Renaissance and did not allow nuns to interact physically with patients. The Christian church started a reformation movement for nursing in the nineteenth century, which led to faith-based community nursing (O'Brien, 2022; Shelly et al., 2021).

Florence Nightingale's influence on nursing was profound. She viewed nursing as a calling at a young age and influenced others to view nursing as a ministry. Her work in nursing defined the profession as different from the medical profession and expanded the scope of nursing. Her work and grounded theory on what nursing was, shaped modern-day nursing education, including holistic nursing care (O'Brien, 2022; Shelly et al., 2021; Tveit et al., 2015).

The benefits of spirituality and its connection to resiliency will be discussed later in this study. Spirituality and spiritual care of patients is one aspect of a holistic assessment and does not share equal importance to physical or emotional assessments. Nurses who understand their levels of spirituality will recognize the spiritual needs of others (O'Brien, 2022). However, nursing education does not always provide an adequate curriculum to prepare students for assessing spirituality nor support students through spiritual practices (Milner et al., 2016; Sanders et al., 2016; Tveit et al., 2015).

There is little research on literature regarding the outcomes of Christian nursing education (Hendrix, 2020). Christian educators describe the benefits of Christian nursing education in the context of the additional qualities of the Christian education setting. Benefits include shaping value systems and role-modeling of compassionate care and leadership. Additionally, Christian educators remark on aspects of Christian education, such as including biblical theory, viewing nursing as a ministry, and exhibiting Christian character (Goree et al., 2021).

There are scant studies on the benefits of faith integration in nursing education. Hartman (2022) discusses the expectation of integration of faith and learning for faith-based higher education institutions. She describes the connection between spiritual transformation and growth through faith-learning integration and its potential impact on future nurse practitioners. However,

the author found a lack of faith integration in the advanced practice nursing program curriculum. Additionally, even though advanced practice nurses are uniquely situated to incorporate spiritual assessments in their holistic care, only some are adequately prepared (Hartman, 2020).

Nursing schools may be situated within a faith-based or Christian education setting that integrates faith into learning and the classroom. These schools are structured to enhance spiritual formation. However, Astle and Gibson (2017) discuss the challenges of faculty being adequately prepared to integrate faith into learning. Faculty may not have attended Christian education themselves or had training on applying faith integration into their work. In previous work settings, faculty may have been prohibited from integrating faith in the classroom, even though they lived out their faith in all other aspects of their lives (Astle & Gibson, 2017).

Hargate (2014) contends that nursing, at its core, is derived from Christian character and beliefs. The nursing professional code of conduct mirrors many Christian characteristics and moral standards. However, nursing education has moved from those roots into secular higher education. The author writes about the imperative of integrating faith and learning for nursing students to improve the image of modern nursing. Two recommendations are role modeling Christian character and moral concepts, along with the reflection on how Christian principles intertwine in nursing care (Hargate, 2014).

There were three noted studies evaluating faith-based nursing programs (Busteed, 2020; Hendrix, 2020; Malale et al., 2016). The studies differed significantly and did not all study bachelor degree programs or define faith-based as Christian. Malale et al. (2016) evaluated the outcomes of diploma nursing students in Tanzania according to the type of institution, public, private, or faith-based. Busteed (2020) identified the need to evaluate liberal nursing education and faith-based courses in bachelor-level prepared nurses and their connection to caring.

Hendrix (2020) completed a qualitative study evaluating the expansion of pre-licensure baccalaureate nursing programs within faith-based institutions.

The differences in focus of these studies demonstrate a need for more knowledge on nursing outcomes in Christian education. The study by Malale et al. (2016) could not find significant differences in academic outcomes measures, but the fact the students were diploma and not an associate degree or bachelor degree with liberal arts education could be a large limitation. Additionally, how spirituality is defined when evaluating the education settings is important. Busteed (2020) evaluates students' understanding and practicing of caring with concepts of spiritual healing, attitudes, beliefs, and perspectives. However, they do not define these concepts as Christian foundations of faith. This author identifies faith-based courses in curriculum but does not attribute to one type of faith. Spiritual is general,.and concepts are culturally inclusive.

The study by Hendrix (2020) was significantly different in that it evaluated the feasibility of providing additional nursing schools in the Southeastern United States. This study did not attempt to define outcome of a Christian education and the impact on nursing students. Rather, it evaluated settings and limitations to developing new Bachelor of Science in Nursing (BSN) nursing programs. Hendrix suggests private faith-based institutions may be conducive to providing more access to nursing educaiton but did not evaluated benefits to nursing student outcomes. It is clear there is a need to conduct quantitative studies determining the impact of Christian nursing education.

Nursing Student Resiliency

Nursing graduates are expected to transition quickly to diverse care settings and rapidly apply nursing theory to the practice area. The literature demonstrates that nursing students

experience stress and adversity within the educational environment (Lekan et al., 2018; Mayer et al., 2022; McDermott et al., 2020; Rios-Risquez et al., 2018), impacting their retention in the nursing profession (Carneiro et al., 2019; Diffley & Duddle, 2022). Due to the rigors of nursing education, many nursing programs are exploring resilience-building curricula for undergraduate nursing students. Nursing programs are exploring methods to help increase undergraduate nursing student resiliency (Chow et al., 2020; Cochran et al., 2020). Facilitating resilience in nursing students and practicing nurses may help address workplace retention (Henshall et al., 2020). c and training has helped promote mental wellness. Studies recommend methods to aid personal resiliency (Kunzler et al., 2022; Mitchell, 2021; Stacey & Cook, 2019).

Definition of Resiliency

Resolving difficult circumstances is a component of resiliency. The definition of resiliency varies in the literature, and it is noted that there is no one agreed-upon definition of the concept. For the most part, resiliency is looked at as an event in which a person must bounce back and return to baseline or a process by which a person derives the ability and skills to bounce back after adversity (Amsrud et al., 2019; Aryuwat et al., 2022; Banerjee et al., 2019; Francis, 2019). The concept of resilience has been studied by multiple disciplines and involves adaptation or growth after a defining event (Schwalm et al., 2022). Specifically, adverse circumstances include adapting to tragedy, trauma, difficulties, and stressors. Literature also describes resiliency as positive adaptation, mobilizing protective factors, and strengthening over time (Chow et al., 2020; Fenzel & Richardson, 2022; Mitchell, 2021; Won et al., 2018). Resilient individuals have greater flexibility and protect themselves against harmful conditions (Mehrinejad et al., 2015).

Connor and Davidson (2003) developed the Connor-Davidson Resilience Scale (CD-

RISC) and defined concepts and characteristics of resiliency. Their broad definition of resiliency is that it is multifaceted and leads to the ability to cope with adverse events with little disruption. Additionally, the authors describe outcomes of response to disruptive circumstances. These include an opportunity for growth and increased resilience, a return to baseline to get past the disruption, recovering from the event with loss, and the last which is dysfunctional coping with self-destructive behaviors (Connor & Davidson, 2003).

Connor and Davidson (2003) identified characteristics of resilient people through research. The authors recognize there are spiritual components with faith and optimism, finding meaning in challenges and asking God for help. These characteristics include:

- Viewing adversity as an opportunity to grow and strengthening effect of stress

- Commitment and goal setting

- Recognizing limitations and control

- Using support systems and healthy attachments

- Past successes and a realistic sense of choices

- Personal traits- a sense of humor, optimism, action-oriented, patient, and faith

In most definitions, resilience is the ability to use a significant crisis or difficulty as a growth opportunity and move forward in life with a new perspective (Banerjee et al., 2019; Francis, 2019; Meybodi & Mohammadi, 2021; Schwalm et al., 2022).

Connor and Davidson's (2003) characteristics of resiliency can be viewed within the theoretical framework of CSF WISDOM by Wilhoit and Howard (2020). These characteristics are separated into vision, intention, and means. Viewing change as an opportunity, setting goals, and exhibiting realistic control over choice can be listed within the vision concept of CSF. Commitment, deepening intention from past successes, having an action-oriented approach, and

tolerating negative affect could be categorized within the intention concept of CSF. Lastly,

engaging the support of others, using the strengthening effect of stress, being adaptable to

change, and possessing optimism and faith are listed under the means of the CSF WISDOM

theoretical framework (Connor & Davidson, 2003; Wilhoit & Howard, 2020). Christian spiritual

formation is demonstrated outwardly through behaviors or traits, and these traits, although

foundationally Christian, can be seen in the context of resiliency character traits. It is important

to note that these resiliency characteristics are used as a framework for resiliency training and

education discussed below (Connor & Davidson, 2003; Wilhoit & Howard, 2020).

Overlapping in the WISDOM theoretical framework is characteristic of optimism.

Connor and Davidson (2003) list optimism as a characteristic of resilient people. Optimism for

the Christian faith is rooted in the sense that a good creation that was impacted by the fall of man

(sin) and redeemed or restored through Christ's sacrifice. The optimism of CSF is the reason for

hope, and a single negative event does not impact this overall hope or optimism (Wilhoit &

Howard, 2020). Connor and Davidson (2003) describe a resiliency trait as tolerance for negative

emotions, and resilient people exhibit optimism in the face of negative emotions.

Spirituality and Resiliency

In a meta-analysis, Schwalm et al. (2022) found factors associated with resilience as

"coping ability, self-efficacy, optimism, social support, flexibility, religious and spiritual beliefs,

positive emotions, self-esteem, and meaning and purpose in life" (p. 1219). Resiliency is

strengthened by spirituality and spiritual beliefs (Schwalm et al., 2022). A general definition of

spirituality is a connection with self or others. Spirituality is not always a connection with God

and could be with nature (Meybodi & Mohammadi, 2021). Spirituality is its own distinct

resource in resiliency and is present in believers and non-believers (Caldeira et al., 2016). Garner

(2002) describe spirituality as uniquely human, and that connects to someone or something outside of themselves (such as God). The need to connect helps the person in times of adversity. There is a positive correlation between spirituality and resiliency. It shows that those whose spiritual beliefs were most important to them demonstrate higher levels of meaning in life and more patience in managing adverse life events (Mehrinejad et al., 2015).

Schwalm et al. (2022) found the concepts of spirituality and religiosity intertwined with resilience. They found that literature demonstrated that not all resilient people have spirituality and religiosity, but those who possess spirituality and religiosity have higher levels of resilience. Religious practices and community may increase the social support related to resilience. Meaning and connection to optimism traits of resiliency may be related to spirituality (Schwalm et al., 2022). These concepts support the hypothesis that spiritual formation would increase levels of resiliency.

The study evaluating the predictability of student resiliency through their spirituality by Mehrinejad et al. (2015) demonstrates the positive connection between spirituality and resiliency. This study supports the finding of Schwalm et al. (2022) that those higher levels of meaning demonstrated patience when dealing with adversity. Additionally, activities related to beliefs (spiritual disciplines) improved participants' relationship with God. Therefore, this study recommends focusing on students' spiritual needs and providing opportunities for spiritual activities (Schwalm et al., 2022).

Fenzel and Richardson (2022) evaluated the components of the coping process to stress in emerging adults (ages 18 to 30). They describe components of coping resources as spirituality, mindfulness, self-compassion, and resilience. This study discusses spirituality and resilience as different coping strategies. These authors agree with the definition of spirituality as separate

from religiosity. However, they define it further as pursuing the divine and sacredness in life. Spirituality may not include religious involvement but a relationship to something transcendent (Fenzel & Richardson, 2022). This definition leaves out Christian concepts of faith. Spirituality is linked to well-being, satisfaction with life, and positive mental health (Fenzel & Richardson, 2022).

The study by Fenzel and Richardson (2022) agrees with general definitions of resiliency. Their study focuses on evaluating links between resiliency and well-being. This study also supports that resiliency mitigates depressive symptoms and increases positive emotions.

Resiliency in Nursing Education

There is ample research evaluating nursing students' need for resiliency and incorporating resiliency in nursing education (Diffley & Duddle, 2022; Manomenidis et al., 2019; McDermott et al., 2020; Morse et al., 2021). Research on resilience has increased over the last two decades and studies aim to learn factors contributing to increased resilience (Lekan et al., 2018; Li & Hasson, 2020). Resiliency research in nursing education also focuses on outcomes such as academic success and retention in the profession (Hughes et al., 2022; Mayer et al., 2022; Rios-Risquez et al., 2018; Spurr et al., 2021). Amsrud et al. (2019) and Aryuwat et al. (2022) agree that resiliency is a process that can be enhanced. Nursing educators are called to help enhance resiliency by forming strong relationships with their students and supporting students when facing difficult obstacles. In addition, educators can help reframe difficulties by helping students seek learning opportunities (Amsrud et al., 2019; Aryuwat et al., 2022).

The concept of resiliency has been a topic of research since the 1980s. However, resiliency specific to nursing students is a new concept that is poorly defined (Diffley & Duddle, 2022; Morse et al., 2021). Resiliency is a process of development, and cumulative successes

increase resiliency levels and strengths. Resiliency is flourishing despite circumstances (Morse et al., 2021). It is recommended that nursing programs include skills building dealing with stressful circumstances and the use of coping techniques. Coping skills include relaxation techniques such as meditation and breathing, and reflection. Student reflection on their strengths and weaknesses with journaling has proven to be a positive coping skill. Spirituality is also linked to resiliency (Diffley & Duddle, 2022; Morse et al., 2021).

Mayer et al. (2022) support these studies and their findings. Internal factors were found to be optimism, emotional intelligence, social support, humor, and self-care. Faculty should help students reflect on their adversity and reframe it as an opportunity for growth. Additionally, faculty should help provide a psychologically safe environment (Hughes et al., 2022). Students relate that they successfully navigate difficult circumstances when it is safe to make mistakes and learn from them (Mayer et al., 2022).

Manomenidis et al. (2019) found personal characteristics of nurses were linked to increased resiliency. Their definition focuses on the ability of the person to bounce back or deal successfully with adverse conditions. They found that a predictor of resiliency and coping was education level. Those with higher education levels had increased self-control and self-awareness. Coping mechanisms included peer support in the workplace and social support prior to their shift (Manomenidis et al., 2019).

There is a strong link between the level of resilience and nursing student academic success (McDermott et al., 2020; Lekan et al., 2018; Rios-Risquez et al., 2018; Spurr et al., 2021). Nursing students experiencing academic distress have increased mental health incidences. Depression is linked with lower resiliency levels and people with higher resiliency traits tend to mitigate depressive episodes (McDermott et al., 2020; Spurr et al., 2021). Resiliency

characteristics derived from Connor and Davidson (2003) include being committed to goals, seeing stress as an opportunity for change, understanding personal limits, secure and healthy relationships, and optimism. Mediators for resiliency aiding academic success include a supportive campus climate and a sense of belonging to the college community (McDermott et al., 2020). Students who have cumulative successes strengthen their capacity for resilience. There is a need to further research interventions and their effect on resilience and the ultimate impact on academic success (McDermott et al., 2020; Spurr et al., 2021).

It is important to note that age, education level, life experience, and level of spiritual maturity may impact levels of resiliency (Francis, 2019; Manomenidis et al, 2019; Schwalm et al., 2018; Spurr et al., 2021). This proposed study compared the differences of level of spirituality due to potential spiritual formation provided by a Christian education. However, not all students attending Christian colleges are professed believers or they may have newly adopted the Christian faith. Students within the Christian setting may have different levels of spiritual maturity (Francis, 2019). Life experience and exposure to previous adversity builds future resiliency (Schwalm et al., 2018). Additionally, age and education level may impact resiliency (Manomenidis et al., 2019; Spurr et al, 2021). The process of nursing education itself develops levels of resiliency due to the type of coursework and exams. Students who have progressed to higher levels in their coursework should demonstrate higher levels of resiliency.

