

Inner Armor: Role of Spiritual and Psychological Well-Being on Compassion Fatigue Among Nursing Students

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Abstract

Compassion fatigue is an increasing concern in nursing education because students are exposed to academic demands, clinical responsibilities, patient suffering, trauma, and emotionally difficult care situations while still developing professional competence and coping capacity. This study aimed to determine the role of spiritual well-being and psychological well-being in compassion fatigue among third- and fourth-year nursing students at Capitol University. The study was anchored on Jean Watson's Theory of Human Caring, Figley's Compassion Fatigue Theory, and Betty Neuman's Systems Model, which collectively framed spiritual well-being and psychological well-being as internal protective resources or "inner armor" against emotional exhaustion and trauma-related stress. A quantitative approach using descriptive, correlational, and causal-comparative designs was employed. The respondents were 243 third- and fourth-year nursing students selected through stratified random sampling. Data were gathered using standardized and adapted self-report instruments, including the Spiritual Well-Being Scale for religious and existential well-being, the Connor-Davidson Resilience Scale for psychological resilience, the Mindful Attention Awareness Scale for trait mindfulness, and the Professional Quality of Life Scale Version 5 for burnout and secondary traumatic stress. Data were analyzed using mean, standard deviation, Pearson's correlation coefficient, and multiple regression analysis. Findings showed that nursing students had high levels of spiritual well-being and psychological well-being, while compassion fatigue was moderately high in terms of burnout and secondary traumatic stress. Religious and existential well-being had significant moderate negative correlations with compassion fatigue, while resilience and trait mindfulness had stronger significant negative correlations. Regression analysis showed that the combined model significantly predicted compassion fatigue, with resilience and trait mindfulness emerging as significant predictors, while religious and existential well-being were not significant predictors when entered simultaneously with the psychological variables. The study concludes that spiritual and psychological well-being function as protective internal resources, with psychological well-being, particularly resilience and mindfulness, playing the strongest role in reducing compassion fatigue. The study recommends strengthening student mental health support, resilience-building, mindfulness training, counseling services, spiritual care, reflective learning, mentoring, and supportive clinical supervision in nursing education and clinical training. The study aligns with SDG 3, Good Health and Well-Being, and SDG 4, Quality Education, because it supports nursing students' mental health, emotional resilience, and learning readiness. Its sustainability impact lies in promoting institutional, educational, and public health sustainability by helping prepare emotionally stable, compassionate, and resilient future nurses.

Keywords: Burnout; Compassion Fatigue; Existential Well-Being; Nursing Students; Psychological Resilience; Psychological Well-Being; Religious Well-Being; Secondary Traumatic Stress; Spiritual Well-Being; Trait Mindfulness

1. Introduction

Nursing education places students in emotionally complex and psychologically demanding environments. During clinical training, students may encounter patient suffering, trauma, and death, particularly in high-acuity areas such as the Intensive Care Unit and Emergency Room. These experiences may create emotional strain before students have fully developed professional coping capacities, making them vulnerable to compassion fatigue. Compassion is a fundamental aspect of nursing practice; however, continuous empathic involvement in patient care can lead to emotional, physical, and psychological exhaustion due to the prolonged demands of caregiving. Compassion fatigue may appear as emotional weariness, depersonalization, diminished empathy, and reduced personal and professional effectiveness (Xie et al., 2021). A meta-analysis by Xie et al. (2021) showed that nurses worldwide experience moderate levels of compassion fatigue, with higher susceptibility among Asian nurses and nurses working in critical care settings. These findings suggest that compassion fatigue may begin during professional training and must be addressed within nursing education. This study focuses on the protective role of spiritual well-being and psychological well-being. Spiritual well-being refers to meaning,

purpose, connectedness, and faith-based or existential grounding, while psychological well-being refers to adaptive internal capacities such as resilience, mindfulness, emotional regulation, and coping. In this study, these internal resources are conceptualized as the students' "inner armor," helping them remain grounded, emotionally balanced, and compassionate despite the pressures of clinical training (Chirico et al., 2023).

Related literature emphasizes that spiritual well-being is a vital component of holistic health among nursing students and professionals. Higher levels of spiritual well-being are linked to improved mental health, lower stress levels, and enhanced self-care practices among nursing students. Spiritual well-being also contributes to professional quality of life by helping nurses cope with ethical challenges and workplace demands. Strong spiritual well-being is associated with lower levels of compassion fatigue, enabling nurses to maintain empathy, resilience, and professional engagement despite frequent exposure to suffering and stress. Spiritual well-being also supports holistic care. Nurses with higher spiritual well-being showed greater confidence and willingness to provide spiritual care, suggesting that personal spirituality can strengthen spiritually sensitive and patient-centered care. In nursing education, spiritual care programs significantly improved students' spiritual well-being, existential well-being, and competence in spiritual care (Lee & Kim, 2024). Spiritual well-being was also linked with psychological capital, including hope, optimism, self-efficacy, resilience and with lower perceived stress and stronger self-care behaviors in physical, emotional, and social domains (Fernández-Pascual et al., 2025). Nurses with higher levels of spiritual well-being tend to be more willing and confident in addressing patients' spiritual needs. Spirituality also serves as a source of psychological support during challenging situations by fostering trust, encouragement, and personal growth.

Existential and religious well-being are important dimensions of spiritual well-being. Existential well-being gives nursing students a sense of meaning, coherence, purpose, and inner peace when facing suffering, uncertainty, and mortality in clinical practice. Higher spiritual health, including existential well-being, was associated with better overall well-being among intensive care nursing students. Inner peace and meaning were also linked to lower stress and higher self-care (Fernández-Pascual et al., 2025), while reflective practices such as journaling, mindfulness, and narrative reflection may strengthen existential insight and readiness for holistic care (Lee & Kim, 2024). Religious well-being, expressed through faith, connection to a higher power, and religious practices, has also been associated with greater compassion and lower compassion fatigue among ICU and perioperative nurses. Religious or spiritual beliefs provided psychological reinforcement during crisis situations. Psychological well-being is another major protective resource; it encompasses emotional stability, life satisfaction, autonomy, a sense of purpose, and positive interpersonal relationships, enabling students to better understand clinical demands and respond effectively to stressful situations. Nursing students with stronger psychological well-being are better able to regulate emotions, maintain clarity of thought, and cope constructively with distressing situations (Jeong et al., 2020). Emotional regulation also mediates the relationship between stress exposure and psychological health outcomes, making psychological well-being a buffer against burnout risk. Psychological well-being supports attentional control, reflective thinking, clinical judgment, patient-centered decision-making, and patient safety. It also strengthens empathy, patience, communication, conflict-resolution, and teamwork, while improving adaptability to unpredictable clinical situations (Xie et al., 2021). As nursing students face increasingly demanding tasks, psychological well-being helps counteract emotional fatigue and preserve professional engagement (Aradilla-Herrero & Tomás-Sábado, 2019).

