A "Writing Remedy" for Scholarly Writing Self-Efficacy in a Baccalaureate Nursing Course

by

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A "Writing Remedy" for Scholarly Writing Self-Efficacy in a Baccalaureate Nursing Course

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Abstract

Baccalaureate degree nursing students must compose scholarly papers to disseminate valuable knowledge and increase evidence-based practice. However, students often enter the program deficient in the ability to express ideas, format papers according to the American Psychological Association, use proper writing mechanics, evaluate the literature, and locate resources for support. As important as the act of writing is, students' perceptions and beliefs in their writing abilities play a significant role in writing success. If a student suspects incompetence in creating a scholarly paper, feelings of low self-efficacy or confidence in oneself can surface. Although numerous research studies stress the importance of incorporating scholarly writing into the nursing curriculum, limited research studies have addressed the concern surrounding nursing students writing self-efficacy. This one-group quantitative quasi-experimental before and after DNP project determined that a scholarly writing intervention positively impacted the writing self-efficacy of online RN-BSN students (N=46) in the first course, NURS3345 Transition to Professional Nursing at a large, southern public university. A paired samples t-test revealed a statistically significant increase before and after the writing intervention. The results proved that a scholarly writing intervention rooted in Bandura's self-efficacy theory benefits nursing students writing self-efficacy.

Keywords: scholarly writing, RN-BSN students, self-efficacy, American Psychological Association, Bandura's Self-Efficacy Theory

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SECTION I: INTRODUCTION

The nursing profession is undeniably facing a shortage. The nursing workforce will lose more than two million years of nursing experience each year between 2020-2030 as the remaining estimated 640,000 baby boomer registered nurses retire (Buerhaus et al., 2017; National Academies of Sciences, Engineering, and Medicine, 2021). The U.S. Bureau of Labor Statistics states there is a need for more than one million new nurses to expand and replace retirees (National Academies of Sciences, Engineering, and Medicine, 2021).

Not only is this nation experiencing a nursing shortage, but there is also a demand for RNs to become increasingly educated and assume leadership positions to maintain best-practice outcomes. Nurses with baccalaureate degrees are vital to the growth of healthcare organizations. Studies indicate a correlation between Registered Nurses with a Bachelor of Science in Nursing (RN-BSN) to improved patient outcomes, higher job satisfaction, critical thinking, and leadership skills. The baccalaureate curriculum focuses on professional development and cultural, political, societal, and economic issues affecting patients and healthcare quality (Iheduru-Anderson, 2020).

The 2011 *Future of Nursing* report recommended growing the percentage of nurses with a baccalaureate degree to 80 percent by 2020 (National Academies of Sciences, Engineering, and Medicine, 2021). Granted, this number was not achieved in 2020. Still, significant strides were made with the attainment of 57 percent of baccalaureate-prepared nurses reported in 2019, an increase from 49 percent in 2010 at the time of the *Future of Nursing* report (Iheduru-Anderson, 2020). The number of employed RNs prepared with at least a bachelor's degree has now surpassed those with an associate degree. This growth has been driven, in part, by RNs completing RN-to-Bachelor of Science in Nursing (BSN) education programs, which provide

additional education needed by RNs with an associate degree to earn a BSN (National

Academies of Sciences, Engineering, and Medicine, 2021).

Baccalaureate nursing education focuses on developing a broad range of skills, including

information acquisition, synthesis, and critical thinking (Tarrant et al., 2008). Baccalaureate

degree nurses must engage in scholarship and share expertise to contribute significantly to the

profession (Williams & Walker, 2020). Sharing this expertise in the form of scholarly writing

adds to the advancement of the nursing discipline by conveying original thought, evidence-based

statements supported by literature, peer-reviewed publications, and a formal language consistent

with nursing (Shellenbarger et al., 2018). Effective scholarly writing involvement is two-fold;

writing necessitates students' awareness and understanding, then requires critical evaluation and

integration of ideas to build upon the body of nursing knowledge (Padagas & Hagan, 2020).

Accreditation standards for baccalaureate nursing schools recognize professionalism,

written communication, and adding to the scholarly body of knowledge. In reaction, the

American Association of Colleges of Nursing (AACN) integrated innovative core competencies

for professional nursing education. These specific AACN domains focus on the need for nurses

to be proficient in communication, articulate findings and participate in scholarly practice.

Domain one stresses the nurse's ability to "articulate nursing's distinct perspective to practice"

and "demonstrate intellectual curiosity" (American Association of Colleges of Nursing, 2021, p.

