Assessment of Reflective Teaching Practice
in Undergraduate Nursing Faculty

by

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Dissertation

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We, the undersigned, as the Supervisory Committee in charge of the work of

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The student named above has:

1. completed the work assigned by the Committee.
   - Yes [✓] No [ ]
2. passed all examinations required by the program, including the final oral defense of the dissertation.
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3. selected option 1: [✓] a traditional dissertation
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4. selected option 2: [ ] 3 manuscript(s) suitable for publication in peer-reviewed journals which meet the approval of the Committee.
5. completed either dissertation option 1 or 2 satisfactorily, which gives evidence of ability to do independent investigation in the major field, and itself constitutes a contribution to knowledge.
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6. The student’s dissertation is accepted by the committee
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We recommend that this student be granted the Doctor of Philosophy in Nursing Degree.

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Dedication

I dedicate this dissertation to my loving husband, Ranjeet

and to my wonderful children, Daniel and Rebekah
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Assessment of Reflective Teaching Practice

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Abstract

The goal of the study was to assess levels of Reflective Teaching Practice employed by undergraduate nursing faculty and teach measures to increase utilization in undergraduate nursing program. This proposed Pilot was conducted using a pre- and post-intervention design with a convenience sample of participants. Using this design, the study compared the level of engagement in self-reflection score in Reflective Teaching Practice (RTP) pre- and post-Strategic Reflective Training Session (SRTS) in undergraduate nursing faculty, as measured by the Self-Reflection and Insight Scale (SRIS); and determine the relationship between engagement in self-reflection score pre and post SRTS as measured by the SRIS, and years of teaching experience as recorded on the Demographic Data Sheet. A paired t-test was conducted to calculate the difference in level of engagement pre- and post-SRTS; and a one-way ANOVA was conducted to determine the relationship between engagement of self-reflection score pre-SRTS, post-SRTS, and years of teaching experience. Based on the data analysis, there was no statistically significant difference in overall engagement in self-reflection score pre- and post-SRTS, and there was no statistically significant difference between the years of experience and pre- and post-SRTS scores.
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List of Abbreviations

AACN: American Association of Colleges of Nursing
ADN: Associate Degree Nursing
ANOVA: Analysis of Variance
BSN: Bachelor of Science in Nursing
DNP: Doctor of Nursing Practice
EdD: Doctor of Education
FFIS: Fast Fact Information Sheet
IRB: Institutional Review Board
PhD: Doctor of Philosophy
RN: Registered Nurse
RTP: Reflective Teaching Practice
SPSS: Statistical Package for the Social Sciences
SRTS: Strategic Reflective Training Session
SRIS: Self-Reflection and Insight Scale
TRP-N: Theory of Reflective Practice in Nursing
UNPD: Department Chair/Program Director of the Undergraduate Nursing Program
UTMB: The University of Texas Medical Branch
VN: Vocational Nursing
CHAPTER 1: INTRODUCTION

Introduction

Chapter One introduces this quantitative study, “Assessment of Reflective Teaching Practice in Undergraduate Nursing Faculty” to determine levels of Reflective Teaching Practice (RTP) employed and measures to increase utilization, in undergraduate nursing faculty. Chapter One begins with a statement of the study problem. The Chapter then provides the background and significance of the problem, statement of purpose and goals, research questions and aims, theoretical framework, study variables, and definition of terms. Finally, Chapter One offers an overview of research methodology, data collection and analysis, and a brief overview of study findings.

Statement of the Problem

The problem of interest for this study was to determine levels of Reflective Teaching Practice (RTP) employed and measures to increase utilization, in undergraduate nursing faculty. Reflection is conceptually defined as an educational technique designed to create a bridge between theory and clinical practice in the undergraduate nursing curriculum, by promoting engagement and increasing clinical judgment and critical thinking among nursing students. A major assumption of reflective teaching practice is that nursing faculty are competent and experienced in guiding nursing students in the development of reflection skills (Dekker-Groan et al., 2010; Tulyakul et al., 2017). The review of the literature has demonstrated a gap in research
regarding utilization and training of reflective teaching practice strategies among nursing educators in the United States (Caldwell & Grobbel, 2013; Dube & Ducharme, 2015).

**Background and Significance of the Problem**

**The Background**

Reflection plays a role in filling the gap between theory and practice and enables nursing students to become better practitioners. According to a seminal article by John Dewey (1910), reflective thinking includes (1) “a state of perplexity, hesitation, doubt,” and (2) “an act of search or investigation directed toward bringing to light further facts which serve to corroborate or nullify the suggested belief” (p. 8).

**Conceptual Definitions of Reflection**

Dewey conceptually defined reflection as “the active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and further conclusions to which it tends” (as cited in Freshwater et al., 2008). Schon (1991) conceptually defined types of reflective practice as reflection-in-action and reflection-on-action time periods (as cited in Armstrong & Asselin, 2017; Freshwater et al., 2008). Reflection-in-action occurs during the event and reflection-on-action, occurs after the event.

**Operational Definitions of Reflection**

Reflection was also operationally defined as a protocol or strategy to think about and discuss academic experiences, i.e., learning different approaches to handling similar situations, reevaluating experience, and formulating a plan to intervene differently in future (Tashiro et al., 2012; Tulyakul et al., 2017). Reflection is also
operationally defined as a protocol or strategy to think about and discuss academic experiences, i.e., learning different approaches to handling similar situations, reevaluating experience, and formulating a plan to intervene differently in future (Tashiro et al., 2012; Tulyakul et al., 2017).

**Reflective Teaching Practice (RTP).**

Reflective teaching practice is a self-assessment of teaching practices achieved through a variety of methods. An important outcome in the practice of self-reflection is to bring about a purposeful and focused change by assessing one’s thoughts and behaviors, acting on what’s not working, and doing more of what works (Grant et al., 2002). A guide to self-reflection for nurse educators by Grech (2021), and reflective teaching practice question cues by Armstrong & Asselin (2017), can be used as an operational definition and guide to reflect personal teaching practices.

Narrative journaling and feedback from a colleague can also facilitate faculty reflection on practices. In a study by Armstrong and Asselin (2017), group reflection facilitated by the researcher and reflective teaching practice question cues enhanced reflection among experienced nurses. Reflection enhances personal and professional development (Braine, 2009; Legare & Armstrong, 2017). Reflection is a skill that can be improved with practice. Reflective teaching practice provides an opportunity for the faculty member to consider personal teaching strategies, and to revise and implement new teaching strategies as needed. Reflection can contribute to enhanced teaching approaches and can improve student outcomes (Armstrong & Asselin, 2017). Reflective teaching practice should be integrated throughout the undergraduate curriculum for
students to be successful in critical thinking skills (Barbour, 2013; Parrish & Crookes, 2014).

**Significance**

This proposed pilot study (Pilot) is *significant* because it will contribute to the adoption of RTP among undergraduate nursing faculty, while promoting engagement and increasing clinical judgment and critical thinking skills among undergraduate nursing students. Nursing education delivery methodology has changed rapidly due to the COVID-19 pandemic. Engaging students in an online environment can be challenging, especially for new educators. Nurse educators are continually seeking strategies to increase critical thinking skills and student engagement. Nursing educators who are trained to include reflective teaching practice in the classroom enhance teaching and student learning outcomes.

This proposed pilot study, using a pre-and post-intervention design, is also *significant* in the field of nursing education, because it will: (1) provide a contribution to the increased use of reflective teaching practice among undergraduate nursing faculty, (2) promote student engagement, and (3) may contribute to increased clinical judgment and critical thinking among nursing students. Furthermore, this study will assess the engagement of self-reflection by faculty and provide strategic training sessions for promoting and/or improving reflective teaching practice among undergraduate nursing educators. It is imperative that a nursing educator utilizes reflective teaching practice and is competent and experienced in guiding students in the development of reflection skills (Dekker- Groan et al., 2010; Tulyakul et al., 2017). Ultimately, RTP will result in increasing nursing students’ clinical reasoning skills, while improving patient care (Caldwell, & Grobbel,
Statement of Purpose and Goals

The Purpose

The purpose of this study was to determine levels of Reflective Teaching Practice (RTP) employed and measures to increase utilization, in undergraduate nursing faculty. This proposed pilot study (Pilot), using a pre-and post-intervention design, is significant because it will contribute to the adoption of RTP among undergraduate nursing faculty, while promoting engagement and increasing clinical judgment and critical thinking skills among undergraduate nursing students.

The Goal

The goal of the study is to assess levels of Reflective Teaching Practice employed by undergraduate nursing faculty and teach measures to increase utilization in undergraduate nursing program. The study is designed to promote increased use of reflective teaching practice among undergraduate nursing faculty.

The Research Question and Aims

Specific Aims

Specific Aim 1: In undergraduate nursing faculty, compare the level of engagement in self-reflection score in Reflective Teaching Practice (RTP) pre- and post-Strategic Reflective Training Session (SRTS), as measured by the Self-Reflection and Insight Scale (SRIS). (See, Appendix G: Self-Reflection and Insight Scale).
Research Question 1: In undergraduate nursing faculty, will engagement in self-reflection score increase post SRTS, as measured by the SRIS?

Null Hypothesis 1: In undergraduate nursing faculty, there is no difference in engagement in self-reflection score in RTP pre and post SRTS, as measured by the SRIS.

Specific Aim 2: In undergraduate nursing faculty, determine the relationship between engagement in self-reflection score pre- and post-SRTS as measured by the SRIS, and years of teaching experience, as recorded on the Demographic Data Sheet. (See, Appendix F: Demographic Data).

Research Question 2: In undergraduate nursing faculty, what is the relationship between engagement in self-reflection score pre- and post-SRTS, as measured by the SRIS, and years of teaching experience, as recorded on the Demographic Data Sheet?

Null Hypothesis 2: In undergraduate nursing faculty, there is no relationship between level of engagement in self-reflection score pre- and post-SRTS, as measured by the SRIS, and years of teaching experience, as recorded on the Demographic Data Sheet.

Statement of the Theoretical Framework

One of the theories that supports reflection is the Theory of Reflective Practice in Nursing (TRP-N) by Galutira (2018), which involves reflection-before-action, reflection-in-action, reflection-on-action, and reflection-beyond-action. The main concepts of the
theory of Reflective Practice in Nursing include reflection, experience, promoting factors, hindering factors, and outcomes (Galutira, 2018).

The theoretical framework serves as a guide for reflective practice and the importance for practicing reflection in nursing. The framework serves as a guide for nurses in understanding the importance of reflection, types of reflection and how to apply it in practice. Reflection is an important concept that should be implemented in nursing education to prepare future nurses. The concept can also be applied by nursing faculty to prepare students in reflective practice and also applicable for nursing faculty in improving their practice. This framework can be used to develop the strategic reflection training session to educate faculty on the importance of engaging in reflection, utilizing processes in the classroom, and engaging students in clinical reflection.

**The Study Variables**

**Independent Variable**

The independent variables for the study will be the: (1) Strategic Reflective Training Session (SRTS); and (2) years of teaching experience, as recorded on the demographic data sheet.

**Dependent Variable**

The dependent variable is the engagement of self-reflection score on the SRIS, post-SRTS.
**Confounding Variables**

Confounding variables will include, but not be limited to, the following items listed on the Demographic Data Sheet.

**Demographic Data Sheet:**

- Undergraduate Nursing Program: that the faculty taught in, i.e., ADN or BSN.
- Years of teaching experience: ranges included 0 – 5 years, 5 – 10 years, 10 – 15 years, 15 – 20 years or greater than 20 years.

**Definition of Relevant Terms**

For the purposes of this study, the following terms were conceptually and operationally defined.

**Conceptual Definitions**

For this study, *reflection* is a construct encompassing the following conceptual definitions.

- Reflection-before-action: is conceptually defined as reflection or analyzation of an event before it happens (Galutira, 2018; Schon, 1991, as cited in Armstrong & Asselin, 2017).
- Reflection-in-action: is conceptually defined as reflection during the experience or actual event (Galutira, 2018).
- Reflection-on-action; is conceptually defined as reflecting or analysis of the past event (Galutira, 2018).
- Experience: is conceptually defined as an event or an occurrence of an activity, including the nurse, client, or community (Galutira, 2018).
Operational Definitions

Reflection is also operationally defined as a self-assessment of teaching practices, as measured by SRIS, to identify the engagement in self-reflection and need for self-reflection among undergraduate nursing faculty. For this study, reflection is also a construct encompassing the following operational definitions.

- Strategic Reflective Training Session (SRTS): was operationally defined as a teaching session, comprised of a PowerPoint presentation recorded by the Primary Investigator in Panopto to teach undergraduate nursing faculty about reflection.

- Self-Reflection and Insight Scale (SRIS): was operationally defined as a survey developed by Grant et. al (2002), used to assess the engagement of faculty in self-reflection and the need for self-reflection before and after strategic reflective training session.

- Level of Engagement in Self-Reflection: was operationally defined as the participant’s responses to questions on the SRIS survey, i.e., on the section of engagement in self-reflection and need for self-reflection.

- Years of Teaching Experience: undergraduate nursing faculty documentation of their years of teaching experience, i.e., 0 – 5 years, 5 – 10 years, 10 – 15 years, 15 – 20 years, or greater than 20 years.

- Reflection-before-action: was operationally defined as reflection by faculty member about their teaching experience before SRTS.