Resilience and trait mindfulness are emphasized as key psychological resources. Resilience allows students to withstand adversity, adapt to challenges, and recover from stress while maintaining stable functioning (Henshall et al., 2020). Resilient students can transform stressors into learning opportunities, strengthening motivation, professional identity, and long-term retention in nursing (Reyes et al., 2020). Resilience can be cultivated through reflective journaling, peer mentoring, faculty support, and simulation-based learning (Delgado et al., 2017). It also helps mitigate emotional exhaustion, compassion fatigue, and secondary traumatic stress (Henshall et al., 2020; Alharbi et al., 2022). Trait mindfulness, on the other hand, supports present-moment awareness, nonjudgmental attention, stress management, and emotional clarity (Gauthier et al., 2016). It enhances attentional control, cognitive flexibility, academic performance, and decision-making (van der Riet et al., 2018). Mindfulness promotes empathy and compassionate presence (Daya & Hearn, 2018), reduces stress, depression, and burnout symptoms (Valenstein-Mah et al., 2020), and strengthens resilience and psychological well-being through adaptive coping and emotional endurance. Compassion fatigue in nursing education includes burnout and secondary traumatic stress. A systematic review and meta-analysis indicated that nurses commonly experience moderate levels of burnout and secondary traumatic stress, with similar concerns also reported among nursing students during clinical internships (Xie et al., 2021). In one study of nursing interns, a substantial proportion experienced moderate to severe compassion fatigue, alongside notable levels of burnout and secondary traumatic stress based on measured scores. Compassion fatigue is associated with several key factors, including heavy workload, poor working conditions, limited social support, low job satisfaction, and decreased psychological resilience. For students, academic requirements and clinical exposure can further heighten these stressors, while cultural and contextual influences may intensify moral responsibility and emotional strain in collectivist settings.

Burnout is a prolonged response to ongoing occupational stress, typically characterized by emotional exhaustion, detachment, depersonalization, and a diminished sense of accomplishment. It is commonly associated with factors such as heavy workloads, night shifts, staffing shortages, rotating schedules, and unsupportive work environments. Higher levels of burnout have also been associated with increased psychological distress, less effective coping strategies, and reduced compassion satisfaction. Burnout has also been identified among nursing interns. Long-term strategies such as manageable workload, supportive supervision, wellness programs, and resilience-building initiatives are needed to prevent chronic burnout. Secondary Traumatic Stress refers to trauma-like symptoms arising from indirect exposure to suffering, trauma, or death. A study involving nursing interns found that students are vulnerable to secondary traumatic stress, with night shifts and workload patterns serving as key contributing factors. This condition may emerge soon after exposure to traumatic clinical events and, if left unaddressed, can reduce empathy, weaken emotional well-being, and impair professional performance. Research involving trauma-center nurses found that secondary traumatic stress and low compassion satisfaction are important predictors of increased burnout. Preventive strategies such as structured debriefing, psychological support, mentorship, reflective practice, and improved shift scheduling have been suggested to help reduce the risk of secondary traumatic stress progressing into chronic compassion fatigue.

Studies also show an inverse relationship between compassion fatigue and both spiritual and psychological well-being. Stronger spiritual well-being helps nurses experience meaning, purpose, connection, inner peace, and resilience, reducing vulnerability to compassion fatigue (Rizqi & Wirawan, 2020). Spiritual practices such as mindfulness, prayer, and reflection have been linked with lower compassion fatigue and burnout. Sorenson et al. (2017) found that spiritual well-being predicted lower compassion fatigue, while Özyurt et al. (2018) reported that healthcare students with higher spiritual awareness and purpose were less susceptible to emotional depletion. Stronger spiritual resources among nurses have also been associated with higher emotional stability and greater resilience. Psychological well-being likewise reduces compassion fatigue. Positive psychological functioning helps nurses cope with repeated exposure to patient trauma (Aradilla-Herrero & Tomás-Sábado, 2019), while emotional regulation helps prevent internalization of patient suffering and supports professional boundaries. Psychological resilience and emotional stability have been identified as factors that help reduce the risk of compassion fatigue. Emotional regulation and moral resilience have been shown to reduce the likelihood of burnout and secondary traumatic stress. Alharbi et al. (2022) found that nursing students with stronger psychological well-being demonstrated lower compassion fatigue during clinical exposure. The interaction between spiritual and psychological well-being is also important because spiritual well-being reinforces resilience through acceptance, gratitude, and cognitive reframing (Chan et al., 2020). Meaning-making helps transform distressing experiences into personal and professional growth, while compassion satisfaction counteracts compassion fatigue. Overall, strong spiritual and psychological well-being operate as buffers and moderators against compassion fatigue (Al-Maadeed & Al-Kaabi, 2021).

Several factors influence compassion fatigue among nursing students and healthcare professionals. Psychological resilience and adaptive coping reduce vulnerability to compassion fatigue (Alharbi et al., 2022). Spiritual meaning, religious engagement, and connectedness buffer emotional exhaustion (Sorenson et al., 2017). Clinical exposure to trauma, end-of-life care, and high-acuity conditions increases emotional strain and secondary traumatic stress. Workload, academic pressure, long clinical hours, performance expectations, and insufficient rest accelerate burnout and decrease empathy (Alharbi et al., 2022). Faculty mentorship, peer support, debriefing, counseling, and supportive learning environments help reduce emotional burden and strengthen well-being (Sorenson et al., 2017).

Globally, compassion fatigue has been documented among healthcare professionals, with increasing evidence that it can begin during professional training. Xie et al. (2021) reported moderate levels of compassion fatigue among nurses, particularly among Asian nurses and those in critical care settings. Global literature recognizes the role of resilience and mindfulness in reducing compassion fatigue, but much of the evidence focuses on practicing nurses rather than students. Spiritual well-being also remains less represented in empirical studies despite its relevance to emotional exhaustion, moral distress, and professional quality of life. Nationally, Philippine studies have focused mainly on practicing nurses, especially during and after the COVID-19 pandemic. De los Santos (2023) reported that Filipino nurses experienced moderate compassion fatigue associated with stress, poorer mental health, and higher intention to leave the profession. Villanueva and Bernardo (2019) documented high prevalence rates of burnout and secondary traumatic stress among Filipino nurses. However, national studies have not sufficiently examined spiritual well-being as a protective factor, even though spirituality is deeply rooted in Filipino culture and nursing practice. Psychological well-being constructs such as trait mindfulness and resilience have also received limited attention among nursing students. Locally, there is a research gap on compassion fatigue among nursing students in Cagayan de Oro City. The present study addresses this gap by focusing on third- and fourth-year nursing students at Capitol University. It examines whether spiritual well-being, resilience, and trait mindfulness can predict or protect against compassion fatigue during clinical training.