Resiliency Interventions in Nursing Education

Nursing programs have implemented varying strategies for boosting nursing students and nurse resiliency (Kunzler et al., 2022; Stacey & Cook, 2019). Interventions implemented in nursing included nurses working in psychiatric hospitals (Bernburg et al., 2019), cardiopulmonary, nurse leaders and specialists, specialty areas such as emergency nursing and

operating room, critical care, and research or academic hospitals. Interventions included mental health promotion, relaxation response (Calder Calisi, 2017), mindfulness resiliency training (Lin et al., 2019), authentic connection, community resilience model, and high-intensity chat group (Chesak et al., 2019; Grabbe et al.,2020; Mistretta et al., 2018). The results of these interventions for nurses practicing in the field with high stressors proved somewhat effective short term (Bernburg et al., 2019; Calder Calisi, 2017; Chesak et al., 2019). However, most results showed no improvement over time or significant changes within nine months. While the techniques prove useful immediately following training, long-term incorporation of resiliency measures did not prove fruitful (Grabbe et al.,2020; Kunzler et al., 2022; Lin et al., 2019; Mistretta et al., 2018).

Janzarik et al. (2022) evaluated the literature for resiliency interventions for nurses working in the field and designed an eight-week psychotherapy intervention. This study recognized the limitations of previous research on the long-term effectiveness of work-related resiliency training. This study incorporated flexible interventions. Nurses would most likely utilize long-term, such as cognitive behavioral therapy and psychodynamic psychotherapy (Janzarik et al., 2022). The randomized controlled trial results showed improved wellness and lower mental incident rates up to six months. However, after nine months, the results were not significant and were similar to findings that long-term effects of work-related resiliency building were minimal (Janzarik et al., 2022).

Stacey and Cook (2019) completed a scoping review of resiliency training interventions for practicing nurses and nursing students. Their review supports previous studies that resiliency training is brief and does not support a long-term change to individual student resiliency characteristics. While curriculum interventions with nursing students increased aspects

promoting resiliency, such as increased connectedness and reflection, outcomes did not show

adequate improvement in hardiness or reduced stress levels (Stacey & Cook, 2019).

Gaps in Literature

The study focused on the impact of spiritual formation from Christian education on

nursing student resiliency. There are few studies directly evaluating the outcomes of Christian

nursing programs. Additionally, there is a connection between spirituality and resiliency but a

lack of studies on the nursing program setting, integration of faith in learning and the effect on

resiliency levels in nursing students. The above review demonstrates short term programs and

education series have been implemented for practicing nurses and nursing students, but their

impact was short-lived. There is a need to understand the formational process that occurs during

a four-year undergraduate nursing program and its effect on student spiritual formation and,

ultimately, levels of resiliency.

<div align="center">

Summary

</div>

Nursing graduates are expected to transition quickly to diverse care settings and rapidly

apply nursing theory to the practice area. The literature demonstrates that nursing students

experience stress and adversity within the educational environment (Lekan et al., 2018; Mayer et

al., 2022; McDermott et al., 2020; Rios-Risquez et al., 2018), impacting their retention in the

nursing profession (Carneiro et al., 2019; Diffley & Duddle, 2022). Due to the rigors of nursing

education, many nursing programs are exploring resilience-building curricula for undergraduate

nursing students (Chow et al., 2020; Cochran et al., 2020). Nursing programs are exploring

methods to help increase undergraduate nursing student resiliency (Henshall et al., 2020; Kunzler

et al., 2022; Mitchell, 2021; Stacey & Cook, 2019).

Connor and Davidson (2003) identified characteristics of resilient people through

research. The authors recognize there are spiritual components with faith and optimism, finding meaning in challenges, and asking God for help. These characteristics include viewing adversity as an opportunity to grow and strengthening effect of stress, commitment, and goal setting, recognizing limitations and control, using support systems and healthy attachments, past successes, and a realistic sense of choices. In most definitions, resilience is the ability to use a significant crisis or difficulty as a growth opportunity (Amsrud et al., 2019; Aryuwat et al., 2022) and move forward in life with a new perspective (Banerjee et al., 2019; Francis, 2019; Meybodi & Mohammadi, 2021; Schwalm et al., 2022).

Schwalm et al. (2022) found the concepts of spirituality and religiosity intertwined with resilience. They found that literature demonstrated that not all resilient people have spirituality and religiosity, but those who possess spirituality and religiosity have higher levels of resilience. Religious practices and community may increase the social support related to resilience. Meaning and connection to optimism and resiliency traits may be related to spirituality (Schwalm et al., 2022).

Christian spiritual formation is the process of becoming like Christ's character for the sake of others (Mulholland, 1993). The concept of spiritual formation through daily spiritual practices forms a believer's ability to face adversity by increasing faith and spirituality (Wilhoit & Howard, 2020). The spiritual formation process moves beyond resiliency or stress management classes. Wilhoit and Howard's purpose for the WISDOM theoretical framework was to develop a usable model originated in the complexities of spiritual formation for others to apply the principles in practice. The grounds for their WISDOM theoretical framework are rooted in scripture, theology, and best practices in spiritual formation. The beginning of CSF is rooted in the Christian foundations of the faith (Mulholland, 1993; Wilhoit & Howard, 2020;

Willard, 1988). WISDOM describes characteristics and behaviors influencing spiritual formation. These include wise planning, intentionality, scripture, salvation, and Spirit, discipleship, optimism, and means.

The point of a Christian liberal arts education is liberal education and to view life as a whole, not separate faith and intellect, and develop the human person into the fullness of God (Holmes, 1987). Students can view the question of who they are and what the solution is through a central view of scripture and how God relates to his creation (Esqueda, 2014). Ultimately students need to work through the alternative viewpoints of liberal arts and determine the Christian worldview on the matter (Holmes, 1987). In this way, faith is integrated into the learning community.

Nursing students attending Christian education programs which foster spiritual formation through spiritual disciplines inherently change their character to manage difficult circumstances. There is a connection between spirituality and resiliency but a lack of study on the nursing program setting, integration of faith in learning, and the effect on resiliency levels in nursing students. More knowledge is needed regarding the outcomes of Christian nursing education (Hendrix, 2020). Short-term programs and education series have been implemented for practicing nurses and nursing students, but their impact was short-lived. There is a need to investigate the formational process that occurs during a four-year undergraduate nursing program in Christian education and its effect on student spiritual formation and, ultimately, levels of resiliency.

CHAPTER THREE: METHODS

Overview

The purpose of this quantitative comparative study was to examine to what extent differences exist between Christian and non-faith-based pre-licensure baccalaureate nursing education programs for spirituality and resiliency. Chapter Three discusses the study's design and describe the setting, participants, data collection methods and instruments, and data analysis procedures.

Design

This study was a quantitative descriptive, cross-sectional, comparative study utilizing survey data obtained from two groups of pre-licensure baccalaureate nursing students and compared their respective levels of spirituality and resiliency. The study compared the differences between two types of existing nursing education programs located in the eastern United States in the academic year of 2023 to 2024. One group was from Christian nursing education programs (X_1), and the second group was from non-faith-based nursing education programs (X_2). A comparative study design was desirable because this study did not manipulate the independent variable (the two groups of students were already formed) and compared the effect of the naturally occurring education settings on the groups' levels of spirituality and resiliency (Gall et al., 2007). Comparative studies cannot infer causality but may determine the magnitude of difference between the two groups (Warner, 2013). Although other studies evaluating the relationship between spirituality utilized correlational study design, these studies determined the relationship between the characteristics of spirituality and resiliency and not between groups of students (Banerjee et al., 2019; Chiang et al., 2021).

The independent variable Christian education nursing program (X_1) was defined as a

program or institution supporting biblical-based theological Christian tenets, social sciences, and developmental psychology in the curriculum and includes "not only the development of a worldview but also to mentors and communities of friendship" (Setran & Wilhoit, 2020, p. 538). Christian education includes basic biblical knowledge, participation in meditation or worship, or integration of faith in the classroom (Hubing, 2020; McRay et al., 2018; Wilhoit & Howard, 2020) which leads to faculty mentorship with students (Setran & Wilhoit, 2020). The non-faith-based education nursing program (X_2) was defined as a nursing program considered secular or without any faith-based curriculum or mission. The dependent variable spirituality (Y_1) was defined as a "dynamic connection with self, others, nature or God" (Meybodi & Mohammadi, 2021, p. 983). The dependent variable resilience (Y_2) was defined as the ability to use a significant crisis or difficulty as a growth opportunity and move forward in life with a new perspective (Meybodi & Mohammadi, 2021).

Research Questions

RQ1: To what extent does a difference exist between pre-licensure baccalaureate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for spirituality (Y_1) and resilience (Y_2)?

RQ1a: To what extent does a statistically significant difference exist between pre-licensure baccalaureate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for spirituality (Y_1)?

RQ1b: To what extent does a statistically significant difference exist between pre-licensure baccalaureate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for resilience (Y_2)?

Hypotheses

The null hypotheses for this study are:

$H_0$1a: No statistically significant difference exists between pre-licensure baccalaureate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for spirituality (Y_1).

$H_0$1b: No statistically significant difference exists between pre-licensure baccalaureate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for resilience (Y_2).

Participants and Setting

Population

This study aimed to learn the differences between Christian and non-faith-based pre-licensure baccalaureate nursing programs by evaluating if types of nursing education impacts nursing student spirituality and secondarily, resiliency. A comparative research study design seeks to compare and contrast two distinct naturally occurring groups. Comparative groups are often selected by their level of difference to evaluate two distinct groups and identify significant differences (Gall et al., 2007). This comparative study design sample was a non-probability convenience sample from two types of undergraduate pre-licensure baccalaureate nursing (BSN) education programs and sought to learn the differences, if any, in the levels of spirituality and resiliency between these two distinct groups of nursing students.

The target population in this study was pre-licensure baccalaureate nursing students in the United States. Pre-licensure BSN programs were selected that were regionally accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and nationally nursing accredited through the Commission on Collegiate Nursing Education (CCNE). The first comparative group was selected from Christian education BSN programs with

SACSCOC and CCNE accreditation. The second comparative group was selected from non-faith-based BSN nursing education programs with SACSCOC and CCNE accreditation.

Schools of Nursing are accredited with national nursing accreditation and regional college/university accreditation agencies. Regional college and university accrediting agencies include the Middle States Commission on Higher Education (MSCHE), the New England Commission of Higher Education (NECHE), the Northwest Commission on Colleges and Universities (NWCCU), and the (Council for Higher Education Accreditation, 2022). Additionally, schools of nursing are accredited by agencies such as the CCNE, the Accreditation Commission for Education in Nursing (ACEN), and the National League for Nursing Commission for Nursing Education Accreditation (CNEA) (CCNE, 2023).

A search was conducted for the states included in the SACSCOC accreditation region, which lies in the southern states of the United States (SACSCOC, 2023). Three states selected in the southern region included a cross-reference conducted for colleges and universities with CCNE-accredited baccalaureate programs in the selected states (CCNE, 2023). Cross references of SACSCOC- and CCNE-accredited colleges in these states yielded 59 nursing schools. In those states, the baccalaureate schools of nursing were categorized as non-faith-based or Christian.

A Christian education nursing program was defined as a program supporting biblical-based theological Christian tenets, social sciences, and developmental psychology in the curriculum and includes "not only the development of a worldview but also to mentors and communities of friendship" (Setran & Wilhoit, 2020, p. 538). Christian education includes basic biblical knowledge, participation in meditation or worship, or integration of faith in the classroom (Hubing, 2020; McRay et al., 2018; Wilhoit & Howard, 2020) which leads to faculty mentorship with students (Setran & Wilhoit, 2020). Further analysis was completed of the school

mission to determine the type of faith-based or non-faith-based mission of the institution. The evaluation for Christian spiritual formation constructs was conducted because some schools identify as faith-based because of their past affiliation with a faith denomination. However, they do not include essential components of the Christian spiritual formation such as basic biblical knowledge, participation in meditation or worship, or integration of faith in the classroom (Setran & Wilhoit, 2020; Wilhoit & Howard, 2020). If faith-denomination affiliation only schools were selected in the sample, this might elicit similar results as the non-faith-based institutions; thus, they were excluded. Because online registered nurse (RN) to bachelor of science in nursing (BSN) programs may not allow for the college environment of spiritual formation, only in-person pre-licensure baccalaureate programs were included, and online BSN programs were excluded from the study. The potential participants were selected from pre-licensure baccalaureate nursing students who agreed to participate in the study regardless of the status of their profession of faith.

The participant selection included students from Christian and non-faith-based nursing programs accredited by SACSCOC and CCNE in three southeastern states. Non-faith-based nursing programs were identified and selected according to their lack of spiritual concept requirements and identified as liberal arts-based. There were 31 non-faith-based pre-licensure baccalaureate nursing programs selected because of no spiritual requirements in their curriculum, the size of the school was considered medium size, and the number of nursing students would likely yield the needed sample size.

Analysis of schools proclaiming they were faith-based were further evaluated for their Christian school mission, including biblical studies, chapel or worship requirements, and integration of faith in the classroom. Five Christian nursing programs were selected according to

the Christian education constructs, the size of the institution, and the number of nursing students that would likely yield the needed sample size. Five Christian and 38 non-faith-based schools were identified. These nursing schools were contacted to determine their willingness to participate in this study (see Appendix E). As a result, two Christian colleges and two non-faith-based gave agreement to participate and forwarded surveys to their nursing students after institutional consent and the Institution Review Board (IRB) process was completed (see Table 1).

Table 1

Population Setting Comparative Group

University	State	Christian or Non-Faith-based
University A	Virginia	Christian
University B	North Carolina	Non-Faith-based
University C	North Carolina	Christian
University D	North Carolina	Non-faith-based

Sample Size

A power analysis for sample size was conducted using G*Power Analysis software. An A priori analysis was conducted for t-tests, evaluating the difference between two independent means (Faul et al., 2007; Faul et al., 2009). The inputs were a one-tailed test with effect size $d = .5$. A one-tailed test was chosen for this study because the hypotheses analyze differences between the two comparative groups and do not indicate direction. The alpha error probability was .05 and the Power (1-β err prob) was .80. The input included an allocation ratio of N2/Ni of 1. See Table 2. The output calculated critical t of 1.6602343 with degrees of freedom (*df*) of 100. The analysis calculated sample size for both comparative groups as minimum of 51 and a total

sample size minimum of 102 for actual power of 0.8058986 (see Table 2).

Table 2

G*Power Sample Analysis (Faul et al., 2007)

[1] – Sunday, April 16, 2023 – 15:44:11		
t tests – Means: Difference between two independent means (two groups)		
Analysis:	A priori: Compute required sample size	
Input:	Tail(s)	= One
	Effect size d	= .5
	α err prob	= .05
	Power (1-β err prob)	= .80
	Allocation ratio N2/N1	= 1
Output:	Noncentrality parameter δ	= 2.5248762
	Critical *t*	= 1.6602343
	df	= 100
	Sample size group 1	= 51
	Sample size group 2	= 51
	Total sample size	= 102
	Actual power	= 0.8058986

According to Fulton (2018), the average survey response rate is a slightly over 30%. The study design collection method is self-report surveys, meaning the number recruited to participate in the study was over 300 nursing students. Therefore, if the response rate is about 30%, the sampling strategy would yield the required sample size for adequate statistical analysis. The expected small size was 51 per comparative group.