- Reflection-on-action: was operationally defined as reflection of teaching practice by the faculty after SRTS.
• Experience: was operationally defined as the event or the session in which faculty engages in teaching undergraduate nursing students.

**Overview of Research Methodology**

This pilot was conducted using a pre- and post-intervention design with a convenience sample of participants. The Theory of Reflective Practice in Nursing, by Galutira (2018), was used as a framework for the study. The foundational principle of TRP-N is that learning is ongoing and different experiences in lifetime provides an opportunity for development. The theory of Reflective Practice in Nursing involves reflection-before-action, reflection-in-action, reflection-on-action, and reflection-beyond-action. The main theoretical concepts include reflection, experience, promoting factors, hindering factors, and outcomes (Galutira, 2018).

**The Protocol**

Once all IRB approvals was obtained, the researcher contacted the Department Chair/Program Director of the Undergraduate Nursing Program (UNPD) to begin the study. An email with the study information documents, including links to complete the survey, i.e., SRTS, and Fast Fact Information Sheet was sent to the Department Chair to be forwarded to the nursing faculty (See, Appendix D). Participants reviewed the Fast Fact Information Sheet to determine a decision to participate in the study. Participants completed the demographic form and the Self-Reflection and Insight Scale Survey (SRIS) via Survey Monkey, prior to reviewing the Strategic Reflective Training Session (SRTS). Subjects then reviewed the SRTS, subsequently completing the SRIS via Survey Monkey, post-SRTS. The links to complete the Demographic Data Sheet, SRIS, and SRTS were included in the recruitment email. Participants completed the SRTS via
reviewing the voice over Power Point in Panopto, using the link provided in the recruitment email. Participants could also have contacted the researcher via email or phone/text for questions during the protocol process.

**Overview of Design: Data Collection and Data Analysis**

**Data Collection**

Data collection began only after approval from UTMB Institutional Review Board (IRB). IRB approval from San Jacinto College was also obtained prior to recruiting participants from San Jacinto College. Demographic data collection included the program that the participant taught in, the years of teaching experience in a nursing program, the highest educational degree earned, and the responses to items on the SRIS. Responses from participants were collected via Survey Monkey. All responses were anonymous.

**Data Analysis**

Data was analyzed using IBM SPSS Premium Grad Pack, SPSS Statistics version 29.0.1.0 (IBM, 2023). Data analysis included the *test of differences* such as paired *t*-test, i.e., to determine if there was a difference in the level of engagement in RTP pre- and post-SRTS. The relationship between level of engagement and years of teaching experience was analyzed by calculating the *one-way ANOVA*, with: (1) difference of pre- and post-score of SRIS as the dependent variable; and (2) years of teaching experience as the independent variable. An alpha of less than <0.05 was used as a standard to determine statistical significance.
Overview of Study Findings

The following conclusions may be drawn from the findings revealed from the data analysis:

- The PI failed to reject Null Hypothesis 1. There was no statistically significant difference in overall engagement in self-reflection score pre- and post-SRTS, as measured by the SRIS. There was a statistically significant change for the question, *I rarely spend time in self-reflection* which could be attributed to the faculty’s understanding of what self-reflection is within the SRTS.

- The PI failed to reject Null Hypothesis 2. There was no statistically significant difference between the years of experience and pre- and post-SRTS scores. Years of experience did not predict the level of engagement in self-reflection and need for self-reflection.

The study was limited by the: 1) small sample size, i.e., eighteen (18) participants; 2) convenience sampling; 3) participants being recruited from two (2) colleges; 4) analysis of doctoral participants, e.g., DNP and PhD, as one group; and 5) inability to explore variances in mean scores of specific SRIS items, because of de-identified participants. These limitations prevented generalizations of the findings of this study to the larger population.

Summary of Chapter One

Chapter One introduced this quantitative study, which explored the levels of Reflective Teaching Practice (RTP) employed by undergraduate nursing faculty. Chapter One began with a statement of the study problem. The Chapter then provided the
background and significance of the problem, statement of purpose and goals, research questions and aims, theoretical framework, study variables, and definition of terms. Finally, Chapter One offered an overview of research methodology, data collection and analysis, and a brief overview of study findings.

**Plan for Remaining Chapters**

Chapter Two will provide a detailed review of the literature on reflective teaching practice. Chapter Three will discuss the application of the pre- and post-intervention research design. Chapter Four will present the study findings. Chapter Five will present the conclusions, discussion, and recommendations relative to the study findings.
CHAPTER 2: REVIEW OF LITERATURE

Introduction

Chapter Two provides a review of literature related to reflection and reflective teaching practice. The Chapter begins with a theoretical and historical overview of literature regarding reflection and reflective teaching practice, including related research studies. The literature review also explores related variables, e.g., prevalence, demographics, and risk factors. Finally, the Chapter defines variables, identifies gaps in the literature, and discusses the rationale for the study.

Theoretical and Historical Literature Review

Theoretical Literature Review

Teaching Methodologies

As the nursing education delivery methodology has changed rapidly due to the COVID-19 pandemic, it is crucial to evaluate teaching methodologies to ensure that students are actively engaged, learning outcomes are met, and students are also participating in self-reflection.

Student Engagement.

An explorative study was conducted by Chang & Chen (2020) in northern Taiwan among fifty-seven (57) second year nursing students to understand their experiences by integrating reflective teaching into health promotion teaching curriculum. The study used “reflective assessment, engagement, and action-reflection” to assess and identify personal health challenges with the guidance of faculty during discussions and implement the needed changes to overcome the challenges, self-assess the changes and outcomes and reflect the experience in a journal (Chang & Chen, 2020). Reflective journal analysis
revealed that guidance from the faculty helped students to identify personal challenges, and students were able to make changes for health promotion even though it was tough (Chang & Chen, 2020). The activity was an opportunity for students to actively participate in understanding changes to promote health which will help them to assist their patients.

Due to the pandemic and frequent changes in delivery methods of instruction, it is extremely important to engage students in the classroom setting whether in-person, virtual classroom or clinical setting. One of the first important tasks is to critically self-reflect on the teaching practices to identify any gaps, to promote engagement in classroom. Grech (2021, p. 91) discussed questions a nursing educator should ask to self-reflect such as “why should I teach this way? “What should I focus on? and “how can I take this to the next level?”.

**Teaching Strategies in Nursing Education**

In order to improve student success and to become more confident in teaching practice, it is critical to assess and evaluate teaching strategies.

**Assessment of Teaching Strategies.**

“Reflective practice is associated with positive learner outcomes” (Registered Nurses Association of Ontario (2017). It is important for the faculty to assess teaching strategies to ensure that teaching strategies are meeting the learning outcomes, promoting student engagement, and integrating the skill of reflection among nursing students. Nursing educators who are trained to include reflective teaching practice in the classroom enhance teaching and student learning outcomes.
Evaluating Teaching Strategies.

Reflection as a Teaching Strategy.

Reflection is an essential skill that is needed among nursing students to bridge the gap between theory and clinical practice. “Educators should embark on a lifelong self-reflective journey to sustain their continuous professional development, and learn to be critical, looking at identified issues or problems within their social and political context for obtaining meaningful outcomes” (Grech 2021, p. 91). The Essential: Core competencies of professional nursing education from American Association of Colleges of Nursing (AACN) developed ten (10) domains to “bridge the gap between education and practice. One of the domains in The Essentials is to promote personal, professional, and leadership development by “participating in activities and self-reflection that fosters personal health, resilience and well-being” (AACN, 2021). This can be achieved by guided and spontaneous reflection. It is essential for the nursing faculty to be knowledgeable about self-reflection and evaluate their practice in order to guide students and to integrate reflection in course curriculum. It is imperative that a nursing educator utilize reflective teaching practice and is competent and experienced in guiding students in the development of reflection skills (Dekker-Groan et al., 2010; Tulyakul et al., 2017).

Elements of Reflection Competency.

An important outcome in the practice of self-reflection is to bring about a purposeful and focused change by assessing one’s thoughts and behaviors, acting on what’s not working, and doing more of what works (Grant et al., 2002). A guide to self-reflection for nurse educators by Grech (2021), and reflective teaching practice question cues by Armstrong & Asselin (2017), can be used as a guide to reflect personal teaching
practices. Narrative journaling and feedback from a colleague can also facilitate faculty reflection on practices. In a study by Armstrong and Asselin (2017), group reflection facilitated by the researcher and the reflective teaching practice question cues enhanced reflection among experienced nurses.

**Elements of Reflection Skills.**

There are different strategies to teach reflection in nursing students; the educators’ skills effect the reflective teaching strategy taught (Braine, 2009). Strategies include spending time to assess a situation from a variety of perspectives and accepting the new feedback, then implementing strategies for finally achieving success in reflective practice. Other methods include documenting reflective learning, e.g., including creating a journal or a diary, noting feedback in a log or a personal planner, or reflecting on a visual aid. Another strategy for teaching reflective practice is documenting new insights by performing a retrospective on past experiences, i.e., one can then determine to accept a new way of teaching and abandon strategies that did not work. Such strategies of reflective teaching encourage growth at a professional level as well (Braine, 2009). Narrative journaling and feedback from a colleague can also facilitate faculty reflection on practices.

**Historical Literature Review**

**Historical Definitions of Reflection**

**Reflection.**

Reflective teaching practice has been dated back to early 1900s with Dewey describing reflection as “the active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and further
conclusions to which it tends” (as cited in Freshwater et al., 2008, p. 2). “Dewey (1933) suggests that reflective thinking is an active, persistent, and careful consideration of a belief or supposed form of knowledge, of the grounds that support that knowledge, and the further conclusions to which that knowledge leads” (as stated in University of Hawaii, n.d.). “Reflective thinking helps learners develop higher-order thinking skills by prompting learners to a) relate new knowledge to prior understanding, b) think in both abstract and conceptual terms, c) apply specific strategies in novel tasks, and d) understand their own thinking and learning strategies (as stated in University of Hawaii, n.d.).

Reflective Teaching Practice.

Schon (1991) defined reflective practice as reflection-in-action and reflection-on-action time periods (as cited in Armstrong & Asselin, 2017; Freshwater et al., 2008). Reflection-in-action occurs during the event and reflection-on-action, occurs after the event.

Historical Practice of Reflective Teaching

Psychological Principles and Methodology.

Reflection is a principle that is used in psychology and in teacher education to improve teaching experience.

Examination of Reflective Teaching Practice.

Nursing educators can use reflective teaching practice to improve their teaching practice which will in turn benefit nursing students. “This is an important activity for novice practitioners to help develop an understanding of their role and support the learning of new skills” (Esterhuizen, 2019, p. 12). Reflective teaching
includes examining own teaching practices before, during and after teaching a course and make necessary changes (Yale University, 2021).

**Promoting Personal and Professional Development.**

Reflection enhances personal and professional development (Braine, 2009; Legare & Armstrong, 2017). Reflective practice promotes professional development, personal development and lifelong learning (Galutira, 2018 & Legare & Armstrong, 2017). Reflecting on each experience provides an opportunity for continuous improvement for the faculty.

**Literature Review of Research**

**Research on Reflection**

There is paucity of research about reflective practice among nursing educators (Legare & Armstrong, 2017). Reflection plays a role in filling the gap between theory and practice and enables nursing students to become better practitioners.

**Dewey’s Conceptual Definition.**

According to a seminal article by John Dewey (1910), reflective thinking includes (1) “a state of perplexity, hesitation, doubt,” and (2) “an act of search or investigation directed toward bringing to light further facts which serve to corroborate.”

Dewey conceptually defined reflection as “the active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and further conclusions to which it tends” (as cited in Freshwater et al., 2008, p. 2). Schon (1991) defined reflective practice as reflection-in-action and
reflection-on-action time periods (as cited in Armstrong & Asselin, 2017; Freshwater et al., 2008). Reflection-in-action occurs during the event and reflection-on-action, occurs after the event.

**Operational Definitions**

Reflection is also operationally defined as a protocol or strategy that enables nursing students to think about and discuss academic experiences, i.e., learning different approaches to handling similar situations, reevaluating experience, and formulating a plan to intervene differently in future (Tashiro et al., 2012; Tulyakul et al., 2017).

Reflective teaching practice for this study is operationally defined as a self-assessment of teaching practices. As presented in Appendix G, the Self-Reflection and Insight Scale (SRIS) will operationally define self-reflection, measuring the effectiveness of the SRTS intervention.

**Research on Reflective Teaching Practice (RTP)**

**Conceptual Definitions**

Reflective teaching practice is a self-assessment of teaching practices and can be achieved through a variety of methods. An important outcome in the practice of self-reflection is to bring about a purposeful and focused change by assessing one’s thoughts and behaviors, acting on what’s not working, and doing more of what works (Grant et al., 2002).
Guide and Cues to Self-Reflection

Guide to Self-Reflection.

A guide to self-reflection for nurse educators by Grech (2021), and reflective teaching practice question cues by Armstrong & Asselin (2017), can be used as a guide to reflect personal teaching practices.

Narrative Journaling and Feedback.

Narrative journaling and feedback from a colleague can also facilitate faculty reflection on practices. According to Chirema (2007), journal writing can be a method to develop reflective learning (as cited in Esterhuizen, 2019, p. 22). The nursing educator can assess and analyze the outcomes after each session or a semester, identify the course outcomes and document what worked best to facilitate learning and identify new strategies or changes that can be performed for the next class session or the next semester. Then nurse educator can document these findings in a journal. Feedback from other colleagues can be beneficial as well. Faculty member can invite another faculty member to observe the classroom session and provide feedback.