This study is grounded in Jean Watson's Theory of Human Caring, Figley's Compassion Fatigue Theory, and Betty Neuman's Systems Model. Together, these theories explain how internal resources may protect nursing students from

compassion fatigue. Jean Watson's Theory of Human Caring emphasizes that caring begins with the development of the nurse's inner self. Authentic compassionate care requires emotional presence, spiritual awareness, and reflective consciousness (Watson, 2008; Watson, 2018). Mindfulness and resilience support emotional regulation, self-awareness, and compassionate presence, which are central to Watson's caring philosophy (Watson, 2018; Chirico et al., 2023). Watson's theory supports the idea that spiritual and psychological well-being help nursing students sustain compassion without becoming emotionally depleted (Watson, 2008). Figley's Compassion Fatigue Theory explains how sustained empathic engagement with suffering individuals may lead to emotional and psychological exhaustion. Compassion fatigue arises from prolonged exposure to trauma, empathic concern, and emotional investment (Figley, 1995; Figley, 2002). When empathy is not balanced by adequate psychological and spiritual resources, emotional reserves may be depleted, increasing vulnerability to compassion fatigue (Figley, 2002). Strengthening spiritual well-being, trait mindfulness, and psychological resilience may interrupt the progression from empathic engagement to emotional exhaustion (Figley, 1995).

Betty Neuman's Systems Model views individuals as open systems interacting with internal and external stressors. System stability depends on lines of defense involving physiological, psychological, sociocultural, developmental, and spiritual variables (Neuman & Fawcett, 2011). Spiritual grounding, trait mindfulness, and resilience serve as internal defenses against clinical stressors and reduce the likelihood of emotional strain and compassion fatigue (Neuman & Fawcett, 2011). Enhancing spiritual and psychological well-being supports system stability during demanding clinical experiences (Neuman & Fawcett, 2011). Conceptually, the study proposes that spiritual well-being and psychological well-being serve as protective "inner armor" against compassion fatigue. Spiritual well-being includes religious well-being and existential well-being, while psychological well-being includes resilience and trait mindfulness. These variables are expected to relate negatively to compassion fatigue, which includes burnout and secondary traumatic stress. The framework assumes that students with higher spiritual and psychological well-being will demonstrate lower compassion fatigue.

The literature indicates that compassion fatigue is well documented among nurses, but less attention has been given to nursing students who are still developing coping skills and professional identity. Existing global studies have focused more on practicing nurses than students, while spiritual well-being remains underexamined as a protective factor. Philippine studies have emphasized occupational stress and mental health outcomes among practicing nurses but have given limited empirical attention to spiritual well-being, trait mindfulness, and resilience among nursing students. The local gap is especially evident in Cagayan de Oro City, where limited research has examined compassion fatigue among nursing students. Although students are exposed to clinical stressors, little is known about how spiritual and psychological resources buffer emotional exhaustion, depersonalization, burnout, and secondary traumatic stress. This study therefore provides local empirical evidence on the role of spiritual well-being, resilience, and mindfulness in predicting or reducing compassion fatigue among third- and fourth-year nursing students at Capitol University. The rationale of the study lies in its contribution to nursing education, student support, and future healthcare practice. By identifying protective internal resources, the study may guide the development of wellness programs, resilience-building activities, reflective practices, spiritual care components, counseling services, debriefing sessions, mentoring programs, and psychologically safe clinical learning environments. These interventions may help students sustain empathy, regulate emotions, preserve compassion, and prepare for professional nursing roles.

This study aligns primarily with SDG 3 – Good Health and Well-Being because it focuses on mental health, emotional well-being, resilience, and prevention of compassion fatigue among nursing students. Compassion fatigue affects how students think, feel, function, and care for patients. By examining spiritual and psychological well-being as protective factors, the study supports preventive mental health strategies, emotional stability, and the development of a healthier future nursing workforce. The study also aligns with SDG 4 – Quality Education because student well-being is directly related to learning quality, clinical readiness, professional formation, and academic success. A nursing education environment that strengthens resilience, mindfulness, spiritual grounding, and emotional regulation can help students learn more effectively and develop into competent, compassionate, and ethically grounded practitioners. This study contributes to public health sustainability by supporting the emotional and mental well-being of future nurses. Nursing students who are protected from compassion fatigue are more likely to provide safe, compassionate, and patient-centered care. In this sense, student well-being is not only an educational concern but also a healthcare workforce concern.

The study contributes to educational sustainability by providing evidence that nursing programs may use to strengthen student welfare, holistic formation, resilience-building, reflective practice, and mental health support. These improvements can help sustain student engagement, academic persistence, and readiness for clinical practice. The study contributes to institutional sustainability by guiding nursing schools, hospitals, faculty, clinical instructors, and administrators in creating supportive systems that reduce burnout risk and promote student retention. It may inform institutional policies on wellness programs, counseling services, mentoring, spiritual enrichment, debriefing, and supportive clinical supervision. The study contributes to cultural sustainability by recognizing the relevance of spirituality, meaning, faith, and values formation within Filipino nursing education while respecting diversity of belief. It also supports community sustainability because resilient and compassionate nursing students are more likely to become emotionally stable, ethically grounded, and service-

oriented healthcare professionals. Overall, the study strengthens multidisciplinary sustainability by linking mental health, nursing education, clinical training, institutional support, cultural values, and healthcare workforce development. It positions spiritual and psychological well-being as protective resources that can help sustain compassionate care and reduce compassion fatigue among future nurses.

2. Material and methods

2.1 Research Design

This study employed a quantitative approach using descriptive, correlational, and causal-comparative designs to examine the predictive influence of spiritual well-being and psychological well-being on compassion fatigue among nursing students. The descriptive design was used to determine the participants' levels of spiritual well-being, psychological well-being, and compassion fatigue, providing baseline evidence on the condition of the student population (Polit & Beck, 2021). The correlational design was used to determine the strength and direction of relationships among the variables through Pearson's r , particularly whether higher spiritual and psychological well-being were associated with lower compassion fatigue. This design was appropriate because it allowed the researcher to examine psychosocial variables that could not be ethically or practically manipulated (Grove & Gray, 2019). The causal research design was also applied to determine the influence of spiritual well-being and psychological well-being on compassion fatigue without manipulating the variables (Siedlecki, 2020). The quantitative framework allowed the study to measure the variables numerically using standardized tools and analyze the data objectively to generate evidence-based recommendations for nursing education, mental health support, and policy development (Polit & Beck, 2021).