The sample size for the study was $N = 85$ with Christian nursing programs $n = 53$, and $n = 32$ for the non-faith-based nursing programs. The Christian group met the minimum expected sample size. However, there was an unequal sample size because the number of participants below the expected minumum sample for the non-faith-based. Participant recruitment occurred between the months of August and November of 2023 at the four participating nursing programs. Participants from the Christian nursing programs continued to complete surveys until the minimum sample size was met. However, the non-faith-based participant survey responses plateaued in October even after numerous requests to complete the survey exhausting the participant recruitment.

There were 124 participants that accessed the survey through the electronic link in Qualtrics®. Of the 124 participants that accessed the survey, all 124 stated they were over the age of 18. Out of the 124 participants, 104 agreed to consent to participate in the study. Therefore, 20 participants were excluded due to lack of consent. Although participants may have agreed to consent, only participants who completed both sections of the survey and scored the Spiritual Transcendence and Resiliency scales were included. Participants were excluded if they did not complete any of the survey, or if they only partially answered one or more sections. In total, 85 participants completed the survey and were included in the sample $N = 85$. Participants were separated by their education setting Christian education or non-faith-based by their survey link. Out of the $N = 85$, the Christian education group included 53 participants $n = 53$ and the non-faith-based group included 32 participants $n = 32$.

The sample size was lower than the expected size from the initial power analysis which calculated the N for a medium effect size with a statistical power of .80 and at the .05 alpha level (Faul et al., 2007). According to Lakens (2013), a small effect size for Cohen's d or Hedges g

correction is 0.2 for small, 0.5 for medium, and 0.8 for large effect. The actual Hedge's *g* effect sizes for this study's hypotheses were small (*g* = -.103) for the STScore and small to medium (*g* = -.393) for the CD-RISC score. The implication in data analysis for the lower sample and effect sizes is lower power to detect a difference between the comparison groups (Warner, 2013). Sample size inequality and variance was addressed in the data analysis.

Participant demographics consisted of age, year of study, religious affiliation, and religiosity score. The list of religious affiliations was derived from the Assessment of Spirituality and Religious Sentiments (ASPIRES) instrument (Piedmont, 2020). Mean age group for participants in both groups was 20-21 years old. Students reporting they were in year one of study were 10 in Christian programs and five in non-faith-based. Year two students were 10 and three respectively. The number of students reporting in year three and four were higher in both groups. Year three reported 17 in the Christian group and 10 in the non-faith-based. Year four reported 16 and 14 for Christian programs and non-faith-based.

Participants self-reported their religious affiliation which were derived from the ASPIRES tool (Piedmont, 2020). Christian education participants reported three main religious groups, Baptist (33), Presbyterian (3), other Christian (16), and agnostic/atheist (1). Non-faith-based education participants reported more diversity with Catholic (2), Methodist (1), Baptist (9), Presbyterian (1), other Christian (8), Muslim (1), agnostic/atheist (8), and other faith tradition (2). Group Religiosity scores were derived from the participant survey utilizing the ASPIRES Religiosity scale. This scale measures importance of religious activities and frequency of participation (Piedmont, 2020). The concept of Religiosity is a scale of involvement such as reading religious material, prayer, and involvement in religious practices of a specific faith group. Participants also self-reported the level of importance of their religious beliefs. The mean

score for Religiosity was 41 for Christian nursing education programs and 36 for non-faith-based

nursing education programs (see Table 3).

Table 3

Sample Demographics

Sample Demographic Comparative Groups	Christian Nursing Education	Non-faith-based Nursing Education
Sample Total *n*	53	32
Age *(mean)*	20-21	20-21
Year of Study *n*		
Year 1(New Freshman)	10	5
Year 2(Sophomore)	10	3
Year 3(Junior)	17	10
Year 4(Senior)	16	14
Religious Affiliation *n*		
Catholic		2
Lutheran		
Methodist		1
Episcopal		
Unitarian		
Baptist	33	9
Presbyterian	3	1
Mormon		
Other Christian	16	8
Jewish		
Muslim		1
Hindu		
Buddhist		
Atheist/Agnostic	1	8
Other Faith Tradition		2
Religiosity Score *(Mean)*	41	36

Instrumentation

The WISDOM theoretical framework of spiritual formation supported the right fit for the

instruments chosen for this study. The data collection occurred through an electronic survey

developed in Qualtrics® consisting of items from two self-report instruments. The instruments

included the Assessment of Spirituality and Religious Sentiments (ASPIRES) and the Connor-

Davidson Resiliency Scale (CD-RISC).

ASPIRES

The first instrument included in the participant survey was the Assessment of Spirituality and Religious Sentiments (ASPIRES) long form (Piedmont, 2010). Due to copyright, the authors do not permit inclusion of a copy of the ASPIRES form in the dissertation. See Appendix A for permission to use the instrument and a link to the ASPIRES website. The purpose of this survey instrument is to measure individuals' spirituality and religiosity across a wide range of faith. The scale intended to develop a way to measure the psychological component of spirituality. The instrument was available in several forms: self-reporting, observer rating, long and short forms. In addition, the instrument included an interpretive manual and scoring software, detailed printouts, and age and gender-normed T-scores for all scales (Piedmont, 2020). The instrument was available in different language translations and was developed for a seventh-grade reading level. The ASPIRES was used in several recent studies (e.g., Le et al., 2019; Fox & Piedmont, 2020; Piedmont et al., 2021). Piedmont et al. (2021) used the ASPIRES tool to assess spirituality in a marginalized population of the homeless and residing in rescue missions. The researcher sought to determine spirituality and spiritual needs of those dealing with chronic external stressors. Le et al. (2019) assessed psychospiritual distress in middle-aged Vietnamese born Americans using the ASPIRES instrument. Additionally, Fox and Piedmont (2020) evaluted the link between religious crisis and psychological distress in an attempt to determine if religious crisis was a predictor of distress.

The ASPIRES self-report long form consisted of two sections (Spiritual Transcendence Scale [STS] and Religious Sentiments Scale [RSS]) with a total of 35 items. The STS consisted of 23 items with three subscales and the RSS consists of 12 items and two subscales. Subscales for the STS section were derived from designated items from the total 23 items and are scored

separately. This study analyzed spirituality through the STS section (23 items) of the ASPIRES

using the total scale score which has an alpha reliability of .93. The subscales of the STS will not

be analyzed. The STS was reported as STScore.

The RSS section of the APSIRES consists of 12 items with two subscales. Items 1-8

makeup the Religiosity scale and items 9-12 make up the Religious Crisis Scale. The first eight

questions gauge the person's intentions with religious activities. The Religiosity Scale has a

Cronbach's alpha reliability score of .89 and can be analyzed separately. See Table 4. Items 9-12

of the RSS were included in the participant survey. The total number of items of ASPIRES

section of the participant survey was 35 items. Differences in Religiosity scores were included in

the comparative group demographics (see Table 4).

Table 4

ASPIRES Instrument Alpha Reliabilities Self Report Long-form

Scale	α
Spiritual Transcendence Scale (STScore)	.93
Religious Sentiments Scale (Measured as Religiosity)	.89

The ASPIRES was scored using the instructions in the instrument manual by the

researcher. All three sections of the instrument were included in the participant survey; however,

the two scores reported were Religiosity and Spiritual Transcendence. There were 13 positively

scored items and 10 negatively scored items. The responses were on a five-point Likert scale of

1-5, from strongly agree to strongly disagree. Positively scored items were scored *strongly agree*

= 5 points to *strongly disagree* = 1 point. Reverse scored items were *strongly disagree* = 5, to

strongly agree = 1 point. All 23 item scores were added together for a total. The scoring manual

included an STS total average score by age and gender (Piedmont, 2020). The STS total point

range was 23 to 115. Higher scores mean higher transcendence and purpose in life to live with

value and meaning. Lower scores mean more concern with immediate daily living (Piedmont,

2020).

The Religiosity subscale consisted of items 1-8. The first three items were related to

spiritual disciplines, reading scripture, reading religious materials, and prayer. These items were

scaled on the frequency of occurrence from never to nearly every week. Items 4 through 8 relate

spirituality to religious sentiments including, attending religious services, the extent of a close

personal relationship with God, the extent of feeling union with God, the level of importance of

religious beliefs, and increasing or decreasing levels of religious involvement (Piedmont, 2020).

When scoring the Religiosity section of the ASPIRES, items 1 through 3 were scored on

seven answers. Never = 1, about once or twice a year = 2, several times a year = 3, about once a

month = 4, 2 to 3 times a year = 5, nearly every week = 6, and several times a week = 7. Items 4

and 6 were scored on a five-point scale of never = 1, rarely = 2, occasionally = 3, often = 4, and

quite often = 5. Item five was scored not at all = 1, slight = 2, moderate = 3, strong = 4, and very

strong = 5. Item 7 was scored on a six-point scale with extremely important = 6, very important

= 5, fairly important = 4, somewhat important = 3, fairly unimportant = 2, and not at all

important = 1. Item 8 was scored on a sliding scale of seven, where the participant rates range

from increased, stayed the same, and decreased with increased = 7 and decreased = 1 (Piedmont,

2020).

The range of scores for the religiosity subscale of the RSS is 8-49 points. Participants

scoring average on the Religiosity scale show, on average, they attend services and read religious

material. Higher scores mean they participate frequently in religious practices and spend above

average time with their religious activities in their faith groups. Lower scores mean the

participant may not be involved in religious activities and may interact personally. Lower scores

can also mean an aversion to religiousness and do not find value in religious activities

(Piedmont, 2020).

The ASPIRES was used in several recent studies (e.g., Fox & Piedmont, 2020; Le et al.,

2019; Piedmont et al., 2021) and used in areas of psychology, religion, and spirituality, as well as

clinical settings (Piedmont, 2020). The instrument was developed over 11 years, refined, and has

exhaustive reviews, making it strong in its reliability, validity, and the right fit for this study. The

ASPIRES section of the participant survey consisted of a total 35 items. Accounting for less than

a minute per item, this portion was completed in about 14-16 minutes and included demographic

information (Piedmont, 2010). The ASPIRES instrument supported five out of six concepts in

the spiritual formation WISDOM framework (Wilhoit & Howard, 2020). Permission was granted

to use the instrument. The authors requested the instrument not be shared in the published

dissertation (see Appendix A).

Evaluation of this study's reliability statistics for the STS demonstrated a lower

Cronbach's alpha when compared with the ASPIRES authors' results (Piedmont, 2020). While

results over .70 are acceptable, scores of .80 and up are desired (Warner, 2013). Unequal sample

sizes and unequal variance between the participating groups may have impacted the total

Cronbach's alpha score for the combined STS total for this study. According to Piedmont (2020),

the ASPIRES STS tested reliability score is .93. The reliability statistics for this study's STScore

shows .74 for the total sample $N = 85$, .68 for the Christian education group $n = 53$, and .80 for

the non-faith-based education group $n = 32$. The results of the reliability for the total sampled

were acceptable at .74. However, the Christian education group demonstrated a reliability score

less than .70 in addition to lower reliability when compared to the non-faith-based group (see

Table 5).

Table 5

Reliability Statistics STScore

STScore	Cronbach's Alpha	N of Items
ASPIRES STS	.93	23
Total Sample (*N* = 85)	.74	23
Christian (*n* = 53)	.68	23
Non-faith-based (*n* = 32)	.80	23

CD-RISC

The Connor- Davidson Resiliency Scale (CD-RISC) was developed through the authors' work with post-traumatic stress disorder (PTSD) and the treatment of stress and anxiety (Connor & Davidson, 2003). The concept of resiliency was relatively unmeasured, and the new measurement scale assessed the resiliency levels of a broad variety of patients. The purpose of the instrument was to provide a self-rated assessment that measures resiliency to determine a clinical treatment plan. In addition, the instrument included an interpretive manual with scoring. The instrument was available in different language translations and developed for a fifth-grade reading level. The CD-RISC original instrument was a 25-item self-rating. There were two abbreviated tools, a CD-RISC 10 and CD-RISC 2 item construct (Connor & Davidson, 2003; Davidson JRT, 2022).

The scale was developed using constructs from various sources in the work of hardiness, control, commitment, and a positive view of change. Additionally, the instrument used some constructs of goal orientation, problem-solving, adaptability, humor in the face of stress, and the use of previous experiences as sources of success. Lastly, optimism, hope, spirituality, and faith

were incorporated. In all, 17 constructs were included as characteristics of resilient people.

- View change or stress as a challenge or opportunity

- Commitment

- Recognition of limits to control

- Engaging the support of others

- Secure attachments

- Setting personal goals

- Self-efficacy

- Strengthening effect of stress

- Past successes

- Realistic sense of having control

- Having a sense of humor in the face of challenge

- Action-oriented

- Patience

- Tolerance of negative circumstances

- Adaptable

- Optimistic

- Has faith or belief outside of oneself

The characteristics of resilient people were incorporated into the self-rated scale for a total of 25 items (Connor & Davidson, 2003). When administering the scale in one study, participants were asked to rate how they percieved their feelings within the last month of time. When taking less than a minute to complete each of the 25 items, the scale took approximately 10-12 minutes (Davidson JRT, 2022).

The CD-RISC resiliency scale was included in the participant survey in its entirety. The CD-RISC section was scored using the instructions in the instrument manual by the researcher. Scoring of the 25 items occured on a five-point scoring range. Not true at all = 0 points, rarely true = 1 point, sometimes true = 2 points, often true =3 points, and true nearly all the time = 4 points. The total score ranged from 0 to 100. A higher score meant the participant has a higher level of resiliency (Connor & Davidson, 2003; Davidson JRT, 2022). Items 5, 10, 11, 12, 22, 23, and 24 measure hardiness. Items 2, 7, 13, 15, and 18 measure coping. Items 1, 4, and 8 measure adaptability and flexibility. Items 3, 9, 20, and 21 measure meaningfulness. Items 6 and 16 measure optimism. Items 14 and 19 measure regulation of emotion, and items 17 and 25 measure self-efficacy. Scores for the CD-RISC were interpreted from a group of the general population. Average scores for the general population were ranked into four quartiles. The lowest scores range from 0-73, the second lowest range from 74-82, the third quartile range from 83-90, and the highest scores from 91-100 (Davidson JRT, 2022).

Testing for internal consistency demonstrated a score for the total 25-item scale of a Cronbach's α = .89 with a general population. The scale was subjected to test and retest reliability, and there was little to no change between the two groups. When tested against other psychological constructs such as hardiness, perceived stress, vulnerability, disability, and social support, higher levels of resiliency correlated with higher levels of hardiness, less perceived stress, less perceived vulnerability stress, less disability, and higher social support (Connor & Davidson, 2003).

The CD-RISC instrument was used in various populations and clinical settings. The CD-RISC was used in several recent studies (e.g., Garcia-Izquierdo et al., 2018; He et al., 2018; Rios-Risquez et al., 2018). Garcia-Izquierdo et al. (2018) and Rios-Risquez et al. (2018) both

utilized the CD-RISC to assess resiliency levels and levels of academic burnout for nursing students. He et al. (2018) measured psychological well-being among nursing students and measured their resiliency with the CD-RISC instrument. Schwalm et al. (2022) conducted a meta-analysis of resiliency and its relationship to spirituality and many of the studies reviewed utilized the CD-RISC tool. According to Davidson JRT (2022), studies have demonstrated a strong link between spirituality and levels of resiliency. This finding demonstrated the strength of the use of the CD-RISC along with the ASPIRES in this study. The CD-RISC instrument supported four out of six concepts in the spiritual formation WISDOM framework (Wilhoit & Howard, 2020). Permission was granted to use the instrument. The authors requested the instrument not be shared in this dissertation (see Appendix B).