Group Reflection.

Reflection is a skill that can be improved with practice. Reflection can contribute to enhanced teaching approaches and can improve student outcomes (Armstrong & Asselin, 2017). In a study by Armstrong and Asselin (2017), group reflection facilitated by the researcher and the reflective teaching practice question cues enhanced reflection among experienced nurses.
Reflective Teaching Practice.

Reflective teaching practice provides an opportunity for the faculty member to consider personal teaching strategies, and to revise and implement new teaching strategies as needed. Reflective teaching practice should be integrated throughout the undergraduate curriculum for the students to be successful in critical thinking skills (Barbour, 2013; Parrish & Crookes, 2014). Reflective writing assignments provides the faculty an opportunity to understand the thought process of students which can improve student’s clinical judgment skills (Smith, 2021). “The infusion of reflective practice in healthcare demands that awareness and evaluation of self, experience and others is not only a recommended skill, but also a requisite for healthcare education.” (Freshwater et al., 2008, p. 14).

Reflective Teaching Practice in the Undergraduate Curriculum

Qualitative Studies.

The majority of the studies regarding reflection were qualitative, i.e., assessing perceptions of students and nurses. Studies have shown that reflection helps to analyze and understand the clinical situation, and improve critical thinking in nursing students (Barbour, 2013; Bulman, et al., 2012; Parrish & Crooke, 2014; Zhang et al., 2017).

Barbour (2013) conducted a descriptive phenomenology study among eighteen (18) Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) students to explore the use of reflective practice in nursing education. Themes that emerged from the study included reflection is used on a daily basis in practice to make decisions on the go; and reflection helped the nurses to analyze a situation, make changes and improve their
practice (Barbour, 2013). Time, autonomy, fear and experience are some of the barriers in reflective practice. Nurse educators play a role in integrating reflective practice in the curriculum to provide more experiences for the students to reduce their fear.

Bulman et al. (2012) conducted an interpretive ethnographic study to understand reflection from the perspective of teachers and students. Data was collected during interviews, observation of teaching and learning situations, and from student reflective learning contracts. Findings included reflection as an opportunity to analyze and understand the experience to improve nursing practice (Barbour, 2012). During reflection, participants can reflect on feelings and self-awareness, develop an action plan, and apply all their prior knowledge to understand the experience.

Parrish and Crookes (2014) conducted a qualitative descriptive study to identify key factors that could meaningfully enhance the reflective subject in a nursing program. Four (4) nursing graduates were interviewed and nursing students in second year, completed a questionnaire. Nursing graduates concluded that they did not appreciate the benefits of reflection while they were students, but noted reflection helped to address issues during daily nursing practice (Parrish & Crookes, 2014). Nursing students revealed that learning different models of reflection helped them to think critically and evaluate their past experiences (Parrish & Crookes, 2014). Educator’s knowledge, helpfulness, and teaching styles also made an impact in student success. These findings confirmed that reflection is beneficial to students and faculty should be knowledgeable to integrate it into the curriculum.
The study conducted by Zhang, Fan, Xia, Guo, Jiang, and Yan (2017) evaluated the effects of reflective trainings for nursing students on their critical disposition. One hundred fifty-seven (157) students were randomly assigned to experimental and control groups. Students and mentors in the experimental group received training on reflective skills. Students were assessed before and after intervention using Critical Thinking Disposition Inventory (CTDI-CV). There was significant difference in CTDI-CV scores for the experimental group after the intervention. The study concluded that reflective training can be used to improve critical thinking in nursing students (Zhang, Fan, Xia, Guo, Jiang, and Yan, 2017).

**Mixed Methodology Studies.**

*Preparation of Nursing Students as Reflective Practitioners.*

A mixed method study to explore new lecturers’ perception and understanding of reflection and preparation of nursing students to become reflective practitioners was conducted by Braine (2009). Purposive sampling was used to recruit seven (7) faculty participants. The subjects participated in two (2) focus groups and subsequently completed a questionnaire; themes were developed based upon the responses. New lecturers reported feeling ineffective and inadequately prepared in reflective teaching strategies (Braine, 2009). The study results confirmed the need to train educators in reflective teaching strategies and incorporation of reflective strategies within the nursing curriculum (Braine, 2009).
**Preceptors Experience in Reflective Teaching Practice.**

A qualitative descriptive study to understand the preceptor’s experience when guiding students’ though reflective teaching practice was conducted in Ireland by Duffy (2009). Via purposive sampling, seven (7) preceptors were selected to participate in the study. Themes developed based on Burnard’s method of data analysis revealed “preceptors had little or no experience of using guided reflection within the preceptorship process” (Duffy, 2009, p. 166). Some of the barriers identified was “lack of organizational support to engage in preceptorship” and “lack of theoretical knowledge.” (Duffy, 2009). Preceptors preferred to have follow-up, ongoing training on reflective practice rather than having a one-day training (Duffy, 2009).

**Reflection from the Perspective of Teachers and Students.**

Bulman et al. (2012) conducted an interpretive ethnographic study to understand reflection from the perspective of teachers and students. Data was collected during interviews, observations of teaching and learning situations, and from student reflective learning contracts. “Findings showed a nursing culture where reflection was seen as a process of searching for solutions to practice experiences, in order to make sense of them” (Bulman et al., 2012, p. 12) During reflection, participants can reflect on feelings and self-awareness, develop action plan, and apply all their prior knowledge to understand the experience.

**Key Factors Enhancing Reflective Practice.**

Parrish and Crookes (2014) conducted a qualitative descriptive study to identify key factors that could meaningfully enhance the reflective subject in a nursing program.
Four (4) nursing graduates were interviewed and nursing students in the second year completed a questionnaire. Nursing graduates concluded that they did not appreciate the benefits of the reflection while they were a student, but reflection helped to address issues during daily nursing practice (Parrish & Crookes, 2014). Nursing students revealed that learning different models of reflection helped them to think critically and evaluate their past experiences and educator’s knowledge, helpfulness, and teaching styles also made an impact in student success (Parrish & Crookes, 2014). These findings confirmed that reflection is beneficial to students and faculty should be knowledgeable to integrate into the curriculum.

**Strategies for Reflective Teaching Practice**

**Barriers to Reflective Teaching Practice.**

Training programs conducted among educators have shown that reflective teaching practice significantly increased understanding of reflective skills (Braine, 2009; Dekker-Groen et al., 2013; Duffy, 2009). Training programs can remove barriers to implementation of reflective teaching practice. Some of these barriers can be the lack of knowledge of reflection as a learning tool at the outset, an academic culture that does not promote reflection as a learning tool, and/ or inadequate classroom or clinical time provided for reflective learning.
Strategies for Teaching Reflective Practice.

Educator Skills in Reflection.

There are different strategies to teach reflection in nursing students; the educators’ skills effect the reflective teaching strategy taught (Braine, 2009). Strategies include spending time to assess a situation from a variety of perspectives and accepting the new feedback, then implementing strategies for finally achieving success in reflective practice. The skill of the educator effects the reflective teaching strategy taught (Braine, 2009). Participation in activities to promote self-reflection has been identified as an essential entry level competency for graduates by American Association of Colleges of Nursing (AACN) to promote personal, professional and leadership development (AACN, 2021). Nursing faculty must be knowledgeable in self-reflection activities to guide students in the process of developing the skill.

Documentation of Reflective Learning.

Journal or Log. Other methods include documenting reflective practice, e.g., including creating a journal or a diary, and noting feedback in a log or a personal planner. Nursing educators can assess and analyze the outcomes after each session or a semester to identify the course outcomes and document best practices to facilitate learning and identify new strategies or changes that can be implemented for the next class session or the next semester.

Documenting New Insights. Another strategy for teaching reflective practice is documenting new insights by performing a retrospective study on past experiences, i.e., to determine acceptance of a new way of teaching and abandon strategies that do not
work. Nursing faculty can attend educational sessions regarding reflection to improve student outcomes and analyze previous experiences and determine strategies to continue to use, and revise strategies that need improvement. Such strategies of reflective teaching encourage growth at a professional level as well (Braine, 2009). Participating in self-reflection promotes continuous improvement among faculty.

**Literature Review of Variables**

**Independent Variables**

**Intervention: Strategic Reflective Training Session (SRTS).**

**Background.**

A review of the literature demonstrated a *gap* in research regarding utilization and training of reflective teaching practice strategies among undergraduate nursing faculty in the United States. No quantitative research could be identified in the review of the literature that explored the use of reflective teaching practice among undergraduate nursing faculty, i.e., exploring knowledge, effectiveness, and use.

**Development.**

A PowerPoint presentation was developed and recorded by the student researcher in Panopto, to teach undergraduate nursing faculty about reflection. The virtual training presentation was developed based upon the Theory of Reflective Practice in Nursing by Galutira (2018), via the following steps:
• **Reflection:** This step included definitions of reflection, encompassing the four types of reflection, i.e., reflection-before-action, reflection-in-action, reflection-on-action, and reflection-beyond-action.

• **Experience:** This step included the importance of reflecting on experiences or clinical situations for improving professional and personal growth.

• **Promoting Factors and Hindering factors:** This step included the factors that promote or hinder reflection and methods to overcome barriers.

• **Outcomes:** This step identified outcomes of reflection, such as professional development, personal development, improving quality of care and outcomes for client.

**Prevalence in the Literature.**

SRTS research in nursing faculty was not prevalent in literature review. Asselin & Fain (2013) conducted a study using the Self-Reflection and Insight Scale (SRIS), to explore and determine the effect of a reflective practice continuing education program among experienced nurses.

**Years of Experience**

**Demographic Data Sheet:**

- Years of teaching experience as recorded on Demographic Data Sheet.

Undergraduate nursing faculty documented their years of teaching experience such as 0 – 5 years, 5 – 10 years, 10 – 15 years, 15 – 20 years or greater than 20 years.
Dependent Variable

Post Test: Self-Reflection and Insight Scale

Background, Reliability and Validity.

As presented in Appendix G, the Self-Reflection and Insight Scale (SRIS) operationally defines self-reflection, i.e., measuring the effectiveness of the SRTS intervention. SRIS is a valid and reliable measure of self-reflection, which assesses engagement in, need for, and insight into self-reflection (Grant et al., 2002). The SRIS consists of twenty (20) questions on a six-point scale, with score of one (1) for strongly disagree and score of six (6) for strongly agree. There are six (6) questions to assess engagement in self-reflection, six (6) questions to assess need for self-reflection, and eight (8) questions to assess insight. This pilot study assessed engagement and need for self-reflection in nursing faculty before and after SRTS intervention. The self-reflection scale has a coefficient alpha of 0.91 and test-retest correlation of 0.77 (Grant et al., 2002).

Level of Engagement.

Level of engagement was measured by answers to six (6) items under engagement in self-reflection on the SRIS, developed by Grant et al. (2002), and six (6) items under need for self-reflection. The questions assessed the frequency of the use of reflection among faculty, which identified the engagement of faculty in reflection and understanding of the need for self-reflection. The questions regarding need for reflection identified the understanding of the faculty regarding need for reflection in their practice.

Confounding Variables

Confounding variables included, but are not limited to, the following items identified from the Demographic Data Sheet and specific Risk Factors.
Demographic Data Sheet:

The Demographic data sheet addresses the type of undergraduate program in which the faculty teaches.

Risk Factors.

The major risk factor was the pandemic. Scheduling live SRTS at one time for all faculty was challenging due to the pandemic and varied working hours for the faculty. SRTS was recorded through Panopto to allow flexibility for the faculty to review SRTS.

Definition of Variables

Independent Variable

Strategic Reflective Training Sessions (SRTS)

  Conceptual Definitions.

  The Strategic Reflective Training Session (SRTS) was conceptually defined as a session to educate about reflection.

  Operational Definitions.

  The Strategic Reflective Training Session (SRTS) was operationally defined as the teaching session which includes a voice recorded PowerPoint through Panopto conducted by the primary investigator to teach undergraduate nursing faculty about reflection.

Years of Teaching Experience

  Conceptual Definitions.

  Years of teaching experience was conceptually defined as number of years the faculty members have taught in a nursing program.
Operational Definitions.

Years of teaching experience was also operationally defined as the number of years of teaching experience in an undergraduate nursing program, as entered in the Demographic Data Sheet. Participants documented their teaching experience on the demographic sheet as less than 5 years, 5 -10 years, 10 – 15 years, 15-20 years, or greater than 20 years.

Self-Reflection and Insight Scale Score Pre-SRTS

Conceptual Definitions.

The Self-Reflection and Insight Scale (SRIS) Pre-SRTS was conceptually defined as the survey developed by Grant et.al (2002), to assess the elements of self-reflection and insight.

Operational Definition.

The Self-Reflection and Insight Scale (SRIS) Score Pre-SRTS was operationally defined as the score of engagement in self-reflection and the need for self-reflection, as measured on the survey developed by Grant et.al (2002).

Dependent Variables

Self-Reflection and Insight Scale (SRIS) Score Post-SRTS

Conceptual Definitions

The Self-Reflection and Insight Scale (SRIS) Post-SRTS was conceptually defined as the survey developed by Grant et.al (2002), to assess self-reflection and insight.
Operational Definition.

Self-Reflection and Insight Scale (SRIS) Post-SRTS was operationally defined as the score of engagement in self-reflection and the need for self-reflection, as measured on the survey developed by Grant et.al (2002).