2.2 Locale of the Study

The study was conducted at the College of Nursing of Capitol University, a private higher education institution located in Cagayan de Oro City, Misamis Oriental, Philippines. Capitol University promotes quality education, professional competence, ethical responsibility, holistic development, and community responsiveness. Its College of Nursing provides classroom instruction, skills laboratory experiences, clinical exposure, and community-based learning activities that prepare students to become competent, compassionate, and ethical healthcare professionals. Nursing students in this setting are exposed to academic demands, clinical responsibilities, patient care experiences, and emotionally challenging situations that require empathy, critical decision-making, and professional accountability. These characteristics made the College of Nursing an appropriate setting for examining spiritual well-being, psychological well-being, and compassion fatigue among nursing students.

2.3 Respondents of the Study

The respondents of the study were third- and fourth-year Bachelor of Science in Nursing students enrolled at Capitol University during the second semester of academic year 2025–2026. These students were selected because they had academic and clinical exposure relevant to the study variables. Their experiences in clinical settings, patient care responsibilities, and nursing-related academic requirements provided an appropriate basis for examining their spiritual well-being, psychological resilience, trait mindfulness, and compassion fatigue.

2.4 Sample and Sampling Procedure

The study used stratified random sampling to ensure adequate representation from the third- and fourth-year levels of the nursing program. The total population consisted of 657 nursing students, composed of 372 third-year students and 285 fourth-year students. Stratified random sampling was appropriate because it divided the population into subgroups based on academic year level, thereby improving representativeness and reducing sampling bias (Polit & Beck, 2021). Within each stratum, simple random sampling was applied so that every student had an equal chance of inclusion. The sample size was computed using the Raosoft® sample size calculator based on population size, confidence level, and margin of error. A total of 243 students were selected, consisting of 138 third-year students and 105 fourth-year students. This sampling procedure allowed proportional representation of both year levels and supported the accuracy of the findings.

2.5 Research Instrument

The study used standardized self-report instruments to measure spiritual well-being, psychological resilience, trait mindfulness, and compassion fatigue. All items were adapted to a 5-point Likert-like scale ranging from 1, interpreted as "Strongly Disagree/Never," to 5, interpreted as "Strongly Agree/Always." This uniform scaling procedure allowed consistent scoring and comparison across all constructs. Spiritual well-being was measured using the Spiritual Well-Being Scale (SWBS) developed by Paloutzian and Ellison (1982). The scale consisted of 20 items divided into Religious Well-Being and Existential Well-Being, with 10 items for each subscale. Religious Well-Being assessed the quality of the student's relationship with God or a higher power, while Existential Well-Being assessed meaning, purpose, and life satisfaction. Psychological well-being was measured through psychological resilience and trait mindfulness. Psychological resilience was measured using the Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003), an adopted

15-item instrument assessing the ability to cope with stress, adapt to adversity, and maintain psychological stability. Trait mindfulness was assessed using the Mindful Attention Awareness Scale (MAAS) developed by Brown and Ryan (2003), a 15-item scale measuring present-centered awareness and non-judgmental attention to experiences.

Compassion fatigue was measured using the Professional Quality of Life Scale, Version 5 (ProQOL 5) developed by Stamm (2010). The study focused on the Burnout and Secondary Traumatic Stress dimensions, each consisting of 10 items. The four instruments were integrated into one self-report questionnaire to assess the students' internal protective resources, collectively conceptualized as "inner armor," and their relationship to compassion fatigue. The validity of the instrument was established through expert review. Validity refers to the accuracy of a study's results and the extent to which an instrument measures what it is intended to measure (Davies, 2007). Three experts reviewed the questionnaire for relevance, clarity, and appropriateness in assessing spiritual well-being, psychological resilience, trait mindfulness, and compassion fatigue among nursing students. Reliability was tested through a pilot test involving 30 nursing students who were not part of the main study. Cronbach's Alpha was used to determine internal consistency. The results showed high reliability for Religious Well-Being, Existential Well-Being, Psychological Resilience, Trait Mindfulness, Burnout, and Secondary Traumatic Stress, with an overall Cronbach's Alpha of 0.893, interpreted as reliable.

2.6 Data Gathering Procedure

Before data collection, the researcher secured the necessary permissions and approvals from the appropriate institutional authorities. A letter of consent was obtained from the Dean of the College of Nursing, followed by approval from the Vice President of Research, Extension, Planning, and Innovations. A letter of consent was also sent to the institution through the Dean of the College of Health and Sciences of Capitol University. These procedures ensured compliance with institutional research governance and ethical standards (Polit & Beck, 2021). The researcher first sought the adviser's approval after the manuscript was assessed and reviewed. After the proposal, the researcher incorporated the comments and suggestions of the adviser, completed the necessary forms, and submitted them to the Vice President of Research, Extension, Planning, and Innovations of Liceo de Cagayan University for final approval. The questionnaire was then prepared for distribution to the participants. These steps were consistent with recommended research protocols requiring systematic planning, ethical clearance, and methodological rigor before data collection (Grove & Gray, 2019; Polit & Beck, 2021).

Participants were informed about the purpose and procedures of the study and were invited to participate voluntarily. They were given the right to withdraw at any time and were required to provide informed consent before answering the questionnaire. The survey was administered through Google Forms. Access to the data was restricted to authorized individuals, including the principal investigator, adviser, data processor, statistician, and other personnel involved in data analysis. The data were organized, tabulated, analyzed, and interpreted according to the objectives of the study. Anonymity and confidentiality were maintained throughout the research process, and participants were not identified in any publication or report (Polit & Beck, 2021).

2.7 Data Analysis Techniques

The collected data were gathered, tabulated, organized, analyzed, and presented using a 5-point Likert-like scale, mean, standard deviation, Pearson's product-moment correlation, and multiple regression analysis. The mean and standard deviation were used to determine the levels of spiritual well-being, psychological resilience, trait mindfulness, and compassion fatigue among the respondents. The mean described the average value of the dataset, while the standard deviation measured the dispersion of responses around the mean (Field, 2018). Pearson's product-moment correlation was used to determine the strength and direction of significant relationships between spiritual well-being, psychological resilience, trait mindfulness, and compassion fatigue. Pearson's r correlation coefficient was appropriate for examining linear relationships between continuous variables (Gravetter & Wallnau, 2017). Multiple linear regression analysis was used to determine the causal impact of spiritual well-being, psychological resilience, and trait mindfulness on compassion fatigue and to identify which variables significantly predicted compassion fatigue while controlling for the influence of other factors (Tabachnick & Fidell, 2019).