Evaluation of this study's reliability statistics for resiliency with the CD-RISC instrument demonstrated the total sample $N = 85$, was equal to the reliability score of the instrument's Cronbach's alpha at .89 (Connor & Davidson, 2003). The Christian education group $n = 53$ was just slightly lower at .88. The non-faith-based education group $n = 32$ demonstrated slightly higher reliability with the instrument at .90 (see Table 6).

Table 6

Reliability Statistics CD-RISC Score

CD-RISC Score	Cronbach's Alpha	N of Items
CD-RISC	.89	25
Total Sample ($N = 85$)	.89	25
Christian ($n = 53$)	.88	25
Non-faith-based ($n = 32$)	.90	25

The ASPIRES and CD-RISC scales were incorporated into one participant survey for this

study and administered as an electronic survey through Qualtrics®. In addition to demographic items, there were a total of 60 items and estimated to take no more than 24-28 minutes to complete. The primary investigator scored the ASPIRES and CD-RISC. No rater training was required due to the survey was a self-report.

Procedures

Before obtaining any participant data, informal participation was requested from the Deans of Nursing from select nursing programs according to the sampling methodology. This was done as a courtesy and to assess potential number participants. Preliminary participation was sought to determine willingness to forward an electronic survey link to existing pre-licensure bachelor's degree nursing students. Once preliminary participation was obtained (see Appendix E) formal permission was obtained according to respective IRB requirements (see Appendix D).

This study involved human participants and was published. IRB approval was required (Gall et al., 2007). All participants signed informed consent to participate in the study and were able to withdraw from participation at any time. Although risks were minimal to participants because there was no planned intervention, there could have been psychological risks when completing a self-report survey regarding spirituality and coping with adverse circumstances. Participants were informed of who will have access to the data. All risks were minimized, and the delivery of the instruments were electronic, increasing confidentiality in the study (Gall et al., 2007). There was no contact between the participants and the researcher. No incentives were offered, and participation was voluntary. The following procedures guided the study:

1. A search for dual accredited pre-licensure baccalaureate nursing education programs from SACSCOC and CCNE in three southeastern states resulted in four participating nursing programs.

2. Collection of data started in August and ended in November of 2023.

3. Inclusion criteria included pre-licensure baccalaureate nursing students, over the age of 18, and attended nursing classes in-person. Only nursing students over 18 were selected as participants to remove the potential vulnerability of those who were considered children.

4. Exclusion criteria include nursing students who are previously licensed and enrolled in baccalaureate studies (RN to BSN), nursing students attending online courses, and early college students. Early college students are high school age students (under the age of 18) and enrolled in nursing education programs and excluded from the study.

5. Following all approvals for the study, items from the ASPIRES and CD-RISC instruments were entered into Qualtrics® to create one electronic survey.

6. In addition to the two instruments, the survey included basic demographic information. Sample demographics consisted of participant age, year of study, and religious affiliation, and religiosity score.

7. The survey consisted of demographic information, 60 total instrument items, and took approximately 24-28 minutes to complete by participants.

8. Data was collected anonymously electronically and analyzed to answer the research questions.

9. The recruitment letter for nursing students was sent via email to the Deans of Nursing of the respective schools. The Deans of Nursing were asked to forward the electronic recruitment letter to pre-licensure bachelor's degree students enrolled in the 23-24 academic year.

10. Participation reminders were sent one week, three weeks, and five weeks from the first

email request to the Deans of Nursing to forward to their students.

11. The recruitment email letter included a survey link [Link A

https://liberty.co1.qualtrics.com/jfe/form/SV_7QcAX5DscrOcYgm] for Christian

nursing education programs and [Link B

https://liberty.co1.qualtrics.com/jfe/form/SV_0pRsgichLbH3puC] for non-faith-based

nursing education programs.

12. Nursing students participated by clicking on the link. The first question of the survey,

participants agreed they were over the age of 18 (see Appendix C).

13. The next question provided informed consent. Participants could choose yes or no.

14. If the participant declined consent or was under the age of 18, the survey closed without

access to the electronic questionnaire (see Appendix F).

15. Once consent was given, the participant began the survey and could leave the survey

platform prior to completion.

16. Survey responses were collected in Qualtrics® and exported to Excel.

17. The researcher kept data secure by using password-protected computer entry and data

management.

18. The researcher coded each section of the survey responses according to the ASPIRES and

CD-RISC manuals in Excel.

19. Participant data was excluded if one of the following occurred: the participant answered

no to over the age of 18, declined consent, or did not answer each section of scoring

(STScore or CD-RISC) completely.

20. Once data was inspected for completeness, complete data was transferred into the

Statistical Package for the Social Sciences (SPSS) for analysis. No outliers were

identified.

Data Analysis

The study compared the differences between two types of existing nursing education programs located in the eastern United States in the academic year of 2023 to 2024. One group was from a Christian education nursing program (X_1), and the second group was from a non-faith-based education nursing program (X_2). A comparative study design was necessary because this study did not manipulate the independent variable (the two groups of students) and compares the effect of the naturally occurring education setting on the groups' levels of spirituality and resiliency (Gall et al., 2007). Comparative studies cannot infer causality but may determine the magnitude of difference between the two groups (Warner, 2013).

Data was collected through an electronic survey through Qualtrics® and analyzed through IBM's SPSS using independent samples *t*-test. The *t*-test is appropriate when comparing between subject groups (Warner, 2013). Assumptions for the *t*-test difference of means are scores in interval or ratio scales, scores are normally distributed, and scores for the population studied are equal (Gall et al., 2007). The data was screened and analyzed for descriptive statistics and tested for assumptions of normality using the Kolmogorov-Smirnov because the group sample size was greater than 50 participants. Data for both research questions RQ1a and RQ1b were initially analyzed with whisker and box plots to determine any outliers. An alpha or $p > .05$ was considered normality was met. Prior to conducting the independent samples *t*-test, the data was tested for the assumption of homogeneity of variance by using Levene's Equality of Error Variances. An alpha or $p > .05$ was considered homogeneity met. Where the Levene's test demonstrated homogeneity was not met, the equal variance not assumed score, which is also considered the Welch's *t*-test, was used in the independent samples *t*-test analysis. Effect size

was analyzed through Hedge's g correction due to unequal sample sizes.

Independent samples t-tests were used to analyze the comparative groups and each research question. RQ1: To what extent does a difference exist between undergraduate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for spirituality (Y_1) and resilience (Y_2)? RQ1a: To what extent does a statistically significant difference exist between undergraduate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for spirituality (Y_1)? RQ1b: To what extent does a statistically significant difference exist between undergraduate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for resilience (Y_2)? The selected alpha was .05 with $p < .05$ for rejecting the null hypothesis and equal significant difference. The effect size was analyzed using Hedge's g correction of Cohen's d because of the unequal sample sizes. The point estimate for effect size was taken from the Hedge's g correction point estimate to identify the effect size. Effect size was determined by historical Cohen's d effect sizes, of 0.2 small, 0.5 medium, and 0.8 large.

Summary

In summary, this study was a descriptive, cross-sectional, comparative, quantitative study utilizing survey data obtained from two groups of pre-licensure baccalaureate nursing students and compared their respective levels of spirituality and resiliency. The study compared the differences between two types of existing nursing education programs located in the eastern United States in the academic year of 2023 to 2024. One group was from a Christian education nursing program (X_1), and the second group was from a non-faith-based education nursing program (X_2). Sampling selection identified two distinct comparison groups that identified as

Christian nursing education and included spiritual formation criteria and those who do not identify as faith-based and provided liberal arts nursing education.

The theoretical framework of spiritual formation supports the right fit for the instruments chosen for this study. The data collection occurred through two self-report surveys, the Assessment of Spirituality and Religious Sentiments (ASPIRES) and the Connor-Davidson Resiliency Scale (CD-RISC). These scales are highly reliable and have been used in multiple studies to validate their constructs. The ASPIRES and CD-RISC scales were incorporated into one survey for this study and administered as an electronic survey through Qualtrics® which took no more than 24-28 minutes to complete. The primary investigator scored the ASPIRES and CD-RISC. No rater training was required due to the survey is a self-report.

Independent samples *t*-tests were used to analyze the comparative groups and each research question, RQ1: To what extent does a difference exist between undergraduate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for spirituality (Y_1) and resilience (Y_2)? RQ1a: To what extent does a statistically significant difference exist between undergraduate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for spirituality (Y_1)? RQ1b: To what extent does a statistically significant difference exist between undergraduate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for resilience (Y_2)?

CHAPTER FOUR: FINDINGS

Overview

The purpose of this quantitative comparative study was to examine to what extent differences exist between Christian and non-faith-based pre-licensure baccalaureate nursing education programs for spirituality and resiliency. This cross-sectional comparative study compared two groups of nursing students enrolled in pre-licensure baccalaureate nursing programs at two types of institutions. This study compared these two groups of students and their levels of spirituality (Y_1) and resiliency (Y_2). An independent samples t-test was used to test the hypotheses. This chapter includes the research question(s), null hypotheses, data screening, descriptive statistics, assumption testing, and analysis.

Research Question(s)

RQ1: To what extent does a difference exist between pre-licensure baccalaureate nursing students who attend a Christian college education (X1) and those who attend a non-faith-based nursing program (X2) for spirituality (Y1) and resilience (Y2)?

RQ1a: To what extent does a statistically significant difference exist between pre-licensure baccalaureate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for spirituality (Y_1)?

RQ1b: To what extent does a statistically significant difference exist between pre-licensure baccalaureate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for resilience (Y_2)?

Null Hypothesis(es)

H_01a: No statistically significant difference exists between pre-licensure baccalaureate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-

based nursing program (X_2) for spirituality (Y_1).

H$_0$1b: No statistically significant difference exists between pre-licensure baccalaureate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for resilience (Y_2).

Data Screening

The data was sorted and scanned for inconsistencies. No data errors or inconsistencies were identified. Box and whiskers plots were used to detect outliers on each dependent variable. No extreme outliers were identified. Data point 31 and 43 are not considered outliers. Although these scores represent lower than the mean and standard deviation, they are not considered extreme outliers. These data points were included in the independent samples t-tests (see Figure 1).

Figure 1

Test for Outliers Box and Whisker Plots
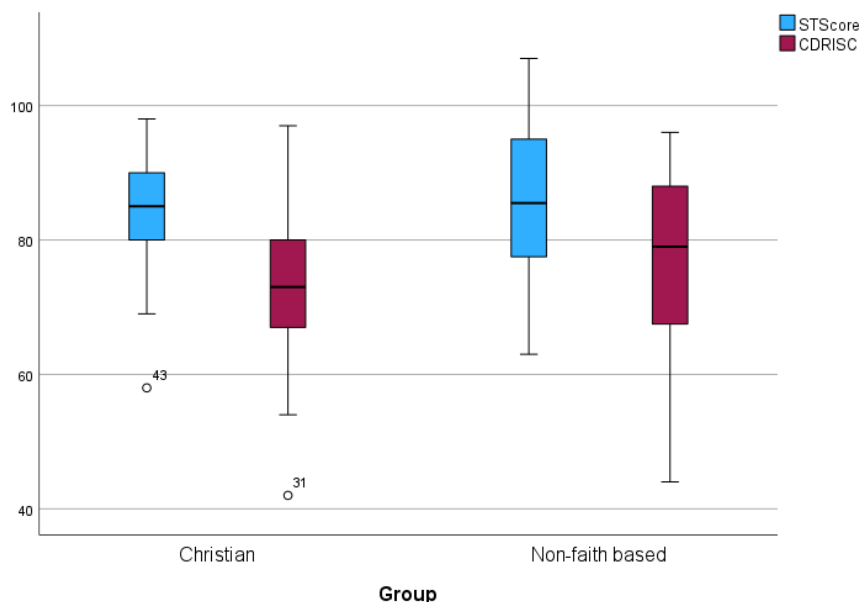
Assumption Tests

The assumptions for the independent samples t-test are:

a. The data was numeric

b. The observations are independent of one another

c. The sample mean was normally distributed

d. There are equal variances between groups (Gall et al., 2013).

The data for analysis was numeric and quantitative. The data was collected from two separate comparative groups. Scores were obtained for the dependent variables of spirituality and resiliency. Scores for the dependent variable were independent of each other and were not correlated. Testing for assumptions for normal distribution occurred through the Kolmogorov-Smirnov test and equal variance through the Levene's test.

Data was tested for assumptions of normality using the Kolmogorov-Smirnov test, because the group sample size was greater than 50 participants. An alpha or $p > .05$ was considered normality was met. The significance for each instrument score and comparison group was .200* demonstrating normality was met (see Table 7).

Table 7

Test of Normality

		Kolmogorov-Smirnov[a]		
	Group	Statistic	*df*	Sig.
STScore	Christian	.095	53	.200*
	Non-faith-based	.106	32	.200*
CD-RISC	Christian	.061	53	.200*
	Non-faith-based	.102	32	.200*

Note. This is a lower bound of the true significance.*
Lilliefors Significance Correction[a]

Descriptive Statistics

Descriptive statistics were obtained on the dependent variable for each group. The sample

consisted of $N = 85$ participants, $n = 53$ Christian, and $n = 32$ non-faith-based. The mean

STScore for the Christian education group was 84.34 with a standard deviation (SD) of 8.10. The

variance was calculated at 65.46. The non-faith-based education group had a mean STScore of

85.34 with a SD of 11.81 and variance of 139.39. The STScore measures the level of spirituality

among the two groups. The total point range of the STScore is 23 to 115. Higher scores mean

higher transcendence and purpose in life. Lower scores mean more concern with immediate daily

living (Piedmont, 2020).

The mean score of the Christian education group completing the CD-RISC was 73.04

with a SD of 11.23 and variance of 126.08. The non-faith-based education group completing the

CD-RISC had a mean of 77.69 with a SD of 12.52 and variance of 156.52. The CD-RISC

measures the level of resiliency among the two groups. The total point range of the CD-RISC is

0 to 100. Higher scores indicate higher resiliency. Lower scores indicate less resiliency.

Descriptive statistics can be found in Table 8.

Table 8

Descriptive Statistics

Group		N	Minimum	Maximum	Mean	Std. Deviation	Variance
Christian	STScore	53	58	98	84.34	8.10	65.46
	CD-RISC	53	42	97	73.04	11.23	126.08
Non-faith-based	STScore	32	63	107	85.34	11.81	139.39
	CD-RISC	32	44	96	77.69	12.52	156.80

Results

Independent samples *t*-tests were used to analyze the comparative groups and each

research question. The *t*-test is appropriate when comparing between subject groups (Warner,

2013). The selected alpha was .05 with $p <$.05 for rejecting the null hypothesis and equal

significant difference. The effect size was analyzed using Hedge's g correction because of the

unequal sample sizes. The point estimate for effect size was taken from the Hedge's g correction

point estimate to identify the effect size. Effect size was determined by historical Cohen's d

effect sizes, of 0.2 small, 0.5 medium, and 0.8 large. Using standardized Cohen's d effect sizes

increases the generalizability of the results (Lakens, 2013).

Hypothesis One

H_01a: No statistically significant difference exists between pre-licensure baccalaureate

nursing students who attend a Christian college education (X_1) and those who attend a non-faith-

based nursing program (X_2) for spirituality (Y_1).

Assumption of Homogeneity of Variance

The independent samples t-test requires that the assumption of homogeneity of variance

be met but may tolerate violation of homogeneity of variance with adequate sample sizes

However, there may be impact by highly unequal sample sizes (Warner, 2013). The assumption

of homogeneity of variance for the hypotheses in the study was examined using the Levene's

test. An alpha or $p >$.05 was considered homogeneity met. Because the Levene's test for H_01a

demonstrated homogeneity was not met, the equal variance not assumed score, which is also

considered the Welch's t test (Parra-Frutos, 2013), was used in the independent samples t-test

analysis below. The assumption of homogeneity of variance for the STScore was not met where

($p = $.006; see Table 9).