Gaps in the Literature Review

Utilization and Training in Reflective Teaching Practice

A review of the literature demonstrated a gap in research regarding utilization and training of reflective teaching practice strategies among undergraduate nursing faculty in the United States. This gap was revealed in both quantitative and qualitative research.

Quantitative Research

No quantitative research could be identified in the review of the literature that explored the use of reflective teaching practice among undergraduate nursing faculty, i.e., exploring knowledge, effectiveness, and/or use of reflection in teaching practice.

Qualitative Research

All reflection studies were qualitative, involving students and new educators as participants.

In Conclusion

Based on the findings of literature review conducted by Dube and Ducharme (2015), nursing research in reflective teaching practice is in the primitive stages, as there is a paucity of research regarding reflective teaching practice. Because there is very limited research regarding reflective practice among nursing educators (Legare &
Armstrong, 2017; Barbour, 2013), more studies regarding reflective teaching practice interventions are indicated.

**Rationale for Study**

The *rationale* for the study was that reflective practice will improve personal and professional development among faculty. It is imperative that a nursing educator utilize reflective teaching practice and is competent and experienced in guiding students in the development of reflection skills (Dekker-Groan et al., 2010; Tulyakul et al., 2017), because RTP will result in increasing the nurse student’s clinical reasoning skills while improving patient care (Caldwell, & Grobbel, 2013).

**Summary and Critique of Literature Review**

**Summary of Literature Review**

The literature review *does* identify a gap in research regarding utilization and training of reflective teaching practice strategies among undergraduate nursing faculty in the United States. Because there is very limited research regarding reflective practice among nursing educators (Legare & Armstrong, 2017; Barbour, 2013), more studies regarding reflective teaching practice interventions are indicated. The proposed study will identity the relationship between engagement in self-reflection scores before and after SRTS, based on years of teaching experience.

**Critique of Literature Review**

The literature review *does not* close gaps in knowledge regarding reflective teaching practices. The proposed study is a pilot study and proposes to explore the impact of SRTS. Although the majority of the previous studies were conducted among students,
future studies will be needed to identify the effect of SRTS within a larger population of both faculty and students.

**Summary of Chapter**

Chapter Two provided a review of literature related to reflection and reflective teaching practice. The Chapter began with a theoretical and historical overview of literature regarding reflection and reflective teaching practice, including related research studies. The literature review also explored related variables, e.g., prevalence, demographics, and risk factors. Finally, the Chapter defined variables, identified gaps in the literature, and discussed the rationale for the study.

**Plan for Remaining Chapters**

Chapter Three will discuss the application of the pre- and post-interventional research design using a convenience sample. Chapter Four will present the study findings. Chapter Five will present the conclusions, discussion, and recommendations relative to the study findings.
CHAPTER 3: RESEARCH DESIGN

Introduction

Chapter Three presents the research design. The Chapter begins by identifying the research question, and the research methodology (i.e., design and rationale) for exploring the aims. The Chapter describes the application of pre- and post-intervention design principles in the study, including participant population, setting, sampling methods; and data collection, data analysis, and data management strategies. The Chapter also provides a discussion of ethical considerations and techniques utilized to protect the rights and confidentiality of study participants.

Specific Aims, Research Questions, and Hypothesis

The goal of the study was to determine levels of Reflective Teaching Practice (RTP) employed by undergraduate nursing faculty.

Specific Aim 1

Specific Aim 1 was: In undergraduate nursing faculty, compare the level of engagement in self-reflection score in Reflective Teaching Practice (RTP) pre- and post-Strategic Reflective Training Sessions (SRTS), as measured by the Self-Reflection and Insight Scale (SRIS). (See, Appendix G: Self-Reflection and Insight Scale).

Research Question 1 was: In undergraduate nursing faculty, will engagement in self-reflection score increase post SRTS, as measured by the SRIS?

Null Hypothesis 1 was: In undergraduate nursing faculty, there is no difference in engagement in self-reflection score in RTP pre- and post-SRTS, as measured by the SRIS.
Specific Aim 2

Specific Aim 2 was: In undergraduate nursing faculty, determine the relationship between engagement in self-reflection score pre- and post-SRTS as measured by the SRIS, and years of teaching experience as recorded on the Demographic Data Sheet. (See, Appendix F: Demographic Data Sheet).

Research Question 2 was: In undergraduate nursing faculty, what is the relationship between engagement in self-reflection score pre- and post-SRTS as measured by the SRIS, and years of teaching experience as recorded on the Demographic Data Sheet?

Null Hypothesis 2 was: In undergraduate nursing faculty, there is no relationship between level of engagement in self-reflection score pre- and post-SRTS as measured by the SRIS, and years of teaching experience as recorded on the Demographic Data Sheet.

Research Methodology: The Design and Rationale

The Design

This proposed Pilot was conducted using a pre- and post-intervention design with a convenience sample of participants. Using this design, the study compared in undergraduate nursing faculty: (1) the level of engagement in self-reflection score in Reflective Teaching Practice (RTP) pre- and post-Strategic Reflective Training Session (SRTS), as measured by the Self-Reflection and Insight Scale (SRIS); and (2) determine the relationship between engagement in self-reflection score pre- and post- SRTS as measured by the SRIS, and years of teaching experience as recorded on the
Demographic Data Sheet. The Theory of Reflective Practice in Nursing by Galutira (2018) was used as a guide to develop the SRTS. SRTS was conducted via voice recorded Power Point Presentation via Panopto.

**The Rationale**

The following section describes the implementation of the Theory of Reflective Practice in Nursing (TRP-N) principles in the present study. The TRP-N by Galutira (2018) was used as a guide to develop the SRTS PowerPoint. The foundational principle of TRP-N is that learning is ongoing and different experiences in lifetime provides an opportunity for development. TRP-N involves reflection-before-action, reflection-in-action, reflection-on-action, and reflection-beyond-action. The main concepts of TRP-N include reflection, experience, promoting factors, hindering factors, and outcomes (Galutira, 2018).

*Reflection* involves analyzing a situation or experience before, during, and after an experience to make better decisions. *Experience* includes any event that happens with the nurse and a client or community. *Factors* that can promote or hinder reflection include cognitive skills, knowledge level, attitude, time, and work culture. Positive attitude, time commitment to reflect, and a work culture that supports reflection is needed to foster a practice in reflection. Reflection can lead to positive outcomes such as “…personal development, professional development, improved quality of care, and improved care outcomes” (Galutira, 2018, p. 52).

TRP-N served as a guide for reflective practice, i.e., the importance for practicing reflection in nursing practice. TRP-N was used to develop the strategic reflection training
session to educate faculty on the importance of engaging in reflection, different strategies for self-reflection, and potential outcomes.

**Population and Setting**

**Population**

The study was conducted among a *population* of undergraduate nursing faculty teaching at least one course within the undergraduate nursing program.

**Setting**

The *setting* was an undergraduate nursing program located in a college setting. Nursing faculty from two undergraduate nursing colleges participated in the study.

**Sampling Methods**

**Power Analysis**

Power analysis was conducted to determine the sample size. A sample size of $n=16$ was determined to have an 80% power of detecting a significant difference from a one-tailed matched pairs *t*-test, and a sample of size of $n=21$ has 90% power. The study goal was to recruit $n=18$ participants. The study lasted six (6) months to one (1) year or until the 18 participants completed the study. Participants were undergraduate nursing faculty. The age range of participants was expected to be above 18 years.

**Convenience Sampling**

Convenience sampling was used for recruitment. Once all IRB approvals were obtained, the student researcher contacted the Undergraduate Program Director/Department Chair of the nursing program to introduce the study. An email with
the study information including link to complete the survey, SRTS and Fast Fact Information Sheet was sent to the Department Chair to be forwarded to the nursing faculty to recruit participants for the study. The student researcher attended a departmental meeting via MS Teams at one undergraduate nursing program location as recommended by the Program Director, to introduce the study to the nursing faculty.

**Participant Inclusion Criteria**

Nursing faculty in an undergraduate nursing program meeting inclusion criterion, were recruited for the study with the assistance of the UNPD. All participants were undergraduate nursing faculty.

Sample inclusion criteria was designed to recruit faculty who:

- Taught at least one course in an undergraduate nursing program in an academic year;
- Attended the strategic reflective training session or viewed the recorded session; and,
- Completed the surveys in English.

**Participant Exclusion Criteria**

Sample exclusion criteria was designed to eliminate faculty who:

- Did not teach at least one course in an undergraduate nursing program;
- Were unable to attend the strategic reflective training session or view the recorded session; and,
- Were unable to complete the surveys in English.
Sample Size

Eighteen (18) nursing faculty from undergraduate nursing program completed the study. Participants were required to teach at least one course in an undergraduate nursing program in an academic year to be eligible for the study. Of the participants, 100% (N=18) responded that they were teaching at least one course in an undergraduate nursing program and met the criteria to participate in the study. No participants were excluded from the study.

Ethical Considerations and Techniques

Human Subjects: IRB Approval

Procedures for the study was approved by the University of Texas Medical Branch (UTMB) Institutional Review Board (IRB). The San Jacinto College IRB also approved the study, prior to recruiting participants. The proposed study was also reviewed and approved by the Dissertation Committee.

Human Subjects: Confidentiality.

The primary risks to participants in this study were loss of confidentiality and emotional distress. Study participants’ confidentiality was protected in a number of ways. All the survey responses were anonymous and collected through Survey Monkey. Personal identifying information was not collected. A Fast Fact Information Sheet was emailed to the UNPD to be emailed to the interested nursing faculty, to protect the identity of the participants. The risks and benefits of participating in the study, and contact information for IRB, primary investigator, and study coordinator, was included in
the participant Fast Fact Information Sheet (FFIS). Responses were collected using an anonymous survey through Survey Monkey.

Measurement Methods

Methodology

Once all IRB approvals were obtained, the PI contacted the UNPD to begin the study. An email with the study information including link to complete the survey and SRTS and FFIS were sent to the UNPD to be forwarded to the nursing faculty (Appendix E). Participants reviewed the FFIS to determine their decision to participate in the study. Participants completed the demographic form and the Self-Reflection and Insight Scale Survey (SRIS), reviewed the Strategic Reflective Training Session (SRTS) and subsequently, completed the SRIS via Survey Monkey. The links to complete the demographic form, SRIS, and SRTS were included in the recruitment email. Participants completed the SRTS after reviewing the voice over PowerPoint, via Panopto, using the link provided in the recruitment email. Participants could have contacted the PI via email or phone/text for questions.

Data Collection Process

Demographic Data

Data for the study consisted of demographic data, SRIS results pre-SRTS and post-SRTS. Demographic data information collected included type of nursing programs that the participants currently teach in, years of teaching experience in a nursing program, and highest educational degree earned (See Appendix F: Demographic Data Sheet).
Data collected included SRIS results pre-SRTS and post-SRTS. SRIS is a valid and reliable measure of self-reflection, which assesses engagement in, need for, and insight into self-reflection (Grant et al., 2002). The SRIS consists of twenty (20) questions on a six-point scale. Survey questions with a positive phrased item regarding self-reflection were scored with one (1) for strongly disagree, two (2) for disagree, three (3) for slightly disagree, four (4) for slightly agree, five (5) for agree, and six (6) for strongly agree. Survey questions with a negative phrased item regarding self-reflection were rescored to reflect one (1) for strongly agree, two (2) for agree, three (3) for slightly agree, four (4) for slightly disagree, five (5) for disagree, and six (6) for strongly disagree. Higher score on the survey questions indicates more awareness of self-reflection. Question one (1), two (2), and four (4), on the engagement in self-reflection and question one (1) on the need for self-reflection were negatively phrased, thus these items were reverse scored to correctly perform the data analysis.

This tool was designed to consistently score the items. “Agreement with favorable items should always be scored higher than agreement with unfavorable items” (Portney & Watkins, 2015, p. 340). There were six (6) questions to assess engagement in self-reflection, six (6) questions to assess need for self-reflection, and eight (8) questions to assess insight. This Pilot assessed responses to engagement and need for self-reflection questions in nursing faculty pre- and post-SRTS intervention. The self-reflection and insight scale has a coefficient alpha of 0.91 and test-retest correlation of 0.77 (Grant et al., 2002). Participants completed demographic information, pre-SRTS, reviewed SRTS via Panopto, and completed post-SRTS.
Limitations and Assumptions

Limitations

The study was limited by the: 1) small sample size, i.e., eighteen (18) participants; 2) convenience sampling; 3) participants being recruited from two (2) colleges; 4) analysis of doctoral participants, e.g., DNP and PhD, as one group; and 5) inability to explore variances in mean scores of specific SRIS items, because of de-identified participants. These limitations prevented generalizations of the findings of this study to the larger population.

Assumptions

A major assumption of reflective teaching practice was that nursing faculty are competent and experienced in guiding nursing students in the development of reflection skills (Dekker-Groan et al., 2010; Tulyakul et al., 2017). The overall assumption that guided this study was that SRTS would have an impact on the subject’s self-reflection scores. In addition, specific assumptions were that: (1) engagement in self-reflection score will be impacted by SRTS, and (2) engagement in self-reflection score pre- and post-SRTS will be impacted by years of teaching experience.