For the first three research problems, descriptive statistics using mean and standard deviation were applied to determine the levels of spiritual well-being, psychological resilience, trait mindfulness, and compassion fatigue. For the fourth research problem, Pearson's product-moment correlation was used to determine the significant relationships among the study variables. For the fifth research problem, multiple regression analysis was used to examine the influence of spiritual well-being, psychological resilience, and trait mindfulness on compassion fatigue.

2.8 Ethical Considerations

Ethical considerations were strictly observed to protect the rights, dignity, privacy, and welfare of the respondents. Before data collection, the researcher secured the necessary institutional approvals and complied with the requirements of the Research Ethics Board. Participants received an informed consent form explaining the purpose of the study, procedures,

and their rights as respondents. Participation was voluntary, and respondents were informed that they could withdraw at any time without penalty. Confidentiality and anonymity were maintained throughout the study. No identifying information was disclosed, and all responses were treated with privacy. Data were collected through a secure online platform and accessed only by the researcher and authorized personnel. The results were presented in aggregate form to ensure that individual responses could not be traced to specific participants. These procedures were consistent with ethical principles of respect for persons, autonomy, confidentiality, and responsible human subject research (Siedlecki, 2020; Polit & Beck, 2021).

The study involved minimal risk, and participants were allowed to skip questions they found uncomfortable or sensitive. They were also encouraged to ask the researcher for clarification if they encountered unfamiliar terms or concepts. No coercion or undue influence was applied during recruitment, and participants were protected from physical, emotional, or psychological harm. These safeguards reflected the ethical principle of beneficence, which requires minimizing harm and protecting participant welfare throughout the research process (Siedlecki, 2020). Participants were also provided with the researcher's contact information and the contact details of the Liceo de Cagayan University Research Ethics Board for concerns or complaints, supporting ethical transparency and participant protection (Grove & Gray, 2019).

3. Results and Discussion

3.1 Levels of Spiritual Well-Being

3.1.1 Religious Well-Being

The nursing students demonstrated a high level of religious well-being, with a composite mean of 4.47 and a standard deviation of 0.51. The highest-rated indicators were the students' belief that God cares about them, with a mean of 4.63 and a standard deviation of 0.56, and the perception that their relationship with God gives comfort in difficult times, with a mean of 4.57 and a standard deviation of 0.59. The lowest-rated indicator was feeling spiritually supported daily, with a mean of 4.34 and a standard deviation of 0.75, although it remained within the high level of interpretation. These findings indicate that religious well-being is a strong internal resource among the respondents. The students' belief in divine care and comfort may support coping, hope, and emotional resilience during stressful clinical experiences. Strong religious well-being provides a framework for interpreting adversity and reducing emotional exhaustion (Özyurt et al., 2018; Rizqi & Wirawan, 2020). Within Watson's Theory of Human Caring, spiritual grounding strengthens caring consciousness and helps nursing students remain compassionate without becoming emotionally depleted (Watson, 2008; Watson, 2018). As part of the students' "inner armor," religious well-being functions as an internal line of defense that supports emotional stability and reduces vulnerability to burnout and secondary traumatic stress (Neuman & Fawcett, 2011; Chirico et al., 2023).

3.1.2 Existential Well-Being

The students also demonstrated a high level of existential well-being, with a composite mean of 4.25 and a standard deviation of 0.55. The highest-rated indicators were being hopeful about the future, with a mean of 4.44 and a standard deviation of 0.66, and having a sense of purpose in life, with a mean of 4.38 and a standard deviation of 0.69. The lowest-rated indicator was harmony and balance in life, with a mean of 4.05 and a standard deviation of 0.81, but it was still interpreted as high. These results suggest that the students possess meaning, purpose, and direction despite the demands of nursing education. Hope and purpose support resilience, emotional regulation, and motivation, especially when students face stress and uncertainty (Fernández-Pascual et al., 2025; Lee & Kim, 2024). A sense of purpose in life is a key component of psychological well-being, as it enhances adaptability and supports continued engagement in demanding or challenging environments. However, the lower score in harmony and balance suggests that academic, personal, and clinical responsibilities may still challenge students' sense of equilibrium, consistent with the view that increased academic and clinical demands may disrupt life balance (Jeong et al., 2020). Existential well-being therefore strengthens the students' internal lines of defense and helps them interpret challenges constructively (Neuman & Fawcett, 2011; Chirico et al., 2023).

3.1.3 Overall Spiritual Well-Being

Overall, nursing students showed a high level of spiritual well-being, with a composite mean of 4.36 and a standard deviation of 0.53. Religious well-being recorded a slightly higher mean of 4.47 than existential well-being, which recorded a mean of 4.24, indicating that students relied more strongly on faith, divine connection, and spiritual support, while also maintaining a high sense of meaning and purpose. These findings show that the students have a stable spiritual foundation that supports emotional comfort, meaning-making, and coping. Religious well-being appears to provide reassurance and guidance, while existential well-being supports direction, fulfillment, and life purpose. Together, these dimensions help students interpret difficult clinical experiences meaningfully and constructively. Spiritual well-being, as part of the students' "inner armor," helps sustain emotional balance and reinforces resilience during academic and clinical stress.

3.2 Levels of Psychological Well-Being

3.2.1 Psychological Resilience

The nursing students demonstrated a high level of psychological resilience, with a composite mean of 4.11 and a standard deviation of 0.58. The highest-rated indicators were turning to God for guidance, with a mean of 4.44 and a standard deviation of 0.68, and remaining hopeful, with a mean of 4.35 and a standard deviation of 0.68. The lowest-rated indicators were staying calm in crises, with a mean of 3.90 and a standard deviation of 0.89, and making decisions under pressure, with a mean of 3.95 and a standard deviation of 0.87, although both remained within the high level. These findings indicate that students generally possess adaptive coping abilities and emotional stability. Their reliance on guidance and hope suggests that resilience is supported by both spiritual coping and positive outlook. Resilient individuals use internal beliefs and adaptive cognitive strategies to manage adversity, reduce emotional exhaustion, and enhance psychological stability (Henshall et al., 2020; Reyes et al., 2020). Hope also supports adaptive functioning during stress (Henshall et al., 2020; Reyes et al., 2020). The lower scores in crisis calmness and pressure-based decision-making suggest that these skills may develop progressively through repeated exposure, mentoring, and clinical supervision (Delgado et al., 2017). Resilience therefore functions as a psychological line of defense that supports emotional regulation and reduces vulnerability to burnout and secondary traumatic stress (Neuman & Fawcett, 2011; Chirico et al., 2023).