Table 9

Levene's Test of Equality of Error Variances[a,b]

STScore	Levene Statistic	*df*1	*df*2	Sig.
Based on Mean	7.821	1	83	.006
Based on Median	7.902	1	83	.006
Based on Median and with adjusted *df*	7.902	1	79.090	.006
Based on trimmed mean	7.882	1	83	.006

Notes. Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: STScore

b. Design: Intercept + Group

Analysis

An independent samples *t*-test was conducted to see if there was a difference in the STS between pre-licensure baccalaureate students who attend Christian and non-faith-based education programs. The Levene's test demonstrated homogeneity was not met. The equal variance not assumed score, which is also considered the Welch's *t*-test, was used in the independent *t*-test analysis. The Welch's *t* adjusts the *df* and attempts to prevent a Type I error due to unequal sample sizes or large variances (Parra-Frutos, 2013; Warner, 2013). The alpha selected was .05 with a $p < .05$ to reject the null hypothesis. It is important to note that the *p* values results were similar when equal variances assumed ($p = .322$), and equal variances not assumed ($p = .336$). The researcher failed to reject the null hypothesis at the 95% confidence level where $t(48.74, 83)$ = -.43, $p = .336$, one-tailed. There was not a statistical difference between the STScores of Christian ($M = 84.34$, $SD = 8.10$) and non-faith-based ($M = 85.34$, $SD = 11.81$) nursing students (see Table 10).

Table 10

Independent Samples Test STScore

	Levene's Test for Equality of Variances		t-test for Equality of Means							
					Significance				95% Confidence Interval of the Difference	
					One-sided p	Two-sided p	Mean Diff	Std. Error Diff	Lower	Upper
	F	Sig.	t	df						
Equal variances assumed	7.821	.006	-.465	83	.322	.643	-1.004	2.160	-5.300	3.292
Equal variances not assumed			-.425	48.74	.336	.673	-1.004	2.365	-5.757	3.748

The effect size for H_01a was calculated using Hedge's g correction because of the unequal sample sizes. Hedge's g is utilized as a conservative correction of the Cohen's d (Lakens, 2013). Comparison of effect size was determined by historical Cohen's d effect sizes, of 0.2 = small, 0.5 = medium, and 0.8 = large and ranges of < .20 = small, .20 to .79 = medium, and ≥ .80 = large. Using standardized Cohen's d effect sizes increases the generalizability of the results (Lakens, 2013). The Hedge's g point estimate, H_01a demonstrated a small effect size, $g = -.103$. The adjusted correction was similar to Cohen's d point estimate at $d = -.104$. The implications for the smaller effect size from the predicted power analysis is that it may be due to the lower sample $N = 85$. Additionally, as the N and effect size decreased, the power to determine a difference between groups likely decreased (Warner, 2013; see Table 11).

Table 11

Independent Samples Effect Sizes STScore

	Standardizer[a]	Point Estimate	95% Confidence Interval	
			Lower	Upper
Cohen's d	9.647	-.104	-.543	.335
Hedges' correction	9.736	-.103	-.538	.332

Notes. a. The denominator used in estimating the effect sizes.
Cohen's d uses the pooled standard deviation. Hedges' correction uses the pooled standard deviation, plus a correction factor.
Glass's delta uses the sample standard deviation of the control group.

Hypothesis Two

H_01b: No statistically significant difference exists between pre-licensure baccalaureate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for resilience (Y_2).

Assumption of Homogeneity of Variance

The independent samples *t*-test requires that the assumption of homogeneity of variance be met but may tolerate violation of homogeneity of variance with adequate sample sizes However, there may be impact by highly unequal sample sizes (Warner, 2013). The assumption of homogeneity of variance for the hypotheses in the study was examined using the Levene's test. An alpha or $p > .05$ was considered homogeneity met. The Levene's test for H_01b demonstrated homogeneity was met with a variance score of ($p = .365$; see Table 12).

Table 12

Levene's Test of Equality of Error Variances[a,b]

CD-RISC	Levene Statistic	*df*1	*df*2	Sig.
Based on Mean	.829	1	83	.365
Based on Median	.795	1	83	.375
Based on Median and with adjusted *df*	.795	1	82.859	.375
Based on Trimmed Mean	.796	1	83	.375

Notes. Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a. Dependent variable: CD-RISC
b. b. Design: Intercept + Group

Analysis

An independent samples *t*-test was conducted to see if there was a difference in the resiliency between pre-licensure baccalaureate students who attend Christian and non-faith-based education programs. The equal variance not assumed score, also considered the Welch's *t*-test was used in the data analysis. The Welch's *t* adjusts the *df* and attempts to prevent a Type I error due to unequal sample sizes or large variances (Parra-Frutos, 2013; Warner, 2013). The alpha selected was .05 with a *p* < .05 to reject the null hypothesis. It is important to note that the *p* values results were similar when equal variances assumed (*p* = .040), and equal variances not assumed (*p* = .045). The researcher rejected the null hypothesis at the 95% confidence level where *t*(59.98, 83) = -1.72, *p* = .045, one-tailed. There was a statistical difference between the CD-RISC scores of Christian (*M* = 73.04, *SD* = 11.23) and non-faith-based (*M* = 77.69, *SD* = 12.52) nursing students (See Table 13).

Table 13

Independent Samples Test CD-RISC Score

CD-RISC	Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
					Significance					
					One-Sided	Two-Sided	Mean	Std. Error		
	F	Sig.	*t*	*df*	*p*	*p*	Diff	Diff	Lower	Upper
Equal variances assumed	.829	.365	-1.771	83	.040	.080	-4.650	2.626	-9.872	.572
Equal variances not assumed			-1.723	59.978	.045	.090	-4.650	2.698	-10.046	.747

The effect size for H₀1b was calculated using Hedge's *g* correction because of the unequal sample sizes. Hedge's *g* is utilized as a conservative correction of the Cohen's *d* (Lakens, 2013). Comparison of effect size was determined by historical Cohen's *d* effect sizes, of 0.2 = small, 0.5 = medium, and 0.8 = large and ranges of < .20 = small, .20 to .79 = medium, and ≥ .80 = large. Using standardized Cohen's *d* effect sizes increases the generalizability of the results (Lakens, 2013). There was a small to medium effect size with, Hedge's *g* = -.393. The adjusted correction was very similar to Cohen's *d* point estimate *d* = -.396. The small to medium effect size may be due to the lower sample *N* = 85. The initial power analysis for sample size demonstrating medium effect was *N* = 102 (see Table 14).

Table 14

Independent Samples Effect Sizes CD-RISC Score

CD-RISC	Standardizer[a]	Point Estimate	95% Confidence Interval	
			Lower	Upper
Cohen's d	11.728	-.396	-.838	.048
Hedges' correction	11.836	-.393	-.831	.047

Notes. a. The denominator used in estimating the effect sizes.

Cohen's d uses the pooled standard deviation.

Hedges' correction uses the pooled standard deviation, plus a correction factor.

Glass's delta uses the sample standard deviation of the control group.

CHAPTER FIVE: CONCLUSIONS

Overview

The purpose of this quantitative comparative study was to examine to what extent differences exist between Christian and non-faith-based pre-licensure baccalaureate nursing education programs for spirituality and resiliency. Chapter Five includes a discussion of the research study, addresses implications and limitations drawn from the research, and provides recommendations for future research based on the data analysis of the current study.

Discussion

The purpose of this quantitative comparative study was to examine to what extent differences exist between Christian and non-faith-based pre-licensure baccalaureate nursing education programs for spirituality and resiliency. The cross-sectional comparative study compared the differences between two types of existing nursing education programs located in the eastern United States from 2023 to 2024. The first group was made up of nursing students enrolled in a pre-licensure baccalaureate program at a Christian college (X_1) that focuses on spiritual formation. The second group was enrolled at a non-faith-based college or university (X_2) focused on liberal arts. This study compared these two groups of students and their levels of spirituality (Y_1) and resiliency (Y_2). The sample size for the study was $N = 85$ with Christian nursing programs $n = 53$, and $n = 32$ for the non-faith-based nursing programs. Data were analyzed using a independent samples t-test.

Hypothesis One

H_01a stated that no statistically significant difference existed between pre-licensure baccalaureate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for spirituality (Y_1). The researcher failed to reject

the null hypothesis at the 95% confidence level where $t(48.74. 83) = -.43$, $p = .336$, one-tailed

and a Hedge's effect size, $g = -.103$. There was not a statistical difference between the STScores

of Christian ($M = 84.34$, $SD = 8.10$) with a variance of 65.46 and non-faith-based ($M = 85.34$, SD

$= 11.81$) with a variance of 139.39. The researcher failed to reject the H_01a, indicating there was

no significant difference in the Spiritual Transcendence scores between the two groups.

The STScore measures the level of spirituality among the two groups. The total point

range of the STScore is 23 to 115. Higher scores mean higher transcendence and purpose in life.

Lower scores mean more concern with immediate daily living (Piedmont, 2020). According to

Piedmont (2020), average scores for Spiritual Transcendence for ages up to 25 can range from 70

to 88.

The variance scores between the two groups are not similar, showing that the non-faith-

based education participants had a larger range of scores (Warner, 2013). It is noted in the data

that the non-faith-based participants demonstrated that 15% of the participants self-reported a

score greater than 100 ($n = 5$). There were no participants in the Christian group that rated

themselves over 100. The highest score was 98 ($n = 1$) in the Christian group. Demographics for

the non-faith-based students showed that 26% of the participants self-reported agnostic/atheist as

their choice of religion. The author of the ASPIRES instrument found there were lower levels of

STScore for the the agnotstic/atheist but not absent for this group of participants (Piedmont,

2010). The fact there are higher levels of scores raises concerns about social desirability bias

(Gall et al., 2007). The survey tool is a self-report scoring of spirituality components. It is

important that participants respond accurately and honestly. Social desirability bias is the

tendency for participants to respond to questions by over-reporting good behaviors and under-

reporting less acceptable behaviors because participants are driven by socially acceptable

behaviors (Kwak et al., 2021). One method to help reduce social desirability bias is to ensure privacy and complete autonomy (Gall et al., 2007). Using electronic anonymous survey data collection is one method in the study design to ensure anonymonity and minimize bias. However, the Deans of Nursing forwarded the tool to their students by email. The researcher did not have direct contact with participants. Students may have been concerned that their deans would see data even though they were assured privacy.

In a meta-analysis, Schwalm et al. (2022) found factors associated with resilience as "coping ability, self-efficacy, optimism, social support, flexibility, religious and spiritual beliefs, positive emotions, self-esteem, and meaning and purpose in life" (p. 1219). Resiliency is strengthened by spirituality and spiritual beliefs (Schwalm et al., 2022). Spirituality is its own distinct resource in resiliency and is present in believers and non-believers (Caldeira et al., 2016). Garner (2002) describe spirituality as uniquely human and that connects to someone or something outside of themselves (such as God). The need to connect helps the person in times of adversity. A general definition of spirituality is a connection with self or others. Spirituality is not always a connection with God and could be with nature (Meybodi & Mohammadi, 2021). Literature supports that spirituality is one component of coping and resiliency (Caldeira et al., 2016; Fenzel & Richardson, 2022; Mehrinejad et al., 2015; Schwalm et al., 2022).

Christian education programs may cultivate spiritual formation (management of difficult situations) through theological foundations, relationships, and mentorship from spiritually mature faculty, which may not occur in non-faith-based nursing education (Francis, 2019). Previous research demonstrated a relationship between spirituality and resiliency (Caldeira et al., 2016; Fenzel & Richardson, 2022; Mehrinejad et al., 2015; Schwalm et al., 2022). It showed that those whose spiritual beliefs were most important to them demonstrated higher levels of meaning

in life and more patience in managing adverse life events (Mehrinejad et al., 2015). Schwalm et al. (2022) found the concepts of spirituality and religiosity intertwined with resilience. They found that literature demonstrated that not all resilient people have spirituality and religiosity, but those who possess spirituality have higher levels of resilience. Religious practices and community may increase the social support related to resilience. Meaning and connection to optimism traits of resiliency may be related to spirituality (Schwalm et al., 2022). These concepts supported the hypothesis that spiritual formation would increase levels of resiliency. However, the results of this study were contrary to previous studies and demonstrated no significant differences between the two groups.

Spiritual formation uses spiritual disciplines, which are the activities that draw believers into a relationship with Christ and others. Spiritual disciplines include biblical and spiritual reading, prayer, community, and relationships. These activities were measured as religiosity in the demographics for both groups of participants in this study. The mean scores for religiosity were $M = 41$ for the Christian nursing education students and $M = 36$ for the non-faith-based. It was clear that Christian nursing education students hold a higher level of practice of spiritual disciplines. However, it was not clear how these activities impacted the self-reported levels of spirituality and spiritual maturity and, ultimately, their resiliency. According to Caldeira et al. (2016) spirituality is its own distinct resource in resiliency and is present in believers and non-believers.

Astin et al. (2003) evaluated college students' spirituality and religiousness in a national study. Their findings showed that religious preferences have different levels of spirituality and religious engagement. Particularly, students who chose no religious preference had the lowest mean scores out of all religious groups on religious engagement and spirituality. Conversely,

those who preferred Baptists and other Christians had high scores of spirituality and religious engagement (Astin et al., 2003). The national study results support this study's results of lower religiosity scores in the non-faith-based group because of the higher percentage of students choosing agnostic/atheist. However, the self-reported spirituality scores in this study by the non-faith-based nursing students were higher and do not mirror the national study by Astin et al. (2003).

Hypothesis Two

$H_0$1b stated there is no statistically significant difference between pre-licensure baccalaureate nursing students who attend a Christian college education (X_1) and those who attend a non-faith-based nursing program (X_2) for resilience (Y_2). The researcher rejected the null hypothesis at the 95% confidence level where $t(59.98, 83) = -1.72$, $p = .045$, one-tailed, with a Hedge's $g = -.393$. There was a statistical difference between the CD-RISC scores of Christian ($M = 73.04$, $SD = 11.23$) with a variance of 126.10 and non-faith-based ($M = 77.69$, $SD = 12.52$) with a variance of 156.81.

The CD-RISC measures the level of resiliency among the two groups. The total point range of the CD-RISC is 0 to 100. Higher scores indicate higher resiliency, and lower scores indicate less resiliency. According to Davidson JRT (2022), for the mean scores on the CD-RISC, both groups rank in the second general population quartile, which is 50% of the general population scores. While this is not the lowest ranking, it suggests there needs to be ways to strengthen coping or adaptability in pre-licensure baccalaureate nursing students. The CD-RISC evaluates resilience by looking at five dimensions: "personal competence, tolerance for negative affect and strengthening effects of stress, positive acceptance of change, sense of control, and spiritual influence" (Ye et al., 2022, p. 340).

Davidson JRT (2022) documents a study that utilized the CD-RISC in adolescent nursing students. The study provided an educational intervention to promote resilience. Their pre- and post-test results show a mean score increase but these increases did not last long term. The highest mean post-educational intervention was 78.0, which increased from the baseline of 75.2 (Davidson JRT, 2022). The baseline scores were similar to the resiliency scores in this dissertation study.