Data Analysis Procedures

Data Analysis

The purpose of data analysis was to determine levels of Reflective Teaching Practice (RTP) employed by undergraduate nursing faculty. This study compared the level of engagement in RTP pre- and post-Strategic Reflective Training Sessions (SRTS), as measured by the Self-Reflection and Insight Scale (SRIS). Level of engagement was measured by participants’ responses to six (6) items under engagement
in self-reflection on the SRIS and six (6) items under need for self-reflection. The years of teaching experience were recorded on the demographic sheet as 0 – 5 years, 5 – 10 years, 15 – 20 years, and greater than 20 years. Years of experience from 15 – 20 years, and greater than twenty (20) years were consolidated into greater than 15 years for one-way ANOVA analysis since there were only two (2) participants in the category of greater than twenty (20) years.

A paired t-test was conducted to calculate the difference in level of engagement before and after SRTS. The relationship between engagement of self-reflection scores pre-SRTS, post SRTS, and years of teaching experience was analyzed using the one-way ANOVA.

**Specific Aim 1**

*Specific Aim 1:* In undergraduate nursing faculty, compare the level of engagement in self-reflection score in Reflective Teaching Practice (RTP) pre- and post-Strategic Reflective Training Sessions (SRTS), as measured by the Self-Reflection and Insight Scale (SRIS). (See, Appendix G: Self-Reflection and Insight Scale).

*Research Question (RQ) 1:* In undergraduate nursing faculty, will engagement in self-reflection score increase post-SRTS, as measured by the SRIS?

*RQ1 Analysis:* A paired t-test was used to calculate the difference in level of engagement pre- and post-SRTS.

*RQ1 Variables:* Included is the level of engagement in reflective teaching practice pre- and post-SRTS, as measured by SRIS. Level of engagement was measured by
answers to six (6) items under engagement in self-reflection on the SRIS and six (6) items under need for self-reflection.

Specific Aim 2

Specific Aim 2: In undergraduate nursing faculty, determine the relationship between level of engagement in RTP pre- and post-SRTS, as measured by the SRIS, and years of teaching experience, as recorded on the Demographic Data Sheet.

Research Question 2: In undergraduate nursing faculty, what is the relationship between engagement in self-reflection score pre- and post-SRTS, as measured by the SRIS, and years of teaching experience, as recorded on the Demographic Data Sheet?

RQ2 Analysis: One-way ANOVA utilizing the difference of the mean pre-score and post-score of SRIS as the dependent variable and groups based on years of teaching experience as the independent variable, was calculated to determine the relationship between level of engagement and years of teaching experience.

RQ2 Variables: Included was engagement of self-reflection score pre- and post-SRTS (i.e., dependent variable) measured by answers to six (6) items under engagement in self-reflection and six (6) items under need for self-reflection. Years of teaching experience was recorded on Demographic Data Sheet as 0-5 years, 5-10 years, 15-20 years, and greater than 20 years.

Data Analysis Software

Data was analyzed using IBM SPSS Premium Grad Pack, SPSS Statistics Version, 29.0.1.0 (IBM, 2023). Data analysis included test of differences such as paired t-test to determine if there is a difference in the level of engagement in RTP pre- and post-
SRTS. The relationship between level of engagement and years of teaching experience was analyzed by calculating the *one-way ANOVA* with post-score of SRIS as dependent variable and years of teaching experience and pre-score of SRIS as independent variable. One way ANOVA was conducted to determine if there was any relationship between the dependent and independent variable. Alpha of less than <0.05 was used as a standard to determine statistical significance.

**Summary of Chapter**

Chapter Three presented the research design. The Chapter began by identifying the research question, and the research methodology (i.e., design and rationale) for exploring the aims. The Chapter described the application of quantitative methodology principles in the study, including participant population, setting, and sampling methods; and data collection, data analysis, and data management strategies. The Chapter also provided a discussion of ethical considerations and techniques utilized to protect the rights and confidentiality of study participants.

**Plan for Remaining Chapters**

Chapter Four will present the study findings. Chapter Five will present the conclusions, discussion, and recommendations relative to the study findings.
CHAPTER 4: FINDINGS

Introduction

Chapter Four will present the overall findings of this study. The Chapter will begin
with a presentation of sample characteristics and a psychometric estimate for the sample.
In addition, major findings and conclusions will be introduced with a summary of findings.

Sample Characteristics

Eighteen (18) undergraduate nursing faculty participated in the study. Table 1, p.
81, Participants’ Demographic Data, summarizes participants’ demographic information.
Of the participants, 100% teach in at least one course in an undergraduate program in an
academic year. Of the faculty, 61.1% (N=11) had a Master of Science degree in Nursing
and 38.9 % (N=7) had a doctoral degree in nursing, education or nursing practice. In
addition, 33.3 % (n= 6) had less than five (5) years of teaching experience, 38.9 % (N =
7) had five (5) to ten (10) years teaching experience, 11.1 % (N=2) had fifteen (15) to
twenty (20) years of teaching experience, and 16.7% (N= 3) had greater than twenty (20)
years of teaching experience in an undergraduate program. Further, 16.7% (n= 3) were
Teaching in a Bachelor of Science in Nursing (BSN) program, 55.6% (N= 10) were
teaching in an Associate Degree Nursing (ADN) program, 22.2 % (N= 4) were teaching
in both ADN and Vocational Nursing (VN) programs, and 5.6 % (N=1) were teaching in
the BSN, ADN, and VN programs.
Psychometric Estimates for the Sample

The Self-Reflection and Insight Scale (SRIS) was used to explore the effect of a reflective practice continuing education program on experienced nurses in a study by Asselin and Fain (2013). The mean score for engagement in self-reflection before continuing education program was 27.32 and standard deviation of 6.01. The mean score for self-reflection after continuing education was 30.84 and standard deviation of 3.99. The effect size was 0.66.

Within this study, a sample size of n=16 was projected to have an 80% power of detecting a significant difference from a one-tailed matched pairs t-test, and a sample of size of n=21 an 90% power. The study goal was to recruit n=18 participants. Eighteen (18) participants were recruited and completed the study.

Introduction to Major Findings and Conclusions

The goal of the present study was to explore the following specific aims.

Specific Aim 1

Specific Aim 1 was: In undergraduate nursing faculty, compare the level of engagement in self-reflection score in Reflective Teaching Practice (RTP) pre- and post-Strategic Reflective Training Session (SRTS), as measured by the Self-Reflection and Insight Scale (SRIS). (See, Appendix G: Self-Reflection and Insight Scale).

Research Question 1 was: In undergraduate nursing faculty, will engagement in self-reflection score increase post SRTS, as measured by the SRIS?
Null Hypothesis 1 was: In undergraduate nursing faculty, there is no difference in engagement in self-reflection score in RTP pre and post SRTS, as measured by the SRIS.

Null Hypothesis 1 Findings and Conclusions

Null Hypothesis 1 Findings.

The PI failed to reject Null Hypothesis 1, i.e., the hypothesis was accepted. Data analysis revealed multiple results as discussed in Table 2, p 82.

There were differences in the mean scores for the survey question, I don’t often think about my thoughts. The mean score for pre-SRTS in Pair 1 (M=4.56) increased to (M=5.11) post-SRTS. Higher pre-score indicates faculty think about their thoughts. There was an increase in the post-score after SRTS, which could be an effect of SRTS. SRTS may have helped the faculty to understand that they are taking time to reflect on their thoughts with each experience which contributed to the higher post-mean score. However, the change was not statistically significant based on the p value of .205.

There were differences in the mean score for the question, I rarely spend time in self-reflection. The mean score pre-SRTS (M= 5.11) decreased to (M= 4.67) post-SRTS and was statistically significant with a p value of .03. Higher score on the item indicates faculty spends time in self-reflection. The pre-score value denote that faculty spends time in self-reflection. There was a slight decrease in the post-score which could be attributed to the impact of understanding the different methods and the importance of self-reflection after each experience and, faculty’s perception of the time needed for self-reflection might have changed leading to the slight decrease in the post-score.
There was not a significant difference in the mean score for the question, *I frequently examine my feelings*. The mean score pre SRTS (M= 4.83) slightly increased to (M= 4.94) after SRTS and was not statistically significant with a *p* value of .71. There was not much variability in the mean for pre-and post-score Mean score demonstrate that faculty almost agree that they examine their feelings.

There were differences in the mean score for the question, *I don’t really think about why I behave in the way that I do*. The mean score pre SRTS (M= 5.23) increased to (M= 4.71) after SRTS and was slightly statistically significant with a *p* value of .06. Higher pre-score demonstrate that faculty agree that they think about the behavior prior to SRTS. The slightly lower post-score could be related to the understanding of time needed for self-reflection after SRTS. The perception of faculty on the time needed to analyze their behavior after each experience may have changed after SRTS leading to the change in mean post-score.

There was a slight difference in the mean score for the question, *I frequently take time to reflect on my thoughts*. The mean score pre SRTS (M= 4.83) slightly increased to (M= 5.00) after SRTS. There was a very minimal change in the pre-and post-score but was not statistically significant with a *p* value of .45.

There was not a significant difference in the mean score for the question, *I often think about the way I feel about things*. The mean score pre SRTS (M= 5.17) was almost similar to (M= 5.11) after SRTS and was not statistically significant with a *p* value of .72. Faculty agree on the pre-score and post-score that they often think about the way they feel about things which reflects self-reflection.
The overall score for the subscale of engagement in self-reflection did not reveal a significant change in score before and after SRTS. The engagement in self-reflection total score pre-SRTS (M=29.72) slightly decreased to (M=29.28) post-SRTS, with a $p$ value of 0.62, which was not statistically significant. There was not much variability in the overall pre-and post-score. Based on the results, faculty closely agree that they participate in self-reflection.

There was not a significant difference in the mean score the question, *I am not really interested in analyzing my behavior*. The mean score pre-SRTS (M= 5.11) slightly decreased to (M= 4.94) post-SRTS and was not statistically significant with a $p$ value of .19. Higher pre-score demonstrate that faculty agree is interested in analyzing behavior for self-reflection. The slight change decreased post-score could be due to the perception of time need for self-reflection.

There was not a significant difference in the mean score for the question, *it is important for me to evaluate the things that I do*. The mean score pre-SRTS (M= 5.11) slightly increased to (M= 5.22) post-SRTS and is not statistically significant with a $p$ value of .43. Faculty agree based on the pre-and post-score that it is important to evaluate things, which shows self-reflection is important to them. The change between pre- and post-score was not statistically significant and is expected due to faculty’s understanding the importance of evaluating the things they do.

There was not a change in the mean score for the question, *I am very interested in examining what I think about, and it is important for me to try to understand what my feelings mean*. The mean score pre-SRTS and post-SRTs was the same (M= 5.00) and was not statistically significant with a $p$ value of 1.00. The pre-score shows that faculty
agree that they are interested in examining their thoughts and understanding their feelings. Due to the high pre-score, SRTS is not expected to have a change in the post-score.

There was not a significant difference in the mean score for the question, *I have a definite need to understand the way that my mind works*. The mean score pre-SRTS (M=4.94) slightly decreased to (M=4.83) post-SRTS and was not statistically significant with a \( p \) value of .61. Pre-score and post-score did not have a significant change in the mean.

There was not a significant difference in the mean score for the question, *it is important to me to able to understand how my thoughts arise*. The mean score pre-SRTS (M=4.89) slightly increased to (M=4.94) post-SRTS and was not statistically significant with a \( p \) value of .67. There was not a significant change in the pre- and post-score as the faculty slightly agree that it is important to understand how thoughts arise. Pre-and post-score demonstrates that faculty slightly agree to the importance of self-reflection.

The overall score for the subscale of need for self-reflection did not have a statistically significant change in score pre- and post-SRTS, as stated in Table 2, p. 84. The overall score for need for self-reflection pre-SRTS was (M=30.06) was similar (M=29.94) post-SRTS, with a \( p \) value of 0.85, which was not statistically significant.

**Null Hypothesis 1 Conclusions.**

Multiple deductions were drawn from the findings revealed from the data analysis.

The overall score for the subscale of engagement in self-reflection did not reveal a significant change in score before and after SRTS. The overall score for the subscale of need for self-reflection did not have a significant change in score pre- and post-SRTS.
There was a slight decrease in the post-score for the question, *I rarely spend time in self-reflection* which could be attributed to the impact of understanding the different methods and the importance of self-reflection after each experience. Furthermore, faculty’s perception of the time needed for self-reflection could have changed leading to the slight decrease in the post-score.

Significant change between pre- and post-score was not expected in the need for self-reflection section due to faculty responses that they were already participating in self-reflection. SRTS may not have had an impact on helping faculty understand the need to reflect as 66.7% of the participants have greater than five (5) years of teaching experience. The amount of teaching experience may have contributed to the higher pre-score of understanding the importance on the need for self-reflection.

**Specific Aim 2**

*Specific Aim 2 was:* In undergraduate nursing faculty, determine the relationship between engagement in self-reflection score pre- and post-SRTS, as measured by the SRIS, and years of teaching experience, as recorded on the Demographic Data Sheet.

*Research Question 2 was:* In undergraduate nursing faculty, what is the relationship between engagement in self-reflection score pre- and post-SRTS as measured by the SRIS, and years of teaching experience, as recorded on the Demographic Data Sheet?

*Null Hypothesis 2 was:* In undergraduate nursing faculty, there is no relationship between level of engagement in self-reflection score pre- and post-SRTS, as measured by the SRIS, and years of teaching experience, as recorded on the Demographic Data Sheet.
Null Hypothesis 2 Findings and Conclusions

Null Hypothesis 2 Findings.