3.2.2 Trait Mindfulness

The students demonstrated a high level of trait mindfulness, with a composite mean of 3.96 and a standard deviation of 0.56. The highest-rated indicators were being aware of one's impact on others, with a mean of 4.22 and a standard deviation of 0.71, being conscious of daily actions, with a mean of 4.12 and a standard deviation of 0.75, and being mindful of surroundings, with a mean of 4.11 and a standard deviation of 0.75. The lowest-rated indicators were focusing on one task, with a mean of 3.78 and a standard deviation of 0.90, and observing thoughts without entanglement, with a mean of 3.83 and a standard deviation of 0.89, though both remained high. These results show that students practice present-moment awareness, attentional regulation, and interpersonal awareness in academic and clinical activities. Awareness of actions and their effect on others may strengthen empathy, communication, and ethical decision-making. Mindfulness supports attentional control, reflective responses, emotional regulation, and reduced stress reactivity (Gauthier et al., 2016; van der Riet et al., 2018). However, the lower scores in sustained focus and cognitive detachment suggest difficulty in maintaining attention during multitasking and rapid-response clinical situations, consistent with the view that cognitive overload can disrupt attentional focus (Valenstein-Mah et al., 2020). Mindfulness strengthens psychological lines of defense by improving emotional stability and reducing the impact of stressors (Neuman & Fawcett, 2011; Chirico et al., 2023).

3.2.3 Overall Psychological Well-Being

Overall, the nursing students demonstrated a high level of psychological well-being, with a composite mean of 4.04 and a standard deviation of 0.57. Psychological resilience had a mean of 4.11, while trait mindfulness had a mean of 3.96, showing that both adaptive coping and cognitive-emotional regulation were present among the respondents. These findings suggest that students are equipped with psychological resources that help them manage academic and clinical demands. Resilience allows them to recover from difficulties and maintain hope, while mindfulness supports awareness, emotional control, and attentional focus. Together, these resources help students respond to stressors in a controlled and adaptive way. Psychological well-being appears to function as a direct protective mechanism against emotional exhaustion, burnout, and secondary traumatic stress during clinical training.

3.3 Levels of Compassion Fatigue

3.3.1 Burnout

The students demonstrated a moderately high level of burnout, with a composite mean of 3.38 and a standard deviation of 0.66. The highest-rated indicators were feeling tired at the end of the day, with a mean of 3.99 and a standard deviation of 0.85, feeling worn out due to workload, with a mean of 3.77 and a standard deviation of 0.88, and feeling overwhelmed by classes and clinical duties, with a mean of 3.65 and a standard deviation of 0.92. The lowest-rated indicators were feeling ineffective as a student, with a mean of 2.77 and a standard deviation of 1.00, and feeling hopeless about making a difference, with a mean of 2.84 and a standard deviation of 1.00. These findings indicate that burnout among the respondents is mainly associated with physical fatigue, workload, and academic-clinical pressure rather than loss of competence or professional purpose. Emotional exhaustion is a central component of burnout, particularly in healthcare training environments where prolonged stress is common. Nursing students are vulnerable because they face both academic performance expectations and clinical exposure. However, the lower ratings for ineffectiveness and hopelessness suggest that students still maintain competence, purpose, and professional identity. Protective factors such as resilience and psychological well-being help preserve motivation and prevent the deeper cognitive and emotional aspects of burnout. Thus, burnout appears manageable but persistent, with resilience and mindfulness helping buffer its effects (Neuman & Fawcett, 2011; Chirico et al., 2023).

3.3.2 Secondary Traumatic Stress

The students demonstrated a moderately high level of secondary traumatic stress, with a composite mean of 3.38 and a standard deviation of 0.64. The highest-rated indicators were being stressed when seeing patients in pain, with a mean of 3.91 and a standard deviation of 0.81, being emotionally affected by patients' experiences, with a mean of 3.85 and a standard deviation of 0.83, and feeling upset by difficult patient situations, with a mean of 3.75 and a standard deviation of 0.85. The lowest-rated indicators were trouble sleeping due to clinical experiences, with a mean of 2.68 and a standard deviation of 1.01, and feeling scared when thinking about patient experiences, with a mean of 2.99 and a standard deviation of 1.00. These findings indicate that students are emotionally affected by clinical exposure, especially by patient suffering and difficult care situations. Such emotional responsiveness is important for compassionate care, but it also increases vulnerability to secondary traumatic stress. STS develops from indirect exposure to trauma through caregiving roles, particularly among individuals with high empathy (Figley, 1995; Beck, 2011). Emotional involvement may support patient-centered care but may also contribute to cumulative stress if not balanced by effective coping strategies (Sorenson et al., 2017). The lower scores in sleep disruption and fear indicate that students' emotional reactions do not often progress into severe psychological disturbance. Resilience, mindfulness, and professional socialization may help regulate these responses (Chirico et al., 2023). Secondary traumatic stress therefore appears present but controlled, with internal protective resources helping maintain emotional stability (Neuman & Fawcett, 2011; Chirico et al., 2023).

3.3.3 Overall Compassion Fatigue

Overall, the students experienced a moderately high level of compassion fatigue, with a composite mean of 3.38 and a standard deviation of 0.65. Burnout and secondary traumatic stress both recorded a mean of 3.38, indicating that workload-related exhaustion and emotional exposure to patient suffering contributed almost equally to compassion fatigue. These results suggest that nursing students experience persistent but manageable emotional and psychological strain. Burnout reflects exhaustion from academic and clinical responsibilities, while secondary traumatic stress reflects the emotional impact of empathic engagement with patients. The findings imply that compassion fatigue is present but moderated, likely because students possess protective internal resources such as resilience, mindfulness, and spiritual well-being. However, the moderately high level of compassion fatigue indicates the need for continued support and interventions to sustain student well-being throughout clinical training.