This study evaluated the setting of nursing education as a possible variable in levels of resiliency. It was hypothesized that nursing students would have higher self-reported resiliency in a Christian education setting than non-faith-based education nursing students. Data showed that the self-reported CD-RISC scores were higher for the non-faith-based nursing students. This was different from the results from (Won et al., 2018), which evaluated resilience according to the general characteristics of their participants. Won et al. found that Catholic and Christian students had higher resilience scores versus those with no religion.

Fenzel and Richardson (2022) utilized the CD-RISC in their study to determine the relationship between spirituality, mindfulness, resilience, self-compassion, and general satisfaction with life. While they did not report general scores for resiliency in their study, they correlated a strong link between resilience and spirituality as a coping factor and predictor for satisfaction with life. While this study evaluated levels of spirituality and resiliency by nursing program, there other coping skill which include relaxation techniques such as meditation, breathing, and reflection (Diffly & Duddle, 2022; Morse et al., 2021). The findings of similar levels of spirituality but higher levels of resilience in this study is contrary to previous studies but could be attributed to non-Christian concepts. A larger number of students from the non-faith-based nursing education group compared to the Christian group identified as atheist or agnostic.

These students may rely on non-faith-based coping skills shown in the highr levels of resilience scores. There was more diversity in the self-reported religious affiliation in the non-faith-based. These non-faith-based activities may play a larger role in coping and self-reported resiliency in non-religious participants accounting for the lower mean of religious practices in the non-faith-based group ($M = 36$) but increased mean for the CD-RISC scores.

Implications

Nursing programs have implemented varying strategies for boosting students and nurses' resiliency (Kunzler et al., 2022; Stacey & Cook, 2019). Interventions included mental health promotion, relaxation response (Calder Calisi, 2017), mindfulness resiliency training (Lin et al., 2019), authentic connection, community resilience model, and high-intensity chat group (Chesak et al., 2019; Grabbe et al.,2020; Mistretta et al., 2018). The results of these interventions for nurses practicing in the field with high stressors proved somewhat effective in the short term (Bernburg et al., 2019; Calder Calisi, 2017; Chesak et al., 2019). Most results showed no improvement over time. While the techniques prove useful immediately following training, long-term incorporation of resiliency measures did not prove fruitful (Grabbe et al.,2020; Kunzler et al., 2022; Lin et al., 2019; Mistretta et al., 2018). Additionally, some researchers have shown there is a connection between spirituality and resiliency (Caldeira et al., 2016; Fenzel & Richardson, 2022; Mehrinejad et al., 2015; Schwalm et al., 2022).

This study focused on learning if the setting of Christian education results in higher levels of nursing student resiliency and spirituality. Christian education is built on scriptural foundations with a mission to cultivate Christian scholarship and faculty to instruct and develop students from the Christian worldview (Eckel, 2009). There were few studies directly evaluating the outcomes of Christian nursing programs. Few studies sought quantitative data on integrated

faith and learning outcomes in Christian education (Kim, 2020; Horner, 2020).

Christians are not immune to adversity and uncontrollable circumstances such as loss or grief. The ability to experience adversity with hope or optimism is derived from a more profound meaning connected to Christ's sacrifice. Spiritual maturity or formation occurs during the moments when believers exhibit patience in the face of their life experiences (Mulholland, 1993). The implication of higher mean religiosity but lower spirituality levels for Christian ($M =$ 84.34, $SD = 8.10$) versus non-faith-based ($M = 85.34$, $SD = 11.81$) means the Christian group placed higher importance on their faith practices. Faith practices were one of the components of the WISDOM framework. However, faith practices and spiritual disciplines should result in growth and adaptability (Wilhoit & Howard, 2020). Evaluating the benefits of a Christian education goes beyond the basic curriculum, biblical courses, and liberal arts requirements. The result of this comparison study demonstrated no difference in levels of spirituality between the comparison groups. This finding was not aligned with previous research literature. While the results from this research study did not succinctly link the setting of the nursing education program with levels of spirituality and resiliency, nurse educators may draw from the quantitative findings and further research in this area.

There were few studies measuring the different levels of resiliency according to education setting. This study found a significant difference between the comparison groups' levels of resiliency. However, non-faith-based nursing education students demonstrated a higher mean score of resiliency ($M = 77.69$) with a SD of 12.52 when compared to Christian education nursing students ($M = 73.04$) with a SD of 11.22. This finding was contrary to previous literature. This study compared the differences in the level of spirituality and resiliency due to potential spiritual formation provided by a Christian education. However, it is important to note

that age, education level, life experience, and level of spiritual maturity may impact levels of resiliency (Francis, 2019; Manomenidis et al,, 2019; Schwalm et al., 2018; Spurr et al., 2021). Not all students attending Christian colleges are professed believers, or may have newly adopted the Christian faith. Students within the Christian setting may have different levels of spiritual maturity (Francis, 2019). Life experience and exposure to previous adversity build future resiliency (Schwalm et al., 2018). The process of nursing education itself develops levels of resiliency due to the type of coursework and exams. Students who have progressed to higher levels in their coursework should demonstrate higher levels of resiliency (Francis, 2019; Spurr et al., 2021). Previous research interventions in nursing education programs attempted to increase resiliency and demonstrated short-lived gains (Grabbe et al.,2020; Kunzler et al., 2022; Lin et al., 2019; Mistretta et al., 2018). This study added quantitative data for the study of the impact of the nursing education setting and the levels of spirituality and resiliency with pre-licensure nursing students.

Limitations

All research has limitations that potentially impact outcomes and results. Research studies have potential threats to internal and external validity. Threats can include the type of study design, sampling, analysis, confounding factors, and generalizability to a larger population (Gall et al., 2007). This study was designed as a cross-sectional comparison study.

Nursing Program Participation

Nursing program recruitment occurred by selecting dual accredited nursing programs from three southeastern states. The program selection process led to five Christian and 31 non-faith-based nursing programs fitting the criteria. Schools were contacted over a six-month time frame to elicit participation. Four schools agreed to participate, two were Christian and two were

non-faith-based according to criteria, which was a small representation of pre-licensure baccalaureate nursing students. Low response rate from eligible schools limited participants and sample size.

Recruitment

According to study design and IRB approval, the initial participant recruitment email was sent to actively enrolled nursing students after the start of the fall 2023 semester. Deans of Nursing emailed the recruitement request to their students. The researcher contacted the Deans of Nursing and requested three additional reminders be sent to students throughout the months of September and October. By the end of November the number of respondents from the Christian programs were adequate. However, responses from the non-faith-based schools plateaud in October. At this point, it was determined that the researcher exhausted recruitment of students. This led to unequal sample sizes, impacting the statistical analysis for significance. Recruitment was limited due to reliance on Deans of Nursing following through on sending recruitment emails to their students.

Nursing Student Participation

There were 124 participants that accessed the survey through the electronic link in Qualtrics®. Of the 124 participants that accessed the survey, 124 stated they were over the age of 18. A total of 104 participants agreed to consent to participate in the study. Therefore, 20 participants were excluded due to lack of consent. Although participants may have agreed to consent, only participants who completed both sections of survey and scored the Spiritual Transcendence and Resiliency scales were included. Participants were excluded if they did not complete any of the survey, or if they only partially answered one or more sections. In total, 85 participants completed the survey and were included in the sample $N = 85$. Participants were

separated by their education setting Christian education or non-faith-based by their survey link. Out of the $N = 85$, the Christian education group included 53 participants ($n = 53$) and the non-faith-based group included 32 participants ($n = 32$).

Sample Groups

The study evaluated existing students in the nursing programs and did not control for the profession of faith. Nursing students may be non-faith-based but attend a Christian program or be Christian and attend a non-faith-based program. Because students of faith and non-faith may attend both types of education settings, the lack of control may have impacted a true comparison of the groups and confounded the results.

Generalizing Results

This study was limited due to sampling and population. The participants represented pre-licensure baccalaureate nursing students from four nursing programs. Their religious affiliation, age, year of study, and religiosity scores were evaluated between the two groups. Comparisons between the two groups demonstrated similar average age and years of study. There was a wider range of religious preference in the non-faith-based group compared to the Christian education group. However, because of the small sample in one region of the United States, generalizing the results to a large population would be difficult (Gall et al., 2007).

<div align="center">

Recommendations for Future Research

</div>

There are numerous recommendations for future research expanding on this topic of study. Stacey and Cook (2019) completed a scoping review of resiliency training interventions for practicing nurses and nursing students. Their review supports previous studies that show that resiliency training is brief and does not support a long-term change to individual student resiliency characteristics. While this research added to the body of knowledge by providing a

quantitative evaluation of the levels of spirituality and resiliency and the education setting for nursing students, there is a need for more knowledge. Recommendations include:

1. Correlational quantitative studies to determine a true link to levels of spirituality and resiliency. This study compared differing levels of spirituality and resiliency between groups but did not correlate the scores. Future studies are recommended to explore the link between these concepts.

2. Future research studies with larger populations are recommended. This study included four schools in the southern United States which is a small representation of the nursing student population. Repeating this study with larger populations is recommended to determine if they obtain similar or different results.

3. It is recommended in future research studies with larger populations to control sampling for true comparison (faith versus non-faith-based). Overlap in the comparison groups may have caused confounding results. Controlling for this variable may deliver a different understanding of study results.

4. Lastly, future studies of pre-licensure nursing students are recommended to evaluate the impact of the Christian education setting on outcomes and resiliency. There are benefits to Christian education and the spiritual formation that occurs during the undergraduate setting. There are limited studies examining Christian education settings on nursing student outcomes.

REFERENCES

American Association of Colleges of Nursing. (2022). *Data spotlight: A closer look at private nursing schools.* https://www.aacnnursing.org/News-Information/News/View/ArticleId/25026/data-spotlight-july-2020-private-nursing-schools

Amsrud, K., Lyberg, A., & Severinsson, E. (2019). Development of resilience in nursing students: A systematic qualitative review and thematic synthesis. *Nurse Education in Practice, 41*, 1-9. https://doi.org/10.1016/j.nepr.2019.102621

Aryuwat, P., Asp, M., Lovenmark, A., Radabutr, M., & Holmgren, J. (2022). An integrative review of resilience among nursing students in the context of nursing education. *Nursing Open, 00*, 1-26. https://doi.org/10.1002/nop2.1559

Astin, A., Astin, H., & Lindholm, J. (2003). *Overall findings: A national study of spirituality in higher education: Students' search for meaning and purpose: Key findings of the first national longitudinal study of undergraduates' spiritual growth.* Higher Education Research Institute. https://spirituality.ucla.edu/findings/

Astle, B., & Gibson, D. (2017). Finding our place: Making the connection toward faith integration. *Journal of Christian Nursing, 34*(2), 108-111. https://doi.org/10.1097/CNJ.0000000000000278

Badley, K. (2009). Clarifying faith-learning integration: Essentially contested concepts and the concept-conception distinction. *Journal of Education & Christian Belief, 13*(1), 7-174. https://doi.org/10.1177/205699710901300103

Banerjee, Y., Akhras, A., Khamis, A., Alsheikh-Ali, A., & Davis, D. (2019). Investigating the relationship between resilience, stress-coping strategies, and learning approaches to

predict academic performance in undergraduate medical students: Protocol for a proof of

concept study. *JMIR Research Protocols, 8*(9), 1-20. https://doi.org/10.2196/14677

Bavinck, H. (2019). *Christian worldview*. Crossway.

Beard, C. (2017). Connecting spiritual formation and adult learning theory: An examination of

common principles. *Christian Education Journal, 14*(2), 247-269.

https://doi.org/10.1177/07398913170400202

Bernburg, M., Groneberg, D., & Mache, S. (2019). Mental health promotion intervention for

nurses working in German psychiatric hospital departments. *Issues in Mental Health

Nursing, 40*(8), 706-711. https://doi.org/10.1080/01612840.2019.1565878

Burger, C. (2022). Guide to faith-based nursing schools. Retrieved from registerednursing.org:

https://www.registerednursing.org/faith-based-nursing-schools/

Busteed, K. (2020). *Experiences of BSN students at a faith-based university with courses related

to caring* [Dissertation].

Caldeira, S., Figueiredo, A., Conceicao, A., Ermel, C., Mendes, J., Chaves, E., de Carvalho, E.,

& Vieira, M. (2016). Spirituality in the undergraduate curricula of nursing schools in

Portugal and Sao Paulo- Brazil. *Religions, 7*(134), 1-9.

https://doi.org/10.3390/rel7110134

Calder Calisi, C. (2017). The effects of the relaxation response on nurses' level of anxiety,

depression, well-being, work-related stress, and confidence to teach patients. *Journal of

Holistic Nursing, 35*(4), 318-327. https://doi.org/10.1177/0898010117719207

Carneiro, E., Navinchandra, S., Vento, L., Timoteo, R., & Borges, M. (2019).

Religiousness/spirituality, resilience, and burnout in employees of a public hospital in

Brazil. *Journal of Religion and Health, 58*, 677-685. https://doi.org/10.1007/s10943-

0691-2

Chesak, S., Cutshall, S., Montanari, K., & Bhagra, A. (2019). Stress management interventions

for nurses: Critical literature review. *Journal of Holistic Nursing, 37*(3), 288-295.

https://doi.org/10.1177/0898010119842693

Chiang, Y., Lee, H., Chu, T., Wu, C., & Hsiao, Y. (2021). The relationship between spiritual

health, health-promoting behaviors, depression, and resilience: A longitudinal study of

new nurses. *Nurse Education in Practice, 56,* 1-8.

https://doi.org/10.1016/j.nepr.2021.103219

Chow, K., Tang, F., Tang, W., & Leung, A. (2020). Resilience-building module for

undergraduate nursing students: A mixed-methods evaluation. *Nurse Education in*

Practice, 49, 102912. https://doi.org/10.1016/j.nepr.2020.102912

Cochran, K., Moss, M., & Mealer, M. (2020). Prevalence of coping strategy training in nursing

school curricula. *American Journal of Critical Care, 29*(2), 104-110.

https://doi.org/10.4037/ajcc202087

Commission on Collegiate Nursing Education. (2023). *CCNE- Accredited baccalaureate nursing*

programs.

https://directory.ccnecommunity.org/reports/rptAccreditedPrograms_New.asp?sort=state

&sProgramType=1#VA

Connor, K., & Davidson, J. (2003). Development of a new resilience scale: The Connor-

Davidson resilience scale (CD-RISC). *Depression and Anxiety, 18,* 76-82.

https://doi.org/10.1002/da.10113

Council for Christian Colleges & Universities. (2022). *The leading national voice of Christian*

higher education; Our place in higher education. https://www.cccu.org/about/#heading-

our-place-in-higher-education-7

Council for Christian Colleges & Universities. (2023). *What is Christian higher education?*

https://www.cccu.org/about/#heading-what-is-christian-higher-3

Council for Higher Education Accreditation. (2022). *Regional accrediting organizations.*

https://www.chea.org/regional-accrediting-organizations

Davidson JRT. (2022). *Connor-Davidson Resilience Scale (CD-RISC)* Manual. Unpublished.

https://www.cd-risc.com/

Diffley, D., & Duddle, M. (2022). Fostering resilience in nursing students in the academic

setting: A systematic review. *Journal of Nursing Education, 61*(5), 229-235.

https://doi.org/10.3928/01484834-20220303-03

Eckel, M. (2009). *A comparison of faith-learning integration between graduates from Christian*

and secular universities in the Christian school classroom [Dissertation].

Esqueda, O. (2014). Biblical worldview: The Christian higher education foundation for learning.

Christian Higher Education, 13(2), 91-100.

https://doi.org/10.1080/15363759.2014.872495

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical

power analysis program for the social, behavioral, and biomedical sciences. *Behavior*

Research Methods, 39 (2), 175-191.