The PI failed to reject Null Hypothesis 2, i.e., the hypothesis was accepted. Data analysis revealed multiple findings, as stated in Table 3, p. 83.

A one-way ANOVA between subjects was conducted to compare the effect of years of teaching experience on the level of engagement in self-reflection score pre- and post-SRTS for each question in the of level of engagement and need for self-reflection section of the survey. Data analysis revealed the following findings:

There was not a statistically significant difference for engagement in self-reflection question 1, I don’t often think about my thoughts as evidenced by one-way ANOVA between the SRIS mean score and groups based on faculty’s years of teaching experience. The mean difference in pre-and post-score was \((F 2, 15) = 0.85\) with a \(p\) value of 0.45. Years of teaching experience had no impact on the difference in the pre- and post-score.

There was not a statistically significant difference for engagement in self-reflection question 2, I rarely spend time in reflection as evidenced by one-way ANOVA between the SRIS mean score and groups based on faculty’s years of teaching experience. The mean difference in pre-and post-score was \((F 2, 15) = 0.88\) with a \(p\) value of 0.44. Years of teaching experience did not make a difference on the pre-and post-score.

There was not a statistically significant difference for engagement in self-reflection question 3, I frequently examine my feelings as evidenced by one-way ANOVA between the SRIS mean score and groups based on faculty’s years of teaching
experience. The mean difference in pre- and post-score was \( (F 2, 15) = 0.57 \) with a \( p \) value of 0.58. Years of teaching experience did not make a difference on the pre-and post-score.

There was not a statistically significant difference for engagement in self-reflection question 4, *I don’t really think about why I behave in the way that I do*. The mean difference in pre-and post-score was \( (F 2, 14) = .16 \) with a \( p \) value of 0.85. Years of teaching experience did not make a difference in the mean difference in pre-and post-score.

There was not a statistically significant difference between the groups for engagement in self-reflection question 5, *I frequently take time to reflect on my thoughts*. The mean difference in pre-and post-score was \( (F 2, 15) = 1.38 \) with a \( p \) value of 0.28.

There was not a statistically significant difference between the groups for engagement in self-reflection question 6, which addressed the survey question, *I often think about the way I feel about things*. The mean difference in pre-and post-score was \( (F 2, 15) = 2.16 \) with a \( p \) value of 0.15.

There was not a statistically significant difference between the groups for need for self-reflection question 1, *I am not really interested in analyzing my behavior*. The mean difference in pre-and post-score was \( (F 2, 15) = .42 \) with a \( p \) value of 0.67.

There was not a statistically significant difference between the groups for need for self-reflection question 2, *It is important for me to evaluate the things that I do*. The mean difference in pre-and post-score was \( (F 2, 15) = 1.06 \) with a \( p \) value of 0.37.
There was not a statistically significant difference between the groups for need for self-reflection question 3, *I am very interested in examining what I think about.* The mean difference in pre-and post-score was \([F 2, 15) = 2.88]\) with a \(p\) value of 0.09.

There was not a statistically significant difference between the groups for need for self-reflection question 4, *it is important for me to try to understand what my feelings mean...* The mean difference in pre-and post-score was \([F 2, 15) = 1.55]\) with a \(p\) value of 0.24.

There was not a statistically significant difference between the groups for need for self-reflection question 5, which addressed the survey question, *I have a definite need to understand the way that my mind works.* The mean difference in pre-and post-score was \([F 2, 15) = .08]\) with a \(p\) value of 0.92.

There was not a statistically significant difference between the groups for need for self-reflection question 6, *It is important to me to able to understand how my thoughts arise.* The mean difference in pre-and post-score was \([F 2, 15) = 1.69]\) with a \(p\) value of 0.22.

There was not a statistically significant difference between the groups for the total engagement in self-reflection score and need for self-reflection score. The mean difference in pre-and post-score for engagement in self-reflection score was \([F 2, 15) = .63]\) with a \(p\) value of 0.54. The mean difference in pre-and post-score for total need for self-reflection score was \([F 2, 15) = .81]\) with a \(p\) value of 0.46.

**Null Hypothesis 2 Conclusions.**

Numerous inferences may be drawn from the findings revealed from the data analysis.
There was no statistically significant difference between groups based on the years of experience and mean difference in pre- and post SRTS scores, as discussed in Table 3, p 84. Of the participants, 66.7% had greater than five (5) years of teaching experience. The one-way ANOVA analysis demonstrated that years of teaching experience did not have a significant difference in the mean score pre-and post SRTS. Higher pre-score can be attributed to faculty implicitly using self-reflection in their teaching prior to SRTS but may not have formally implemented the different self-reflection strategies. End of semester results may have given the faculty an opportunity to retrospect on the learning objectives and utilize different strategies over the years for improving student outcomes. Therefore, years of teaching experience may not be the only variable affecting the level of engagement and need for self-reflection score. Future study accounting for other variables such as age, gender, ethnicity, level of education, and experiences in self-reflection at prior jobs may be needed to identify the variable accountable for the difference in the scores.

**Summary of Chapter**

Chapter Four presented the findings of this study, which explored the research aims, questions, and hypothesis. The Chapter began with a presentation of sample characteristics and a psychometric estimate for the sample. In addition, major findings and conclusions were introduced, with a summary of findings.

**Plan for Remaining Chapters**

Chapter 5 will provide an interpretation of the findings. This interpretation will include conclusions, discussions, and recommendations for future research.
Chapter 5: Conclusions, Discussions, and Recommendations

Introduction

Chapter Five presents a brief summary of this research, beginning with a review of the study’s problem and methodology used to answer the research question(s). The Chapter then presents a comparison of the findings to the extant literature; the implications of the study; the study’s strengths, limitations, and assumptions; recommendations for further research; and ends with the conclusions.

Statement of the Problem

The problem of interest for this study was to determine levels of Reflective Teaching Practice (RTP) employed and measures to increase utilization, in undergraduate nursing faculty. Reflection is conceptually defined as an educational technique designed to create a bridge between theory and clinical practice in the undergraduate nursing curriculum, by promoting engagement and increasing clinical judgment and critical thinking among nursing students. A major assumption of reflective teaching practice is that nursing faculty are competent and experienced in guiding nursing students in the development of reflection skills (Dekker-Groan et al., 2010; Tulyakul et al., 2017). The review of the literature has demonstrated a gap in research regarding utilization and training of reflective teaching practice strategies among nursing educators in the United States (Caldwell & Grobbel, 2013; Dube & Ducharme, 2015).
Review of Methodology

Theoretical Framework

This Pilot was conducted using a pre- and post-intervention design with a convenience sample of participants. The Theory of Reflective Practice in Nursing, by Galutira (2018), was used as a framework for the study. The foundational principle of TRP-N is that learning is ongoing and different experiences in lifetime provides an opportunity for development. The theory of Reflective Practice in Nursing involves reflection-before-action, reflection-in-action, reflection-on-action, and reflection-beyond-action. The main theoretical concepts include reflection, experience, promoting factors, hindering factors, and outcomes (Galutira, 2018).

Sampling

Power analysis was conducted to determine the sample size. A sample size of n=16 was determined to have an 80% power of detecting a significant difference from a one-tailed matched pairs t-test, and a sample of size of n=21 has 90% power. The study goal was to recruit n=18 participants.

Data Management

Data collection began only after approval from UTMB Institutional Review Board (IRB). IRB approval from San Jacinto College was also obtained prior to recruiting participants from San Jacinto College. Demographic data collection included program that the participant taught in, years of teaching experience in a nursing program, highest educational degree earned, and responses to items on the SRIS. Responses from participants were collected via Survey Monkey. All responses were anonymous.
Data Analysis

Data was analyzed using IBM SPSS Premium Grad Pack, SPSS Statistics version 29.0.1.0 (IBM, 2023). Data analysis included the test of differences such as paired t-test, i.e., to determine if there was a difference in the level of engagement in RTP pre- and post-SRTS. The relationship between level of engagement and years of teaching experience was analyzed by calculating the one-way ANOVA, with: (1) pre- and post-score of SRIS the dependent variable; and (2) years of teaching experience the independent variable. An alpha of less than <0.05 was used as a standard to determine statistical significance.

Interpretation of Major Findings and Conclusions

The goal of the present study was to determine levels of Reflective Teaching Practice (RTP) employed by undergraduate nursing faculty. This study compared the level of engagement in RTP pre- and post-Strategic Reflective Training Sessions (SRTS), as measured by the Self-Reflection and Insight Scale (SRIS). Level of engagement was measured by participants’ responses to six (6) items under engagement in self-reflection on the SRIS and six (6) items under need for self-reflection.

Null Hypothesis 1

Null Hypothesis 1 was: In undergraduate nursing faculty, there is no difference in engagement in self-reflection score in RTP pre- and post-SRTS, as measured by the SRIS.

Findings.

Data analysis revealed multiple findings. The overall score for the subscale of engagement in self-reflection did not reveal a significant change in score before and after
SRTS. The overall score for the subscale of need for self-reflection did not have a significant change in score pre- and post-SRTS. There was a slight decrease in the post-score for the question, *I rarely spend time in self-reflection* which could be attributed to the impact of understanding the different methods and the importance of self-reflection after each experience. Furthermore, faculty’s perception of the time needed for self-reflection could have changed leading to the slight decrease in the post-score.

**Conclusions**

The following conclusions may be drawn from the findings revealed from the data analysis:

The PI **failed to reject** Null Hypothesis 1. There was no statistically significant difference in overall engagement in self-reflection score pre- and post-SRTS, as measured by the SRIS. There was a slight decrease in the post-score for the question, *I rarely spend time in self-reflection* which could be attributed to the impact of understanding the different methods and the importance of self-reflection after each experience. Furthermore, faculty’s perception of the time needed for self-reflection could have changed leading to the slight decrease in the post-score.

Significant change between pre- and post-score was not expected in the need for self-reflection section due to faculty responses that they were already participating in self-reflection. SRTS may not have had an impact on helping faculty understand the need to reflect as 66.7% of the participants have greater than five (5) years of teaching experience. The amount of teaching experience may have contributed to the higher pre-score of understanding the importance on the need for self-reflection.
Null Hypothesis 2

Null Hypothesis 2 was: In undergraduate nursing faculty, there is no relationship between level of engagement in self-reflection score pre- and post-SRTS as measured by the SRIS, and years of teaching experience as recorded on the Demographic Data Sheet.

Findings

Data analysis revealed additional findings. There was not a statistically significant difference between the groups for the total engagement in self-reflection score and need for self-reflection score. The mean difference in pre-and post-score for engagement in self-reflection score was [(F 2, 15) = .63] with a p value of 0.54. The mean difference in pre-and post-score for total need for self-reflection score was [(F 2, 15) = .81] with a p value of 0.46.

Conclusions

The following conclusions may be drawn from the findings revealed from the data analysis.

The PI failed to reject Null Hypothesis 2. The one-way ANOVA analysis demonstrated that years of teaching experience did not have a significant difference in the mean score pre-and post SRTS. Higher pre-score can be attributed to faculty implicitly using self-reflection in their teaching prior to SRTS but may not have formally implemented the different self-reflection strategies. Therefore, years of teaching experience may not be the only variable affecting the level of engagement and need for self-reflection score.
Theoretical Framework: Theory of Reflective Practice in Nursing

One of the theories that supports reflection is the Theory of Reflective Practice in Nursing (TRP-N) by Galutira (2018), which involves reflection-before-action, reflection-in-action, reflection-on-action, and reflection-beyond-action. The main concepts of the theory of Reflective Practice in Nursing include reflection, experience, promoting factors, hindering factors, and outcomes. The theoretical framework serves as a guide for reflective practice and the importance for practicing reflection in nursing. The framework serves as a guide for nurses in understanding the importance of reflection, types of reflection and how to apply it in practice. The theoretical framework was used as a guide in the development of SRTS, but an interactive workshop to engage faculty in the implementation of different strategies based on different teaching experience would have been beneficial.

Literature Review of Research

Specific Aim 1

Specific Aim 1 was: In undergraduate nursing faculty, compare the level of engagement in self-reflection score in Reflective Teaching Practice (RTP) pre- and post-Strategic Reflective Training Sessions (SRTS), as measured by the Self-Reflection and Insight Scale (SRIS). (See, Appendix G: Self-Reflection and Insight Scale).

The study findings highlight that there was no statistically significant difference in the pre- and post-score after SRTS. The study goal was to determine levels of Reflective Teaching Practice (RTP) employed by undergraduate nursing faculty. This study compared the level of engagement in RTP pre- and post-Strategic Reflective
Training Sessions (SRTS), as measured by the Self-Reflection and Insight Scale (SRIS).

Also consistent with the literature, the study had a theoretical assumption that nursing faculty are competent and experienced in guiding nursing students in the development of reflection skills (Dekker-Groan et al., 2010; Tulyakul et al., 2017).

- The mean score pre-SRTS was 5.17 (M= 5.17) for the question, *I frequently take time to reflect on my thoughts.*
- The mean score pre-SRTS was 5.11 (M= 5.11) for the question, *It is important for me to evaluate the things that I do.*

Faculty was engaging in self-reflection prior to SRTS based on the pre-score SRTS. Higher pre-score data may have been due to the faculty implicitly using self-reflection in their teaching prior to SRTS. Asselin & Fain, 2013 implemented a training program for nurses that included a review of reflection, critical reflective inquiry model, and engagement and integration of the model in the participants. Self-reflection score was assessed using SRIS pre-and post-intervention, and six weeks after completion of the program. The study results showed engagement in self-reflection scores were higher after the training program and the effect was constant at week six. (Asselin & Fain, 2013).