3.4 Relationship Between Compassion Fatigue and Spiritual and Psychological Well-Being

The results showed significant negative relationships between compassion fatigue and the domains of spiritual and psychological well-being. Religious well-being and existential well-being both had moderate negative correlations with compassion fatigue, with $r = -0.38$ and $p < .001$. Resilience and trait mindfulness both had stronger negative correlations with compassion fatigue, with $r = -0.60$ and $p < .001$. These findings indicate that higher levels of spiritual and psychological well-being were associated with lower levels of compassion fatigue. These findings support the study's conceptual framework that spiritual and psychological well-being function as protective factors against compassion fatigue. Psychological well-being showed stronger correlations, suggesting that resilience and mindfulness may provide more immediate protection against burnout and secondary traumatic stress than spiritual well-being alone. Spiritual well-being contributes through meaning-making and emotional support, while psychological well-being contributes through active coping, emotional regulation, and stress management. These findings are consistent with studies showing that spiritual well-being is associated with reduced stress and improved emotional stability (Fernández-Pascual et al., 2025; Lee & Kim, 2024). Psychological well-being, particularly resilience and trait mindfulness, directly enhances emotional regulation and coping capacity (Gauthier et al., 2016; van der Riet et al., 2018; Valenstein-Mah et al., 2020). Resilience and mindfulness also help reduce burnout and secondary traumatic stress (Henshall et al., 2020; Alharbi et al., 2022).

3.5 Predictors of Compassion Fatigue

The regression analysis showed that the combined model significantly predicted compassion fatigue, with $R = .69$, $R^2 = .48$, adjusted $R^2 = .47$, $F = 55.82$, and $p < .001$. This means that religious well-being, existential well-being, resilience, and trait mindfulness collectively explained 48% of the variance in compassion fatigue. Among the predictors, resilience was significant, with $B = -0.31$, $\beta = -0.29$, and $p = .001$, and trait mindfulness was also significant, with $B = -0.27$, $\beta = -0.25$, and $p = .002$. Religious well-being, with $B = -0.09$, $\beta = -0.08$, and $p = .199$, and existential well-being, with $B = -0.12$, $\beta = -0.10$, and $p = .134$, were not statistically significant predictors when entered together with the psychological variables. The regression equation was expressed as $Y' = 4.72 + -0.09 X1 + -0.12 X2 + -0.31 X3 + -0.27 X5$, where Y' represented compassion fatigue, $X1$ represented Religious Well-Being, $X2$ represented Existential Well-Being, $X3$ represented Resilience, and $X4$ represented Trait Mindfulness. These results indicate that psychological well-being, particularly resilience and mindfulness, has a stronger and more immediate predictive influence on compassion fatigue than spiritual well-being. Resilience allows students to adapt to adversity and recover from stress, thereby reducing emotional exhaustion and helping maintain engagement in clinical practice (Henshall et al., 2020; Reyes et al., 2020; Alharbi et al., 2022). Mindfulness improves present-moment awareness and emotional regulation, allowing students to manage stress responses and reduce reactivity to clinical demands (Gauthier et al., 2016; van der Riet et al., 2018). In relation to Compassion Fatigue Theory, these psychological capacities help prevent empathic strain from progressing into burnout and secondary traumatic

stress (Figley, 1995, 2002). Spiritual well-being appears to function as a supportive but more indirect influence by providing meaning, purpose, hope, and emotional grounding (Özyurt et al., 2018; Rizqi & Wirawan, 2020). Within Neuman's Systems Model, both spiritual and psychological resources serve as internal lines of defense, although psychological mechanisms appear to respond more immediately to stressors (Neuman & Fawcett, 2011). Overall, the findings confirm that strengthening resilience and mindfulness, while also nurturing spiritual well-being, is important in reducing compassion fatigue among nursing students (Chirico et al., 2023).

4. Conclusion & Recommendations

The study concludes that nursing students possess high levels of spiritual well-being and psychological well-being, with strong faith, meaning, purpose, resilience, mindfulness, and emotional regulation serving as internal protective resources against compassion fatigue. Although the students experienced moderately high levels of burnout and secondary traumatic stress, these were not at severe levels, suggesting the presence of buffering factors. The findings further indicate that compassion fatigue is significantly and negatively related to both spiritual and psychological well-being; however, psychological well-being, particularly resilience and mindfulness, emerged as the strongest predictor of compassion fatigue. Overall, spiritual and psychological well-being function as the students' "inner armor," with psychological well-being playing the most critical role in reducing emotional exhaustion and trauma-related stress among nursing students.

Based on the findings, CHED may use the study as a basis for enhancing nursing education policies related to student mental health and well-being, while hospitals, clinical training institutions, colleges of nursing, and nursing administrators may strengthen supportive learning environments through wellness programs, resilience-building workshops, mindfulness training, counseling services, spiritual care, values formation, balanced workloads, mentorship, supervision, and emotionally supportive clinical exposure. Nursing faculty and clinical instructors may incorporate reflective discussions, post-clinical debriefings, guided self-awareness activities, open communication, constructive feedback, and early recognition of burnout and secondary traumatic stress. Parents and families may provide emotional support, open communication, and healthy coping encouragement, while nursing students may engage in mindfulness exercises, reflective journaling, stress management, peer support, personal reflection, faith-based practices, and meaning-making activities. Future researchers may expand the study by examining additional variables such as social support, academic stress, and clinical environment factors, and by conducting longitudinal or experimental studies on interventions that enhance resilience, mindfulness, and spiritual well-being.

Compliance with ethical standards

The authors declare no conflict of interest. This study complied with recognized ethical standards for human-participant research by ensuring voluntary participation with informed consent, the right to withdraw without penalty, and strict confidentiality through anonymous, secure, and aggregated data handling. Given the focus on psychological well-being, procedures were non-invasive, and safeguards were observed to minimize discomfort, with guidance to appropriate support services when needed, and required institutional permissions were secured for instrument use and access to academic records.

REFERENCES

- Alharbi, J., Jackson, D., & Usher, K. (2022). The potential for resilience to reduce compassion fatigue among nursing students: A cross-sectional study. *Nurse Education Today*, 109, Article 105228. <https://doi.org/10.1016/j.nedt.2021.105228>
- Al-Maadeed, S., & Al-Kaabi, R. (2021). Compassion fatigue, burnout, and resilience among nurses during COVID-19 pandemic. *Journal of Nursing Management*, 29(8), 2736–2744. <https://doi.org/10.1111/jonm.13448>
- Aradilla-Herrero, A., & Tomás-Sábado, J. (2019). Psychological well-being, depressive symptoms and emotional intelligence in nursing students. *Nurse Education Today*, 76, 193–198. <https://doi.org/10.1016/j.nedt.2019.02.017>
- Beck, C. T. (2011). Secondary traumatic stress in nurses: A systematic review. *Archives of Psychiatric Nursing*, 25(1), 1–10. <https://doi.org/10.1016/j.apnu.2010.05.005>
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822–848. <https://doi.org/10.1037/0022-3514.84.4.822>
- Chan, R., Chung, L., Hung, K., & Chan, P. (2020). The effectiveness of mindfulness-based intervention in reducing stress and burnout among nurses: A systematic review. *Nurse Education Today*, 94, Article 104564. <https://doi.org/10.1016/j.nedt.2020.104564>
- Chirico, F., Batra, K., Batra, R., Ferrari, G., Crescenzo, P., Nucera, G., Szarpak, L., & Magnavita, N. (2023). Spiritual well-being and burnout syndrome in healthcare: A systematic review. *Journal of Health and Social Science*, 8(1), 13–32. <https://doi.org/10.19204/2023/sprt2>
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76–82. <https://doi.org/10.1002/da.10113>