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using

G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods,*

41 (4), 1149-1160. https://doi.org/10.3758/BRM.41.4.1149

Fenzel, L., & Richardson, K. (2022). The stress process among emerging adults: Spirituality,

mindfulness, resilience, and self-compassion as predictors for life satisfaction. *Journal of*

Adult Development, 29, 1-15. https://doi.org/10.1007/s10804-021-09384-2

Fox, J., & Piedmont, R. (2020). Religious crisis as an independent causal predictor of

psychological distress: Understanding the unique role of the numinous for intrapsychic

functioning. *Religions, 11*(329), 1-18. https://doi.org/10.3390/rel11070329

Francis, J. (2019). Integrating resilience, reciprocating social relationships, and Christian

formation. *Religious Education, 114*(4), 500-512.

https://doi.org/10.1080/00344087.2019.1631948

Fulton, B. (2018). Organizations and survey research: Implementing response enhancing

strategies and conducting nonresponse analyses. *Sociological Methods & Research,*

47(2), 240-276. https://doi.org/10.1177/0049124115626169

Gall, M., Gall, J., & Borg, W. (2007). *Educational research: An introduction* (8th ed.). Pearson.

Garber, S. (2007). The fabric of faithfulness. InterVarsity Press. ISBN: 978-0830833191

Garcia-Dia, M., DiNapoli, J., Garcia-Ona, L., Jakubowski, R., & O'Flaherty, D. (2013). Concept

analysis: Resilience. *Archives of Psychiatric Nursing, 27*(6), 264-270.

https://doi.org/10.1016/j.apnu.2013.07.003

Garcia-Izquierdo, M., Rios-Risquez, M., Carillo-Garcia, C., & Sabuco-Tebar, E. (2018). The

moderating role of resilience in the relationship between academic burnout and the

perception of psychological health in nursing students. *Educational Psychology, 38*(8),

1068-1079. https://doi.org/10.1080/01443410.2017.1383073

Garner, L. (2002). Spirituality among baccalaureate nursing students at a private Christian

university and a public state university. *Christian Higher Education, 1*(4), 371-384.

https://doi.org/10.1080/15363750214577

Goree, K., Rieg, L., & Hobus, M. (2021). Why Christian nursing education? *Journal of Christian*

*Nursing, 38(*3), 148-151. https://doi.org/10.1097/CNJ.0000000000000841

Grabbe, L., Higgins, M., Baird, M., Craven, P., & Fratello, S. (2020). The Community

　　Resiliency Model® to promote nurse well-being. *Nursing Outlook, 68*(3), 324-336.

　　https://doi.org/10.1016/j.outlook.2019.11.002

Gruenberg, J., & Asumang, A. (2019). Axes of formation: A model for assessing theories of

　　spiritual formation. *Journal of Spiritual Formation & Soul Care, 12*(2), 22-231.

　　https://doi.org/10.1177/1939790919867722

Hamadeh, K., Garvey, L., Willetts, G., & Olasoji, M. (2021). Undergraduate nursing students'

　　resilience, challenges, and supports during coronavirus. *International Journal of Mental

　　Health Nursing, 30*(1), 1407-1416. https://doi.org/10.1111/inm.12896

Hargate, C. (2014). Will the real nurse please stand up? Improving nursing image through faith-

　　learning integration. *Journal of Christian Nursing, 32*(3), E27-31.

　　https://doi.org/10.1097/CNJ.0000000000000195

Hartman, S. (2022). A call for faith-integration among graduate nursing students. *Journal of

　　Christian Nursing, 39*(3), 179-185. https://doi.org/10.1097/CNJ.0000000000000854

He, F., Turnbull, B., Kirshbaum, M., Phillips, B., & Klainin-Yobas, P. (2018). Assessing stress,

　　protective factors and psychological well-being among undergraduate nursing students.

　　Nurse Education Today, 68, 4-12. https://doi.org/10.1016/j.nedt.2018.05.013

Hendrix, K. (2020). *Exploring the phenomena of developing and implementing new pre-

　　licensure baccalaureate nursing education programs in rural faith-based institutions*

　　[Unpublished doctoral dissertation].

Henshall, C., Davey, Z., & Jackson, D. (2020). Nursing resilience interventions- A way forward

　　in challenging healthcare territories. *Journal of Clinical Nursing, 29*, 3597-3599.

https://doi.org/10.1111/jocn.15276

Holmes, A. (1987). *The idea of a Christian college.* William Eerdmans Publishing Company.

Horner, J. (2020). Academic rigor in Christian schools: The academic effect of bible courses and integration of faith and learning in secondary education. *International Journal of Christianity & Education, 24(*2), 199-217. https://doi.org/10.1177/2056997119882027

Howard, E. (2018). *A guide to Christian spiritual formation: How scripture, Spirit, community, and mission shape our soul.* Baker Academic. ISBN: 978-0801097805

Hubing, J. (2020). Spiritual formation as kingdom orientation. *Bulletin of Ecclesial Theology, 7*(2), 35-52. https://www.pastortheologians.com/academic-articles/bet7-2/spiritual-formation-as-kingdom-orientation

Hughes, V., Swoboda, S., Taylor, J., Hudson, K., & Rushton, C. (2022). Strengthening external protective resources to promote prelicensure nursing students' resilience. *Journal of Professional Nursing, 39*, 10-18. https://doi.org/10.1016/j.profnurs.2021.12.003

Issler, K. (2012). Approaching formative scripture reading with both head and heart. *Journal of Spiritual Formation & Soul Care, 5*(1), 117-134.

Janzarik, G., Wollschlager, D., Wessa, M., & Lieb, K. (2022). A group intervention to promote resilience in nursing professionals: A randomised controlled trial. *International Journal of Environmental Research and Public Health, 19*(649), 1-18. https://doi.org/10.3390/ijerph19020649

Kim, Y. (2020). Think Christianly, think critically: Faith-learning integration, critical thinking, and perceived importance of worldview development among students in Christian higher education. *Religion & Education, 47*(3), 273-299. https://doi.org/10.1080/15507394.2020.1765068

Klink, E. (2020). Spiritual formation and the church. *Bulletin for Ecclesial Theology, 7*(2), 55-71. https://www.pastortheologians.com/academic-articles/bet7-2/spiritual-formation-and-the-church

Kuh, G., & Gonyea, R. (2006). Spirituality, liberal learning, and college student engagement. *Liberal Education, 92*(1), 40-47.

Kunzler, A., Chmitorz, A., Rothke, N., Staginnus, M., Schafer, S., Stoffers-Winterling, J., & Lieb, K. (2022). Interventions to foster resilience in nursing staff: A systematic review and meta-analyses of pre-pandemic evidence. *International Journal of Nursing Studies, 134,* 1-28. https://doi.org/10.1016/j.ijnurstu.2022.104312

Kwak, A., Ma, X., & Kim, S. (2021). When does social desirability become a problem? Detection and reduction of social desirability bias in information systems research. *Information & Management, 58,* 1-13. https://doi.org/10.1016/j.im.2021.103500

Lakens, D. (2013). Calculating and reporting effect sizes to facilitate cumulative science: A practical primer for *t*-test and ANOVAs. *Frontiers in Psychology*, *4*(863), 1-12. https://doi.org/10.3389/fpsyg.2013.00863

Le, Y., Piedmont, R., & Wilkins, T. (2019). Spirituality, religiousness, personality as predictors of stress and resilience among middle-aged Vietnamese-born American Catholics. *Mental Health, Religion & Culture, 22*(7), 754-768. https://doi.org/10.1080/1367476.2019.1646235

Lekan, D., Ward, T., & Elliot, A. (2018). Resilience in baccalaureate nursing students: An exploration. *Journal of Psychosocial Nursing and Mental Health Services, 56*(7), 46-55. https://doi.org/10.3928/02793695-20180619-06

Li, Z., & Hasson, F. (2020). Resilience, stress, and psychological well-being in nursing students:

A systematic review. *Nurse Education Today, 90*, 1-13.

https://doi.org/10.1016/j.nedt.2020.104440

Lin, L., He, G., Yan, J., Gu, C., & Xie, J. (2019). The effects of a modified mindfulness-based

stress reduction program for nurses: A randomized controlled trial. *Workplace Health

and Safety, 67*(3), 111-122. https://doi.org/10.1177/2165079918801633

Lu, J. (2021). Educational models of spiritual formation in theological education: Introspection-

based spiritual formation. *Teaching Theology and Religion, 24*, 28-41.

https://doi.org/10.1111/teth.12560

Maddix, M. (2018). Rediscovering the formative power of scripture reading for the Church.

Christian Education Journal, 15(1), 34-42. https://doi.org/10.1177/0739891318758410

Madewell, A., & Ponce-Garcia, E. (2016). Assessing resilience in emerging adulthood: The

resilience scale (RS), Connor-Davidson resilience scale (CD-RISC), and scale of

protective factors (SPF). *Personality and Individual Differences, 91*, 249-255.

https://doi.org/10.1016/j.paid.2016.03.036

Malale, K., Nyangena, E., & Kithinji, W. (2016). A comparative analysis of academic

performance of diploma nursing students of public, private, and faith based schools in

Tanzania. *International Journal of Nursing Education, 8*(2), 151-157.

https://doi.org/10.5958/0974-9357.2016.00067.2

Manomenidis, G., Panagopoulou, E., & Montgomery, A. (2019). Resilience in nursing: The role

of internal and external factors. *Journal of Nursing Management, 27*, 172-178.

https://doi.org/10.1111/jonm.12662

Marsden, G. (1997). *The outrageous idea of Christian scholarship.* Oxford University Press.

ISBN: 978-0195122909

Mayer, K., MacMillan, N., & Linehan, K. (2022). Student perspectives on sources of resilience during nursing school. *Nursing Education Perspectives, 43*(6), E59-E61. https://doi.org/10.1097/01.NEP.0000000000000994

McDermott, R., Fruh, S., Williams, S., Hauff, C., Graves, R., Melnyk, B., & Hall, H. (2020). Nursing students' resilience, depression, well-being, and academic distress: Testing a moderated mediation model. *Journal of Advanced Nursing, 76*, 3385-3397. https://doi.org/10.1111/jan.14531

McRay, B., Barwegen, L., Haase, D., Karianjahi, M., Larson, M., Ribbe, R., Schwanda, T., Setran, D., & Wilhoit, J. (2018). Spiritual formation and soul care in the department of Christian formation and ministry at Wheaton College. *Journal of Spiritual Formation and Soul Care, 11*(2), 271-295. https://doi.org/10.1177/1939790918795629

Mehrinejad, S., Tarsafi, M., & Rajabimoghadam, S. (2015). Predictability of students' resiliency by their spirituality. *Procedia Social and Behavioral Sciences, 205*, 396-400. https://doi.org/j.sbspro.2015.09.024

Meybodi, A., & Mohammadi, M. (2021). Identifying the components of spirituality affecting the resilience of nurses. *Journal of Nursing Management, 29*, 982-988. https://doi.org/10.1111/jonm.13235

Milner, K., Foito, K., & Watson, S. (2016). Strategies for providing spiritual care & support to nursing students. *Journal of Christian Nursing, 33*(4), 238-243. https://doi.org/10.1097/CNJ.0000000000000309

Mistretta, E., Davis, M., Temkit, M., Lorenz, C., & Stonnington, C. (2018). Resilience training for work-related stress among healthcare workers: Results of a randomized controlled clinical trial comparing in-person and smartphone delivered interventions. *Psychosomatic

Medicine, 60(6), 559-568. https://doi.org/10.1097/JOM.0000000000001285

Mitchell, A. (2021). Resilience and mindfulness in nurse training on an undergraduate

curriculum. *Perspectives in Psychiatric Care, 57*, 1474-1481.

https://doi.org/10.1111/ppc.12714

Morse, J., Kent-Maverick, J., Barry, L., Harvey, J., Okang, E., Rudd, E., Wang, C-Y., &

Williams, M. (2021). Developing the resilience framework for nursing and healthcare.

Global Qualitative Nursing Research, 8, 1-21.

https://doi.org/10.1177/23333936211005475

Mulholland, R. (1993). *Invitation to a journey; A road map for spiritual formation.* InterVarsity

Press.

Muto, S. (2012). The art and discipline of formative reading: Revisiting Holy scripture with

humble receptivity. *Journal of Spiritual Formation & Soul Care, 5*(1), 100-116.

O'Brien, M. (2022). *Spirituality in nursing; Standing on holy ground* (7th ed.). Jones & Bartlett

Learning. ISBN: 978-1284225044

Palmer, C. (2020). *Practicing prayer and attachment to God: A study of emerging adult spiritual

formation* [Unpublished Dissertation].

Parra-Frutos, I. (2013) Testing homogeneity of variances with unequal sample sizes.

Computational Statistics 28, 1269–1297 https://doi.org/10.1007/s00180-012-0353-x

Piedmont, R. (2010). *Assessment of spirituality and religious sentiments.* Loyola University

Maryland.

https://ezproxy.liberty.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true

&db=mmt&AN=test.3205&site=ehost-live&scope=site

Piedmont, R. (2020). *Assessment of Spirituality and Religious Sentiments: Technical Manual*

(3rd ed.). Ralph L. Piedmont. https://centerforprofessionalstudies.com/aspires/

Piedmont, R., Fox, J., & Copello, E. (2021). Whatsoever you do unto the least of my brethren you do unto me. Using the Assessment of Spirituality and Religiosity Sentiments (ASPIRES) scale in socially and economically marginalized rescue mission. *Religions, 12*(474), 1-18. https://doi.org/10.3390/rel12070474

Porter, S., Sandage, S., Wang, D., & Hill, P. (2019). Measuring the spiritual, character, and moral formation of seminarians: In search of a meta-theory of spiritual change. *Journal of Spiritual Formation and Soul Care, 12*(1), 5-24. https://doi.org/10.1177/1939790918797481

Rios-Risquez, M., Garcia-Izquierdo, M., Sabuco-Tebar, E., Carrillo-Garcia, C., & Solano-Ruiz, C. (2018). Connections between academic burnout, resilience, and psychological well-being in nursing students: A longitudinal study. *Journal of Advanced Nursing, 74*, 2777-2784. https://doi.org/10.1111/jan.13794

Sanders, L., Kopis, S., Moen, C., Pobanz, A., & Volk, F. (2016). Perceptions of spirituality and spiritual care in religious nurses. *Journal of Christian Nursing, 33*(4), 214-219. https://doi.org/10.1097/CNJ.0000000000000308

Schwalm, F., Zandavalli, R., Filho, E., & Lucchetti, G. (2022). Is there a relationship between spirituality/religiosity and resilience? A systematic review and meta-analysis of observational studies. *Journal of Health Psychology, 27*(5), 1218-1232. https://doi.org/10.1177/1359105320984537

Setran, D., & Wilhoit, J. (2020). Christian education and spiritual formation: Recent history and future prospects. *Christian Education Journal: Research on Educational Ministry, 17*(3), 530-546. https://doi.org/10.1177/0739891320937463

Shelly, J., Miller, A., & Fenstermacher, K. (2021). *Called to care: A Christian worldview for nursing* (3rd ed.). InterVarsity Press. ISBN: 978-1514000922

Southern Association of Colleges and Schools Commission on Colleges. (2023). *About SACSCOC.* https://sacscoc.org/

Spurr, S., Walker, K., Squires, V., & Redl, N. (2021). Examining nursing student's wellness and resilience: An exploratory study. *Nurse Education in Practice, 51*, 1-9. https://doi.org/10.1016/j.nepr.2021.102978

Stacey, G., & Cook, G. (2019). A scoping review exploring how the conceptualisation of resilience in nursing influences interventions aimed at increasing resilience. *International Practice Development Journal, 9(*1), 1-16. https://doi.org/10.19043/ipdj.91.009

Tennant, A. (2005). The making of the Christian: Richard J. Foster and Dallas Willard on the difference between discipleship and spiritual formation. *Christian Today, 49*(10), 42.