The current study makes an important contribution to the literature in that it can be used as a model to assess reflective practice in new faculty upon hiring, teach different strategies for reflection during training period, and determine any change in reflective teaching practice after training, and also after a semester.
**Specific Aim 2**

*Specific Aim 2 was:* In undergraduate nursing faculty, determine the relationship between engagement in self-reflection score pre- and post-SRTS, as measured by the SRIS, and years of teaching experience, as recorded on the Demographic Data Sheet.

The study findings highlight that one-way ANOVA between subjects to compare the effect of years of teaching experience on the level of engagement in self-reflection score pre- and post-SRTS for each question in the level of engagement and need for self-reflection section of the survey was not statistically significant. Therefore, years of teaching experience may not be the only variable affecting the level of engagement and need for self-reflection score. Other variables regarding education level, education regarding self-reflection, age, and gender should be included in a future study to identify the effect of other variables on self-reflection.

**Study Implications**

Based on the study results, year of teaching experience was not a predictor of engagement in self-reflection:

- There was no statistically significant difference in the score for self-reflection pre- and post-SRTS.
- There was a wide range in the years of teaching experience for the faculty.
- Of the faculty that participated in the study, 66.7% of faculty had more than five (5) years of teaching experience and 33.3% had zero (0) to five (5) years of experience.
The implication for future research would be to determine other factors such as type of degree the faculty member holds, age, gender, ethnicity and any prior reflective teaching practice experience or education from a webinar or a conference.

**Study Strengths**

Examination of the study’s methodology and findings reveals several strengths:

- **Recruitment**: Participants were recruited with the assistance of UNPD.
- **Confidentiality**: An email with the study information including link to complete the survey and SRTS and FFIS was sent to the UNPD to be forwarded to the nursing faculty to protect the identity of the participants.
- **Education**: An additional strength of the study was that the voice recorded PowerPoint presentation provided faculty the importance of reflection with each experience, different ways to include reflective practice, promoting factors, hindering factors, and the benefits of reflection.
- **Training Program Development**: The study results may provide information that will assist in development of a training program for new faculty in implementing reflective teaching practice.

**Limitations and Assumptions**

**Limitations**

The study was limited by the: 1) small sample size, i.e., eighteen (18) participants; 2) convenience sampling; 3) participants being recruited from two (2) colleges; 4) analysis of doctoral participants, e.g., DNP and PhD, as one group; and 5) inability to explore variances in mean scores of specific SRIS items, because of de-identified participants.
These limitations prevented generalizations of the findings of this study to the larger population.

**Assumptions**

The study was based upon the theoretical assumption that nursing faculty are competent and experienced in guiding nursing students in the development of reflection skills (Dekker-Groan et al., 2010; Tulyakul et al., 2017). The overall *assumption* that guided this study was that SRTS will have an impact on the self-reflection score. The specific assumptions were that: (1) engagement in self-reflection score will be impacted by SRTS, and (2) engagement in self-reflection score pre- and post-SRTS will be impacted by years of teaching experience.

**Recommendations for Future Research**

Future research studies focusing on Specific Aim 1 should attempt to: (1) provide an intervention identifying one of the strategies of reflective teaching practice; (2) create a workshop for the faculty to implement the strategy based on their teaching experience; (3) conduct a follow up study after each course or semester to evaluate the effectiveness of the strategy; (4) conduct the study with a larger sample; and (5) create an instrument that specifically addresses reflective teaching practice among nursing faculty.

- In addition, future research studies focusing on Specific Aim 2 should attempt to: (1) determine the effects of gender, age, doctoral education, and teaching modality, i.e., the effects of online versus in person reflective teaching practice; (2) explore the overall perspective of reflective teaching practice in faculty, i.e., strategies that faculty members implement on a regular basis and the effectiveness from a faculty point of view; and (3) investigate variances in mean scores of specific SRIS items.
Conclusions

The following conclusions may be drawn from the findings revealed from the data analysis:

- The PI failed to reject Null Hypothesis 1. There was no statistically significant difference in overall engagement in self-reflection score pre- and post-SRTS, as measured by the SRIS. There was a statistically significant change for the question, I rarely spend time in self-reflection which could be attributed to the faculty’s understanding of what self-reflection is within the SRTS.

- The PI failed to reject Null Hypothesis 2. There was no statistically significant difference between the years of experience and pre- and post-SRTS scores. Years of experience did not predict the level of engagement in self-reflection and need for self-reflection.

Summary of Chapter

Chapter Five presented a brief summary of this research, beginning with a review of the study’s problem and methodology used to answer the research question. The Chapter then presented a comparison of the findings to the extant literature; the implications of the study; the study’s strengths, limitations, and assumptions; recommendations for further research; and ended with the conclusions.
References


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Appendix A
UTMB IRB Initial Approval

06-Oct-2021

MEMORANDUM

TO: Priya Jacob
Grad School Biomedical Science GSBS9999

FROM: Dwight Wolf, MD
Chairman, IRB

RE: Initial Study Approval

IRB #: IRB # 21-0135

Submission Number: 21-0135.005

TITLE: Assessment of Reflective Teaching Practice in Undergraduate Nursing Faculty

DOCUMENTS: Protocol V3, September 9, 2021
Fast Fact Information Sheet
Recruitment_V2
Demographic Form
Pre SIRTS survey
Post test_SIRTS Survey_v2/PowerPoint_V1
PowerPoint_V1

The UTMB Institutional Review Board (IRB) reviewed the above-referenced research protocol via an expedited review procedure on 06-Oct-2021 in accordance with 45 CFR 46.110(a)-(b)(1). Having met all applicable requirements, the research protocol is approved. The approval for this research protocol begins on 06-Oct-2021.

Continuing Review for this protocol is not required, as outlined in 45 CFR 46.109. The Principal Investigator is still responsible for:

1. Submitting amendments for protocol changes
2. Reporting Adverse Events, Protocol Violations, and Unanticipated Problems, as outlined in IRB policies and procedures.
3. Closing the project once it ends, or when personal identifiers are removed from the data/biospecimens and all codes and keys are destroyed.

Written documentation of consent is waived in accordance with 45 CFR 46.117(c).

The approved number of subjects to be enrolled is 18. If the approved number needs to be increased, you first must obtain permission from the IRB to increase the approved sample size.

If you have any questions, please do not hesitate to contact the IRB office via email at IRB@utmb.edu.
Appendix B
UTMB IRB Final Amendment

03-May-2023

MEMORANDUM

TO:                  Priya Jacob
                    Grad School Biomedical Science GSBS9999

FROM:    Dwight Wolf, MD
          Chairman, IRB

RE:       Amendment/Miscellaneous Request Acknowledged

IRB #:    IRB # 21-0135

Submission Number: 21-0135.013

TITLE:    Assessment of Reflective Teaching Practice in Undergraduate Nursing Faculty

DOCUMENTS: San Jacinto College IRB Approval letter

The Miscellaneous request to the above referenced study has been reviewed via an expedited review procedure on 03-May-2023 and acknowledged by the UTMB Institutional Review Board (IRB).

If you have any questions, please do not hesitate to contact the IRB office via email at IRB@utmb.edu.

Description of Changes/Submission

Acknowledgement of the San Jacinto College IRB approval letter.
Appendix C
Fast Fact Information Sheet

FAST FACT SHEET
IRB#: 21-0135

Study Name: Assessment of Reflective Teaching Practice in Undergraduate Nursing Faculty

Contact Information:
Principal Investigator: Priya Jacob
Office 713-213-5231 Email: prjacob@utmb.edu

Study Coordinator: Dr. Mary O'Keefe
Office: 409-772-6951 Email: meokeefe@utmb.edu

What is the purpose of this research study?
The purpose of the study is to determine levels of Reflective Teaching Practice (RTP) employed and measures to increase utilization in undergraduate nursing faculty.

What are the Research Procedures?
If you agree to take part, you will be asked to review this Fast Fact Sheet and complete the following procedures: Complete a demographic data sheet, complete self-reflection and insight scale prior to reviewing the presentation, review a presentation on reflection and take the self-reflection and insight scale within two weeks of reviewing the presentation.

What are the Risks and Benefits?
Any time information is collected, there is a potential risk for loss of confidentiality. Every effort will be made to keep your information confidential; however, this cannot be guaranteed. You may not receive any personal benefits from being in this study. We hope the information learned from this study will benefit other people with similar conditions in the future.

Costs and Compensation:
There are no costs to participate in the study. However, you will need access to a computer with internet connection to review the presentation and complete the survey. There will be no reimbursement for participation in this study.

How will my information be protected?
Information we learn about you in this study will be handled in a confidential manner. If we publish the results of the study in a scientific journal or book, we will not identify you.

Who can I contact with questions about this research study?
This study has been approved by the UTMB Institutional Review Board (IRB). If you have any complaints, concerns, input or questions regarding your rights as a subject participating in this research study or you would like more information about the protection of human subjects in research, you may contact the IRB Office, at (409) 286-9400 or irb@utmb.edu.

For questions about the study, contact Priya Jacob or Dr. Mary O'Keefe at the numbers listed above.

Before you agree to participate, make sure you have read (or been read) the information provided above; your questions have been answered to your satisfaction; you have been informed that your participation is voluntary, and you have freely decided to participate in this research.

This form is yours to keep.
Appendix D
Recruitment Email for Program Director/Department Chair

Dear Program Director/Department Chair,

My name is Priya Jacob. I am a doctoral student in the PhD Nursing Program at the University of Texas Medical Branch in Galveston, Texas (UTMB). I am conducting a doctoral research study on self-reflection, entitled, “Assessment of Reflective Teaching Practice in Undergraduate Nursing Faculty.” Self-reflection involves thinking about one’s nursing experience, e.g., motives and actions.

The online study includes completing a brief Demographic Data Sheet and a Self-Reflection and Insight Scale Survey via Survey Monkey (5 minutes), reviewing a Strategic Reflective Teaching Session (STRS) (Power Point 13 slides, 20-30 minutes), and immediately retaking the same Self-Reflection and Insight Scale Survey (Total time - maximum 35 minutes). This is a Pretest/Post Model. The STRS will introduce the types of reflection, importance of reflecting on experience, promoting and hindering factors, and outcomes of reflection.

This study has been approved by the UTMB Institutional Review Board. Participation in this study is voluntary. Identity of participants and responses will remain completely anonymous and confidential, i.e., I will not be collecting any personal identifiers or IP addresses.

Please contact me at prjacob@utmb.edu or 713-213-5251 if you have any questions and I will send an email with the link to the survey and Strategic Reflective Teaching Session to be forwarded to the nursing faculty.

Thank you,

Priya Jacob
UTMB PhD Student (5th year)
Email: prjacob@utmb.edu
Cell Phone: 713-213-5251
Appendix E
Recruitment Email for Faculty

Dear Nursing Faculty,

My name is Priya Jacob. I am a doctoral student in the GSBS PhD Nursing Program at the University of Texas Medical Branch in Galveston, Texas (UTMB). I am conducting a doctoral research study entitled, “Assessment of Reflective Teaching Practice in Undergraduate Nursing Faculty.” Self-reflection involves thinking about one’s nursing experience, e.g., motives and actions.

This online study involves completing a brief Demographic Data Sheet and a Self-Reflection and Insight Scale Survey via Survey Monkey (5 minutes), reviewing a Strategic Reflective Teaching Session (SRTS) (Power Point, 20 - 30 minutes), and immediately retaking the same Self- Reflection and Insight Scale Survey (Total time - maximum 35 minutes). This is a Pretest/Post Model. The SRTS will introduce the types of reflection, importance of reflecting on experience, promoting and hindering factors, and outcomes of reflection.

This study has been approved by the UTMB Institutional Review Board. Participation in this study is voluntary. Identity of participants and responses will remain anonymous and confidential.

Nursing faculty who are teaching at least one course in an undergraduate nursing program in an academic year are eligible to participate in this study. Please review the attached Fast Fact Information Sheet to determine whether you would like to participate in the study. If you choose to participate, please click on the below link to complete the survey and strategic reflective training session (SRTS).

Link for the survey from Survey Monkey: https://www.surveymonkey.com/r/6BVL5HC

Link for the SRTS: https://utmb.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=7deb2295-ee7c-4d65-ad3c-ae9800f5c9c5

(This link is also provided with the survey).

If you have any questions, you can contact me at 713-213-5251 or prjacob@utmb.edu.

Thank you for your time and consideration to participate in the study

Priya Jacob
UTMB PhD Student
Email: prjacob@utmb.edu
Cell Phone: 713-213-5251
Appendix F
Demographic Sheet

Demographic Data Sheet

1. Do you teach at least one course in an Undergraduate Nursing Program in an academic year?
   ☐ Yes
   ☐ No

2. Program that you currently teach in:
   ☐ Vocational Nursing
   ☐ Associate Degree Nursing
   ☐ Bachelor of Science in Nursing
   ☐ Other (please specify)

3. Highest Qualification: (Choose the highest degree)
   ☐ Bachelor of Science in Nursing
   ☐ Master of Science in Nursing
   ☐ PhD. in Nursing
   ☐ Doctorate in Education (EdD)
   ☐ Other (please specify)

4. Years of teaching experience in undergraduate nursing program:
   ☐ Less than 5 years
   ☐ 5 – 10 years
   ☐ 10 – 15 years
   ☐ 15 – 20 years
   ☐ Greater than 20 years
Appendix G
Self-Reflection and Insight Scale

Engagement in self-reflection
I don’t often think about my thoughts (R).
I rarely spend time in self-reflection (R).
I frequently examine my feelings.
I don’t really think about why I behave in the way that I do (R).
I frequently take time to reflect on my thoughts.
I often think about the way I feel about things.