- Davies, M. B. (2007). *Doing a successful research project: Using qualitative or quantitative methods* (2nd ed.). Palgrave Macmillan.
- Daya, Z., & Hearn, J. H. (2018). Mindfulness interventions in nursing: An integrative review of the literature. *Nurse Education in Practice*, 28, 12–21. <https://doi.org/10.1016/j.nepr.2017.09.002>
- Delgado, C., Upton, D., Ranse, K., Furness, T., & Foster, K. (2017). Nurses' resilience and the emotional labour of nursing work: An integrative review. *International Journal of Nursing Studies*, 70, 71–88. <https://doi.org/10.1016/j.ijnurstu.2017.02.008>
- De los Santos, J. A. A. (2023). Compassion fatigue influences the mental health and turnover intention of nurses in the COVID-19 pandemic. *Acta Medica Philippina*, 57(8), 19–24. <https://doi.org/10.47895/amp.vi0.5137>
- Fernández-Pascual, M. D., Reig-Ferrer, A., Santos-Ruiz, A. M., & Martínez-Rodríguez, L. (2025). Spirituality in managing perceived stress and promoting self-care: A descriptive study on nursing students in Spain. *Journal of Religion and Health*, 64(2), 882–898. <https://doi.org/10.1007/s10943-024-02232-z>
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE Publications.
- Figley, C. R. (1995). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. Brunner/Mazel.
- Figley, C. R. (2002). Compassion fatigue: Psychotherapists' chronic lack of self-care. *Journal of Clinical Psychology*, 58(11), 1433–1441. <https://doi.org/10.1002/jclp.10090>
- Gauthier, T., Meyer, R. M. L., Greife, D., & Gold, J. I. (2016). An on-the-job mindfulness-based intervention for pediatric ICU nurses: A pilot. *Journal of Pediatric Nursing*, 31(6), 798–806. <https://doi.org/10.1016/j.pedn.2016.07.011>
- Gravetter, F. J., & Wallnau, L. B. (2017). *Statistics for the behavioral sciences* (10th ed.). Cengage Learning.
- Grove, S. K., & Gray, J. R. (2019). *Understanding nursing research: Building an evidence-based practice* (7th ed.). Elsevier.
- Henshall, C., Davey, Z., & Jackson, D. (2020). Nursing resilience interventions: A way forward? *Nurse Education Today*, 94, Article 104578. <https://doi.org/10.1016/j.nedt.2020.104578>
- Jeong, H. C., Jang, S. H., Kim, Y., & Kim, J. S. (2020). Impact of academic stress and emotional intelligence on nursing students' well-being. *Journal of Nursing Education*, 59(6), 354–361. <https://doi.org/10.3928/01484834-20200520-03>
- Lee, H., & Kim, J. (2024). The role of life purpose in psychological well-being among nursing students. *Journal of Nursing Education*, 63(2), 89–96. <https://doi.org/10.3928/01484834-20240115-03>
- Neuman, B., & Fawcett, J. (2011). *The Neuman systems model* (5th ed.). Pearson Education.
- Özyurt, B., Dereli, E., & Keleş, S. (2018). The relationship between spiritual well-being and compassion fatigue among healthcare students. *Journal of Religion and Health*, 57(4), 1403–1414. <https://doi.org/10.1007/s10943-017-0462-6>
- Paloutzian, R. F., & Ellison, C. W. (1982). Loneliness, spiritual well-being, and quality of life. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research, and therapy* (pp. 224–237). John Wiley & Sons.
- Polit, D. F., & Beck, C. T. (2021). *Nursing research: Generating and assessing evidence for nursing practice* (11th ed.). Wolters Kluwer.
- Reyes, A. T., Andrusyszyn, M. A., Iwasiw, C., Forchuk, C., & Babenko-Mould, Y. (2020). Resilience in nursing education: An integrative review. *Journal of Nursing Education*, 59(12), 659–666. <https://doi.org/10.3928/01484834-20201118-08>
- Rizqi, M. A., & Wirawan, H. (2020). Spirituality and work burnout among nurses: The mediating role of work meaningfulness. *Journal of Health Psychology*, 25(6), 846–855. <https://doi.org/10.1177/1359105317730303>
- Siedlecki, K. L. (2020). *Research designs and methods for nursing and healthcare*. Springer Publishing.
- Sorenson, C., Bolick, B., Wright, K., & Hamilton, R. (2017). Understanding compassion fatigue in healthcare providers: A review of current literature. *Journal of Nursing Scholarship*, 49(3), 295–303. <https://doi.org/10.1111/jnu.12291>
- Stamm, B. H. (2010). *The concise ProQOL manual* (2nd ed.). ProQOL.org. <https://proqol.org/proqol-manual>
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Pearson.
- Valenstein-Mah, H., Anderson, T., Bylsma, L. M., Rudy, B. M., & Ginty, A. T. (2020). Effectiveness of mindfulness interventions for emotional regulation among nursing students. *Mindfulness*, 11(5), 1234–1247. <https://doi.org/10.1007/s12671-020-01334-7>
- van der Riet, P., Levett-Jones, T., & Aquino-Russell, C. (2018). The effectiveness of mindfulness meditation on stress, anxiety, and depression in nursing students. *Journal of Advanced Nursing*, 74(12), 2997–3010. <https://doi.org/10.1111/jan.13717>
- Villanueva, A. S., & Bernardo, M. G. (2019). Burnout and secondary traumatic stress among Filipino nurses: A cross-sectional study. *Philippine Journal of Nursing*, 89(1), 56–64.
- Watson, J. (2008). *Nursing: The philosophy and science of caring* (Rev. ed.). University Press of Colorado.
- Watson, J. (2018). *Unitary caring science: The philosophy and praxis of nursing*. University Press of Colorado.
- Xie, W., Chen, L., Feng, F., Okoli, C. T. C., Tang, P., Zeng, L., Jin, M., Zhang, Y., & Wang, J. (2021). The prevalence of compassion satisfaction and compassion fatigue among nurses: A systematic review and meta-analysis. *International Journal of Nursing Studies*, 120, Article 103973. <https://doi.org/10.1016/j.ijnurstu.2021.103973>