27-28). Domain two states that nurses should "communicate effectively with relevant

stakeholders across health systems" (AACN, 2021, p. 30). Domain three focuses on health policy

creation; the nurse should "articulate and describe the intent of the proposed health policy

change" (AACN, 2021, p. 35). Domain four states that the nurse should "demonstrate an

understanding of different approaches to scholarly practice," "participate in scholarly inquiry as

a team member," and "communicate scholarly findings" (AACN, 2021, p. 37). These goals in baccalaureate education directly relate to the expectation of nursing students to participate in scholarly writing and evidence-based projects (Tyndall & Scott, 2017). Therefore, effective written communication is a significant outcome of baccalaureate education.

These AACN Domains infer there is a need for promoting the development of interprofessional collaboration, communication, and scholarly inquiry in nursing education programs. Writing is a powerful tool, reported by students and mid-career professionals as the most helpful skill for academic and career success (Bailey et al., 2015). With a strong and established writing foundation, nursing students will be more successful in written and oral communication during and throughout nursing programs (Luthy et al., 2009). By implementing foundational writing coursework, nursing students improve critical thinking skills, the capability of personal reflection, and the ability to become effective communicators.

Due to nursing's clinically sound underpinnings, a plethora of evidence supports clinical knowledge in nursing education. The ability to think critically, exhibit clinical competence and uphold patient safety standards is emphasized by program outcomes across nursing curriculums. However, there is a lack of emphasis on the ability of a nurse to develop writing skills, especially in an Associate Degree Nurse program (Tyndall & Scott, 2017). Students entering a baccalaureate degree program are expected to compose scholarly papers. However, students often enter the program deficient in the ability to express ideas clearly and evaluate and synthesize the literature, leading to a decrease in writing self-efficacy, the belief that one can perform the necessary task. This project aimed to implement a scholarly writing intervention to address baccalaureate nursing students writing self-efficacy, providing a solid foundation for future professional writing opportunities.

Background of the Problem

Typically, associate degree nurses return to school for a bachelor's degree for one of these three reasons: to obtain a position in which a BSN is required, as intermediary education for graduate school, or for personal fulfillment (McEwen et al., 2013). Subsequently, these reasons necessitate a foundation for professional, scholarly writing and communication. Regardless of the setting, nurses need to be able to communicate in a variety of ways, through recording information in the form of charts or nursing care plans, writing formal letters, proposals, or governmental policies, documenting performance appraisals, and creating manuscripts or journals for publication (Thorpe & Kulig, 1997). However, significant barriers associated with scholarly writing in nursing manifest in time, a lack of writing experience, and indifference to the need for professional writing for career purposes (Cone & Van Dover, 2012).

There is the possibility of a significant time lapse among nurses whose education level is at the associate degree level that are now entering a baccalaureate program- the average is almost seven and a half years between the two degrees (McEwen et al., 2013). Another obstacle nurses face when returning to school is the inability to write in the formal, professional style required by academic programs because of a lack of writing exposure in a clinically focused associate degree program. In a systematic review of the literature examining nursing education programs and strategies to develop writing skills, associate degree nursing programs were grossly underrepresented (Tyndall & Scott, 2017). The third impediment to professional writing is the outlook of students. Nursing students view writing within a baccalaureate program either as necessary preparation for future professional activities or as a burden to endure to obtain a degree (Friberg & Dahlbord-Lyckhage, 2013).

Scholarly writing is one primary differentiation between associate degree and baccalaureate degree nursing practice, as evidenced by BSN nurses displaying enhanced communication skills and competencies in problem-solving and leadership (Tyndall & Scott, 2017). Over the last several decades, scholarly writing has become a more prominent skill to enhance nurses' ability to disseminate knowledge and expand the profession and evidence-based care (Stevens et al., 2014). Yet, current methods to improve scholarly writing in RN-BSN completion programs must be standardized, and more research on effective strategies is necessary (Roberts & Goss, 2009; Stevens et al., 2014). When nursing students, and subsequently nurses, grapple with the ability to write, the deficiency impedes the dissemination of knowledge and the advancement of nursing and best practices, a core competency of a baccalaureate-prepared nurse. Moreover, BSN nurses are expected to advance to leadership positions and serve as collaborative partners with other disciplines to improve overall health and reduce health disparities (National Academies of Sciences, Engineering, and Medicine, 2021). The need to add to the body of nursing knowledge and best practice evidence to improve patient care requires competent scholarly writing skills. Therefore, nursing faculty must emphasize writing skills as an absolute priority in baccalaureate nursing education (Williams & Walker, 2020).

Review and Summary of Relevant Literature

The literature review aims to assess, synthesize, and identify common themes amongst various peer-reviewed research articles to address the self-efficacy of scholarly writing in RN-BSN nursing students. The objective of this research is to provide a background of information and recognize scholarly information from the current literature, support the study, and attempt to answer the specific question:

Does the (I) implementation of a scholarly writing intervention (O) impact the online RN-BSN students' (P) Post-Secondary Writing Self-Efficacy Scale scores?