Tveit, B., Karvinen, I., Damsma-Bakker, A., Ylonen, M., Oosterhoff-Zielman, M., Fanuelsen, O., & Van Leeuwen, R. (2015). Balancing identity and diversity in faith-based nursing education: A case study from northern Europe. *Christian Higher Education, 14*(5), 283-297. https://doi.org/10.1080/15363759.2015.1079748

Warner, R. (2013). *Applied statistics; From bivariate through multivariate techniques* (2nd ed.). Sage Publications.

Wilhoit, J., & Howard, E. (2012). *Discovering Lectio Divina: Bringing scripture into ordinary life.* InterVarsity Press. ISBN:978-0830835706

Wilhoit, J., & Howard, E. (2020). The wisdom of Christian spiritual formation. *Journal of Spiritual Formation and Soul Care, 13(*1), 5-21. https://doi.org/10.1177/1939790920903841

Wilhoit, J., & Willard, D. (2008). *Spiritual formation as if the church mattered: Growing in Christ through community.* Baker Academic. ISBN: 978-081027765

Willard, D. (1988). *The spirit of the disciplines; Understanding how God changes lives.* HarperSanFrancisco.

Won, S., Heo, C., & Choi, Y. (2018). The effects of school life, emotional intelligence, and social intelligence on resilience of nursing university students. *Biomedical Research, 29(*21), 3829-3834. https://doi.org/10.4066/biomedicalresearch.29-18-1049

Ye, Y., Wu, C., Huang, T., & Yang, C. (2022). The difference between the Connor-Davidson Resilience Scale and the Brief Resilience Scale when assessing resilience: Confirmatory factor analysis and predictive effects. Global Mental Health, 9, 339-346. https://doi.org/10.1017/gmh.2022.38

APPENDIX A

[External] RE: Permission for use

███████████████

Mon 1/30/2023 3:55 PM

To: Fair, Lynette███████████████

You don't often get email from drralph@thecfps.com. Learn why this is important

Thank You for your email. As I understand your request, you wish to place a copy of the ASPIRES in your dissertation. The ASPIRES is a copyright protected instrument and as such cannot be reproduced as an Appendix or other attachment with your dissertation document. You can send interested parties to the website that contains all information about the ASPIRES: https://centerforprofessionalstudies.com. If you are interested in obtaining copies of the scale for your research, you can find all purchase and license related information at this website. If you have any questions, please do not hesitate to reach out.
Dr. Piedmont

From: Fair, Lynette ███████████████
Sent: Monday, January 30, 2023 9:01 AM
To: ███████████████
Subject: Permission for use

To Whom it may concern,

I am contacting you because I would like to ask permission to reproduce your instrument, the Assessment of Spirituality and Religious Sentiments (ASPIRES) found at https://web.s.ebscohost.com/ehost/detail/detail?vid=3&sid=c2d6ee57-c6d4-48bd-9e52-65b9ff847081%40redis&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl#AN=test.3205&db=mmt in my Dissertation. The Dissertation focuses on "The Impact of Spiritual Formation within Christian Education on Undergraduate Nursing Students' Resiliency." Therefore, your instrument measuring spirituality and religious sentiments is vital in this study. In addition, after defending my Dissertation, my program requires me to submit it for publication in the Liberty University open-access institutional repository, Scholars Commons. If you allow this, I will provide a citation of your work as follows:

Piedmont, R. (2010). Assessment of spirituality and religious sentiments. *Loyola University Maryland*.
    https://ezproxy.liberty.edu/login?url=https://search.ebscohost.com/login.aspx?
    direct=true&db=mmt&AN=test.3205&site=ehost-live&scope=site

I appreciate your consideration in this matter.

Sincerely,
Lynette Fair, Doctoral Candidate, MSN, RN, NE-BC
Director of Nursing
Associate Professor
Geneva College
███████████████

APPENDIX B

Dear Lynette,

Thank you for your interest in the Connor-Davidson Resilience Scale (CD-RISC). We are pleased to grant permission for use of the English CD-RISC-25 in the project you have described under the following terms of agreement:

1.   You agree (i) not to use the CD-RISC for any commercial purpose unless permission has been granted, or (ii) in research or other work performed for a third party, or (iii) provide the scale to a third party without permission. If other colleagues or off-site collaborators are involved with your project, their use of the scale is restricted to the project described, and the signatory of this agreement is responsible for ensuring that all other parties adhere to the terms of this agreement.

2   You may use the CD-RISC in written form, by telephone, or in secure electronic format whereby the scale is protected from copying, downloading, alteration, repeated use, unauthorized distribution or search engine indexing. In all use of the CD-RISC, including electronic versions, the full copyright and terms of use statement must appear with the scale. The scale should neither be distributed as an email attachment, nor appear on social media, nor in any form where it is accessible to the public and should be removed from electronic and other sites once the activity or project has been completed. The RISC can only be made accessible in electronic form after subjects have logged in through a link, password or unique personal identifier.

3   Further information on the CD-RISC can be found at the www.cd-risc.com website. The scale's content may not be modified, although in some circumstances the formatting may be adapted with permission of either Dr. Connor or Dr. Davidson. If you wish to create a non-English language translation or culturally modified version of the CD-RISC, please let us know and we will provide details of the standard procedures.

4   Three forms of the scale exist: the original 25 item version and two shorter versions of 10 and 2 items respectively. When using the CD-RISC 25, CD-RISC 10 or CD-RISC 2, whether in English or other language, please include the full copyright statement and use restrictions as it appears on the scale.

5.   A student-rate fee of $ 33 US is payable to Becky Williams at 936 Ridgeway Avenue, Signal Mountain, TN 37377, USA either by PayPal ▇▇▇▇▇▇▇▇▇ ccount ▇▇▇▇▇▇▇▇▇▇▇▇ or cheque. Money orders are not accepted.

6.   Complete and return this form via email to ▇▇▇▇▇▇▇▇▇▇ The scale will only be sent after the signed agreement has been returned.

7.   In any publication or report resulting from use of the CD-RISC, you do not publish or partially reproduce items from the CD-RISC without first securing permission from the authors.

If you agree to the terms of this agreement, please email a signed copy to the above email address. Upon receipt of the signed agreement, we will email a copy of the scale. For questions regarding use of the CD-RISC, please contact Becky Williams at ▇▇▇▇▇▇▇▇▇▇▇ We wish you well in pursuing your goals.

Sincerely yours,

Becky Williams.

Agreed to by:
Lynette Fair

_____   _____2/8/2023_____
Signature   (printed)   Date

Doctoral Student
_____
Title

Liberty University
_____
Organization

APPENDIX C

Consent

Consent

Title of the Project: The impact of Christian education on undergraduate nursing students' levels of spirituality and resiliency.
Principal Investigator: Lynette Rae Fair, Doctoral Candidate, School of Nursing, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be 18 years of age or older, enrolled in a pre-licensure bachelor degree nursing program, and attending courses in-person (online excluded). Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to compare pre-licensure bachelor degree nursing students' levels of spirituality and resiliency when attending two different types of nursing education programs.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:
1. Complete Part I of the survey which includes basic participant information. Completing Part I should take less than a minute.
2. Complete Part II of the survey which includes information regarding participant levels of spirituality and religiosity. Completing Part II consists of 35 items and should take approximately 14-16 minutes.
3. Complete Part III of the survey which includes information regarding resiliency. Completing Part III consists of 25 items and should take approximately 10-12 minutes.
4. Total time to complete to take part in this study should be approximately 24-28 minutes.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include adding to the body of knowledge regarding nursing student resiliency and developing resiliency in new nurses.

What risks might you experience from being in this study?

Liberty University
IRB-FY22-23-1729
Approved on 6-26-2023

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be anonymous.
- Data will be stored on a password-locked computer. After five years, all electronic records will be deleted.

How will you be compensated for being part of the study?

Participants will not be compensated for participating in this study.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Lynette Rae Fair. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at ██████████████ You may also contact the researcher's faculty sponsor, Dr. Elizabeth Whorley, at ██████████████

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is

Liberty University
IRB-FY22-23-1729
Approved on 6-26-2023

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. You will be given a copy of this document for your records/you can print a copy of the document for your records. If you have any questions about the study later, you can contact the researcher using the information provided above.

APPENDIX D

IRB Approval

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

June 26, 2023

Lynette Fair
Elizabeth Whorley

Re: IRB Exemption - IRB-FY22-23-1729 The impact of Christian education on undergraduate nursing students' levels of spirituality and resiliency

Dear Lynette Fair, Elizabeth Whorley,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at ████████████.

Sincerely,
G. Michele Baker, PhD, CIP
Administrative Chair
Research Ethics Office

APPENDIX E

Nursing Directors Preliminary Permissions

RE: Seeking preliminary dissertation study participation

Turner, Tracey (Nursing) ████████████████
Fri 2/24/2023 2:51 PM
To: Fair, Lynette ████████████
Thank you, Lynette. You have preliminary approval.

Blessings,

Dr. Tracey M. Turner, EdD, MSN, RNC-OB
Interim Dean
School of Nursing
████████████

LIBERTY
U N I V E R S I T Y

Liberty University | Training Champions for Christ since 1971

From: Fair, Lynette ████████████
Sent: Friday, February 24, 2023 9:12 AM
To: Turner, Tracey (Nursing) ████████████
Subject: Re: Seeking preliminary dissertation study participation

Good Morning, Dr. Turner,
My plan is to utilize the Assessment of Spirituality and Religiosity (ASPIRES) and the Connor-Davidson Resilience Scale (CD-RISC). I will be combining these into one survey. The goal of my dissertation is to compare nursing students who attend a Christian nursing education and those who do not attend a faith-based nursing program and their levels of spirituality and resiliency.
I am in the early stages of the dissertation proposal. I am working with Dr. Whorley as Chair.
Please let me know if you have any other questions.
Lynette Fair

From: Turner, Tracey (Nursing) ████████████
Sent: Wednesday, February 22, ████ :14 PM
To: Fair, Lynette ████████████
Subject: RE: Seeking preliminary dissertation study participation

Lynette,

Could you please share the tool you are considering using?

Blessings,

Dr. Tracey M. Turner, EdD, MSN, RNC-OB
Interim Dean
School of Nursing
████████████

Re: [External] Seeking Dissertation Study Preliminary Agreement

Kathleen Rayman ████████████████
Wed 3/22/2023 2:26 PM
To: Fair, Lynette ████████████████

Hello Lynette, we would be happy to invite our students to participate in your dissertation study. We will need a copy of the IRB approval in addition to the documents you mentioned. Good luck to you as you plan your study. We will have approximately 106 prelicensure students in fall 2023.
Wishing you a good day,
Dr. Rayman

On Wed, Mar 22, 2023 at 3:16 PM Fair, Lynette ████████████████ wrote:

Dear Dr. Rayman,

I am writing to inquire about a preliminary agreement to participate in my doctoral dissertation research study evaluating the connection of spirituality and resiliency in undergraduate pre-licensure baccalaureate nursing students. I am seeking only a tentative agreement at this time to determine the potential nursing programs I can include in my proposal brief.

I am writing my dissertation proposal this spring and wanted to know if you would be willing to participate (when it comes time and after IRB approval) by emailing all of your pre-licensure baccalaureate nursing students a link to a survey that would take approximately 15 minutes to complete. The data collection is planned for the fall of 2023 academic semester. It would be helpful to know the average number of pre-licensure baccalaureate students enrolled in your program.

I appreciate your consideration of participation, and I look forward to your response.

Sincerely,

Lynette R. Fair, Ph.D.(c), MSN, RN, NE-BC
Liberty University Doctoral Student
Director of Nursing
Associate Professor Geneva College
████████████████

--
Kathleen M. Rayman, PhD, RN
(she/ her/ hers)
Professor and Chair of Nursing
████████████████
████████████████
████████████████

APPENDIX F

Participant Recruitment Email with Survey Link A

Dear Potential Participant,

As a doctoral candidate in the School of Nursing at Liberty University, I am conducting research on the impact of spirituality on nursing student resiliency. The purpose of my research is to compare groups of students from different types of nursing programs and compare their levels of spirituality and resiliency, and I am writing to invite you to join my study.

Participants must be 18 years of age or older, attend residential nursing classes, and enrolled in a pre-licensure bachelor degree of nursing program. Participants will be asked to take an anonymous, online survey. It should take approximately 24 to 28 minutes to complete the procedure listed. It will be completely anonymous, and no personal, identifying information will be collected.

If you agree to be in this study, I will ask you to do the following:

1. Open the electronic link to the participant survey. Opening the electronic link should take less than 30 seconds.
2. Complete Part I of the survey which includes basic participant information. Completing Part I should take less than a minute.
3. Complete Part II of the survey which includes information regarding participant levels of spirituality and religiosity. Completing Part II consists of 35 items and should take approximately 14-16 minutes.
4. Complete Part III of the survey which includes information regarding resiliency. Completing Part III consists of 25 items and should take approximately 10-12 minutes.
5. Total time to complete to take part in this study should be approximately 24-28 minutes.

To participate, please click here or paste this link in your browser https://liberty.co1.qualtrics.com/jfe/form/SV_7QcAX5DscrOcYgm and complete the study survey.

A consent document is provided as the first page of the survey after you have contested you are over the age of 18. The consent document contains additional information about my research.

Because participation is anonymous, you do not need to sign and return the consent document unless you would prefer to do so. After you have read the consent form, please click the link to proceed to the survey. Doing so will indicate that you have read the consent information and would like to take part in the study.

Sincerely,
Lynette Fair
Doctoral Candidate
School of Nursing, Liberty University

Participant Recruitment Email with Survey Link B

Dear Potential Participant,

As a doctoral candidate in the School of Nursing at Liberty University, I am conducting research on the impact of spirituality on nursing student resiliency. The purpose of my research is to compare groups of students from different types of nursing programs and compare their levels of spirituality and resiliency, and I am writing to invite you to join my study.

Participants must be 18 years of age or older, attend residential nursing classes, and enrolled in a pre-licensure bachelor degree of nursing program. Participants will be asked to take an anonymous, online survey. It should take approximately 24 to 28 minutes to complete the procedure listed. It will be completely anonymous, and no personal, identifying information will be collected.

If you agree to be in this study, I will ask you to do the following:
1. Open the electronic link to the participant survey. Opening the electronic link should take less than 30 seconds.
2. Complete Part I of the survey which includes basic participant information. Completing Part I should take less than a minute.
3. Complete Part II of the survey which includes information regarding participant levels of spirituality and religiosity. Completing Part II consists of 35 items and should take approximately 14-16 minutes.
4. Complete Part III of the survey which includes information regarding resiliency. Completing Part III consists of 25 items and should take approximately 10-12 minutes.
5. Total time to complete to take part in this study should be approximately 24-28 minutes.

To participate, please click here or paste this link into your browser
https://liberty.co1.qualtrics.com/jfe/form/SV_0pRsgichLbH3puC and complete the study survey.

A consent document is provided as the first page of the survey after you have contested you are over the age of 18. The consent document contains additional information about my research.

Because participation is anonymous, you do not need to sign and return the consent document unless you would prefer to do so. After you have read the consent form, please click the link to proceed to the survey. Doing so will indicate that you have read the consent information and would like to take part in the study.

Sincerely,

Lynette Fair
Doctoral Candidate
School of Nursing, Liberty University