Need for self-reflection
I am not really interested in analyzing my behavior (R).
It is important for me to evaluate the things that I do.
I am very interested in examining what I think about.
It is important to me to try to understand what my feelings mean.
I have a definite need to understand the way that my mind works.
It is important to me to be able to understand how my thoughts arise.

Insight
I am usually aware of my thoughts.
I’m often confused about the way that I really feel about things (R).
I usually have a very clear idea about why I’ve behaved in a certain way.
I’m often aware that I’m having a feeling, but I often don’t quite know what it is (R).
My behavior often puzzles me (R).
Thinking about my thoughts makes me more confused (R).
Often, I find it difficult to make sense of the way I feel about things (R).
I usually know why I feel the way I do.

Six-Point Scale: 1 = Strongly Disagree, 6 = Strongly Agree
Appendix H
Permission to Use Self-Reflection and Insight Scale

3/1/2021
Mail - Jacob, Priya - Outlook

RE: Permission to use Self-Reflection and Insight Scale

Peter Langford <peter.langford@voiceproject.com.au>
Mon 3/1/2021 7:51 PM
To: Jacob, Priya <prjacob@UTMB.EDU>
Cc: O'keefe, Mary E. <meokeefe@UTMB.EDU>

WARNING: This email originated from outside of UTMB's email system. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Priya – Thanks for your email. Yes, that’s fine. We are regarding the scale as being in the public domain now, so feel free to use. All the best for a successful and enjoyable PhD!

Pete

---

From: Jacob, Priya <prjacob@UTMB.EDU>
Sent: Tuesday, 2 March 2021 11:23 AM
To: Peter Langford <peter.langford@voiceproject.com.au>
Cc: O’keefe, Mary E. <meokeefe@UTMB.EDU>
Subject: Permission to use Self-Reflection and Insight Scale

Hello Dr. Langford:

I am a PhD Nursing student at The University of Texas Medical Branch at Galveston, TX, USA. I am developing a study titled: Assessment of Reflective Teaching Practice in Undergraduate Nursing Faculty.


May I have your permission to do so?

Thank you,

Priya Jacob
PhD Nursing Student
prjacob@utmb.edu
Table 1
Demographic Data

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highest Education Received</strong> N=18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MS in Nursing</td>
<td>11</td>
<td>61.1%</td>
</tr>
<tr>
<td>Doctorate (EdD, PhD or DNP)</td>
<td>7</td>
<td>38.9%</td>
</tr>
<tr>
<td><strong>Programs the faculty currently teach in</strong> N=18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSN</td>
<td>3</td>
<td>16.7%</td>
</tr>
<tr>
<td>ADN</td>
<td>10</td>
<td>55.6%</td>
</tr>
<tr>
<td>ADN &amp; VN</td>
<td>4</td>
<td>22.2%</td>
</tr>
<tr>
<td>ADN, VN &amp; BSN</td>
<td>1</td>
<td>5.6%</td>
</tr>
<tr>
<td><strong>Years of teaching experience in undergraduate nursing program:</strong> N=18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 5 years</td>
<td>6</td>
<td>33.3%</td>
</tr>
<tr>
<td>5 – 10 years</td>
<td>7</td>
<td>38.9%</td>
</tr>
<tr>
<td>Greater than 15 years</td>
<td>5</td>
<td>27.8%</td>
</tr>
<tr>
<td><strong>Faculty teaches at least 1 undergraduate nursing course:</strong> N=18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2
Paired Samples *t*-test for Differences in Pre – Post-Scores on the SRIS

<table>
<thead>
<tr>
<th>SRIS Item</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t (17)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don’t often think about my thoughts</td>
<td>-0.56</td>
<td>1.79</td>
<td>-1.32</td>
<td>0.21</td>
</tr>
<tr>
<td>I rarely spend time in self-reflection</td>
<td>0.44</td>
<td>0.78</td>
<td>2.41</td>
<td>0.03</td>
</tr>
<tr>
<td>I frequently examine my feelings</td>
<td>-0.11</td>
<td>1.23</td>
<td>-0.38</td>
<td>0.71</td>
</tr>
<tr>
<td>I don’t really think about why I behave in the way that I do</td>
<td>0.53</td>
<td>1.07</td>
<td>2.05</td>
<td>0.06</td>
</tr>
<tr>
<td>I frequently take time to reflect on my thoughts</td>
<td>-0.17</td>
<td>0.92</td>
<td>-0.77</td>
<td>0.45</td>
</tr>
<tr>
<td>I often think about the way I feel about things</td>
<td>0.06</td>
<td>0.64</td>
<td>0.37</td>
<td>0.72</td>
</tr>
<tr>
<td>Engagement in self-reflection score</td>
<td>0.44</td>
<td>3.73</td>
<td>0.51</td>
<td>0.62</td>
</tr>
<tr>
<td>I am not really interested in analyzing my behavior</td>
<td>0.17</td>
<td>0.51</td>
<td>1.37</td>
<td>0.19</td>
</tr>
<tr>
<td>It is important for me to evaluate the things that I do</td>
<td>-0.11</td>
<td>0.58</td>
<td>-0.81</td>
<td>0.43</td>
</tr>
<tr>
<td>I am very interested in examining what I think about</td>
<td>0.00</td>
<td>0.49</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>it is important for me to try to understand what my feelings mean.</td>
<td>0.00</td>
<td>0.34</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>I have a definite need to understand the way that my mind works</td>
<td>0.11</td>
<td>0.90</td>
<td>0.52</td>
<td>0.61</td>
</tr>
<tr>
<td>It is important to me to able to understand how my thoughts arise.</td>
<td>-0.06</td>
<td>0.54</td>
<td>-0.44</td>
<td>0.67</td>
</tr>
<tr>
<td>Need for self-reflection score</td>
<td>0.11</td>
<td>2.40</td>
<td>0.20</td>
<td>0.85</td>
</tr>
<tr>
<td>Total SRIS Score</td>
<td>-0.06</td>
<td>6.79</td>
<td>-0.04</td>
<td>0.97</td>
</tr>
</tbody>
</table>
Table 3
One-Way ANOVA for Difference in Pre – Post-Scores Between Years of Teaching Experience Groups

<table>
<thead>
<tr>
<th>SRIS Item</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>F (2, 15)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don’t often think about my thoughts.</td>
<td>-0.17</td>
<td>0.75</td>
<td>0.85</td>
<td>0.45</td>
</tr>
<tr>
<td>0-5 years</td>
<td>-0.17</td>
<td>0.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10 years</td>
<td>-0.43</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;15 years</td>
<td>-0.80</td>
<td>1.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I rarely spend time in self-reflection.</td>
<td>0.17</td>
<td>0.41</td>
<td>0.88</td>
<td>0.44</td>
</tr>
<tr>
<td>0-5 years</td>
<td>-0.17</td>
<td>1.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10 years</td>
<td>-0.29</td>
<td>1.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;15 years</td>
<td>0.40</td>
<td>1.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I frequently examine my feelings.</td>
<td>0.33</td>
<td>1.30</td>
<td>0.57</td>
<td>0.58</td>
</tr>
<tr>
<td>0-5 years</td>
<td>-0.40</td>
<td>1.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10 years</td>
<td>-0.07</td>
<td>1.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;15 years</td>
<td>0.40</td>
<td>1.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I don’t really think about why I behave in the way that I do.</td>
<td>0.33</td>
<td>0.52</td>
<td>0.16</td>
<td>0.85</td>
</tr>
<tr>
<td>0-5 years</td>
<td>-0.40</td>
<td>0.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10 years</td>
<td>-0.07</td>
<td>1.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;15 years</td>
<td>-0.07</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I frequently take time to reflect on my thoughts.</td>
<td>0.33</td>
<td>0.52</td>
<td>1.38</td>
<td>0.28</td>
</tr>
<tr>
<td>0-5 years</td>
<td>0.43</td>
<td>0.98</td>
<td></td>
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<tr>
<td>5-10 years</td>
<td>0.40</td>
<td>1.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;15 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I often think about the way I feel about things.</td>
<td>-0.33</td>
<td>0.52</td>
<td>2.16</td>
<td>0.15</td>
</tr>
<tr>
<td>0-5 years</td>
<td>-0.33</td>
<td>0.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10 years</td>
<td>-0.14</td>
<td>0.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;15 years</td>
<td>0.00</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement in Self-Reflection</td>
<td></td>
<td></td>
<td>0.63</td>
<td>0.54</td>
</tr>
<tr>
<td>0-5 years</td>
<td>-1.83</td>
<td>2.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10 years</td>
<td>0.00</td>
<td>2.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;15 years</td>
<td>0.60</td>
<td>6.23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3 (contd.)
One-Way ANOVA for Difference in Pre – Post-Scores Between Years of Teaching Experience Groups

<table>
<thead>
<tr>
<th>SRIS Item</th>
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<th>F (2, 15)</th>
<th>p-value</th>
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<tr>
<td>I am not really interested in analyzing my behavior.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5 years</td>
<td>-0.17</td>
<td>0.41</td>
<td>0.42</td>
<td>0.67</td>
</tr>
<tr>
<td>5-10 years</td>
<td>-0.29</td>
<td>0.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;15 years</td>
<td>0.00</td>
<td>0.71</td>
<td></td>
<td></td>
</tr>
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<td>It is important for me to evaluate the things that I do.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5 years</td>
<td>-0.17</td>
<td>0.41</td>
<td>1.06</td>
<td>0.37</td>
</tr>
<tr>
<td>5-10 years</td>
<td>0.29</td>
<td>0.49</td>
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<tr>
<td>&gt;15 years</td>
<td>0.20</td>
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<tr>
<td>0-5 years</td>
<td>-0.17</td>
<td>0.41</td>
<td>2.88</td>
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<tr>
<td>5-10 years</td>
<td>-0.14</td>
<td>0.38</td>
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<tr>
<td>&gt;15 years</td>
<td>0.40</td>
<td>0.55</td>
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<tr>
<td>it is important for me to try to understand what my feelings mean.</td>
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<tr>
<td>0-5 years</td>
<td>0.00</td>
<td>0.00</td>
<td>1.55</td>
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<td>0.20</td>
<td>0.45</td>
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<td>I have a definite need to understand the way that my mind works.</td>
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<td>.08</td>
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<tr>
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<td>0.55</td>
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<tr>
<td>Need for self-reflection</td>
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<td></td>
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<td>0.46</td>
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<td>&gt;15 years</td>
<td>1.00</td>
<td>3.81</td>
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<td></td>
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</tbody>
</table>
# Vita

PRIYA JACOB

## Professional Summary

- Full-time faculty in the Nursing Program at San Jacinto College, Houston, Texas.
- Completed the Nursing Educator graduate degree from Texas Tech University Health Sciences Center while functioning as a full time Registered Nurse III at Children’s Memorial Hermann Hospital.
- Dedicated Registered Nurse with a 9-year track record of providing quality, patient-centered care in a Neonatal Intensive Care Unit.
- Experienced in a variety of nursing roles including evaluation of staffing requirements, assistance to nursing managers & education for patients and families on health care needs and conditions.

## Experience

### Nursing Faculty  
**Nursing Program, San Jacinto College, Houston, TX**

- Teach courses in the Associate Degree & Vocational Nursing Programs.
- Supervise, instruct and evaluate students in the classroom, clinical settings and in the simulation lab.
- Plan and conduct student conferences.
- Revise curriculum and prepare assignments for the course.
- Member of the Readmissions Committee 2018 -2021.
- Participated in the SJC Foundation Scholarship Review Committee.
- Worked on ACEN standards and integrated Differentiated Essential Competencies (DECs) in assigned courses.

## Education

<table>
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<tr>
<th>Degree</th>
<th>Institution</th>
<th>GPA</th>
<th>Year</th>
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<tbody>
<tr>
<td>PhD Nursing</td>
<td><em>The University of Texas Medical Branch at Galveston</em></td>
<td>4.0</td>
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<tr>
<td>Master of Science in Nursing (Education)</td>
<td><em>Texas Tech University Health Sciences Center</em></td>
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<tr>
<td>Bachelor of Science in Nursing</td>
<td><em>Texas Tech University Health Sciences Center</em></td>
<td>Summa cum Laude - 3.9</td>
<td>2004 - 2005</td>
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<tr>
<td>Associate Degree in Nursing</td>
<td><em>San Jacinto College – Central Campus</em></td>
<td>1999 - 2001</td>
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## Professional Licensure/Certification

<table>
<thead>
<tr>
<th>Certification</th>
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<tbody>
<tr>
<td>Registered Nurse</td>
<td>Expires Mar 2024</td>
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<tr>
<td>Basic Life Support</td>
<td>Expires Feb 2024</td>
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<tr>
<td>Neonatal Intensive Care Nursing (RNC)</td>
<td>Expires Dec 2024</td>
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## Awards, Honors & Commendation

- Gale Foundation Academic Achievement Award, Fall 2019
- John P. McGovern Chair in Nursing Award, Fall 2018
- United States Achievement Academy National Award Winner, 2000