Literature Review

Two different databases were utilized to conduct the review, ProQuest and the Cumulative Index to Nursing and Allied Health Literature (CINAHL), to exhaust all options and obtain the most relevant data. A search strategy table was created to identify the best methods to narrow the search. By utilizing a computerized search of keywords "RN-BSN students," "associate degree," "baccalaureate degree," "scholarly writing or writing self-efficacy," "not utilizing scholarly writing intervention," and "student self-efficacy or student grades on scholarly assignment." The Boolean method was applied to broaden and define the search, and these terms were combined using the words AND and OR. The theoretical investigation was expanded to include "self-efficacy theory." Bibliography mining was also used to develop the literature search. One form of bibliography mining is when the individual reviews each article's reference list for additional works of interest (Houser, 2018).

The exhaustive review revealed justification of the needs for this study and suggestions for possible research questions (Cresswell, 2015). The themes noted in the literature search for the problem-based inquiry are a lack of writing instruction in nursing, nursing students' knowledge, skills, and attitudes towards scholarly writing, relationships between student self-efficacy and writing ability, and influence from faculty support and instruction. The articles were examined to assist the development of this project's purpose, significance, and theoretical framework.

Historical Aspect of Writing in Nursing

Previous literature suggests there is vital significance in drawing on Florence Nightingale as a resource for current nursing practice (Attewell, 1998). Nurses today actively find Florence Nightingale relevant to nursing knowledge and education. The foundations of nursing education arguably began with Florence Nightingale and her desire to establish and add to a body of nursing knowledge (Attewell, 1998). Nightingale founded an early training school for nurses in 1860, serving as a model for nursing schools worldwide (Attewell, 1998). As a trailblazer for nursing education, Nightingale continually advocated for recognizing higher educational standards. An underpinning of Nightingale's approach to education proposed that nursing schools develop stringent didactic standards (Keating & DeBoor, 2018). Although nursing education has changed over the past 150 years, Nightingale's foreshadowing of standards and consistency in nursing education was extraordinary.

Not only was Nightingale passionate about establishing a clear vision for nursing education, but with years of nursing experience, she developed a new concept in education based on nursing evidence and reflective writing (Anderson, 1981). Known as a prolific writer, Nightingale kept diaries of all nursing experiences and activities. A lifetime of collected writings includes published reports and prestigious personal correspondence with individuals, organizations, and governments throughout the British Empire and the rest of the world (Nelson & Rafferty, 2010). With Nightingale's ability to communicate in writing, a noted reform took place regarding health legislation in England and India, along with military hospitals, which also influenced a significant reorganization of hospital administration (Attewell, 1998). Nightingale's prodigious writing and formidable thinking led to a substantial development in nursing knowledge. Nightingale published her first book in 1859, *Notes on Nursing, What It Is, and What*

It Is Not (Keating & DeBoor, 2018). For decades, this book was the sole textbook in nursing. The passion for educational standards intertwined with her writing ability laid a solid foundation for nursing.

Following Nightingale, the nursing profession underwent a period of disorganization to define itself as a scientific discipline (AACN, 2021). To address the issue, early nurse leaders devoted their efforts to eliminating discrimination, advancing policies, and creating a collective voice for the profession through their academic writing abilities. The period of transformation in nursing is marked by the emergence of educational leaders and the establishment of professional nurse journals (Dombrowsky, 2022). The ability to present coherent, relevant, scholarly information profoundly contributes to the development of the nursing profession. Even today, the concept of writing in nursing and adding to nursing knowledge is evidenced by domains in the AACN Essentials document, which provides a framework for nursing education.

Lack of Writing Exposure in Nursing

Despite the importance of writing and the ability to disseminate nursing knowledge dating back to Nightingale and the infancy of nursing, scholarly writing still needs to be addressed for students enrolled in higher education. There is a noted gap between writing experience and writing skills displayed through all levels of academia and practicing nurses, as evidenced by the literature review. Nonetheless, writing competency is an expectation that differentiates associate degree nurses from those with a Baccalaureate Degree (Tyndall & Scott, 2017). Conversely, although this is a distinguishing factor between the two degrees, there are signs that writing is a competency many nurses need to develop. Typically, in a diploma or associate degree nursing program, there is an emphasis on concise charting combined with the traditional multiple-choice exam as opposed to formal papers, which can hinder the development

of academic writing skills in these students (Thorpe & Kulig, 1997). Yet, the most common assignments in post-RN courses are paper writing assignments (Thorpe & Kulig, 1997).

Several problems surface when students must write papers for baccalaureate-level nursing courses. Some students focus on the structural elements of a paper in the form of grammar, spelling, and punctuation rather than on the writing process's content (Thorpe & Kulig, 1997). Students become accustomed to a mechanical form of writing, suitable for high school and associate degree programs where evaluation is performed through multiple choice exams (Thorpe & Kulig, 1997). Due to a noted lack of writing abilities in an associate-to-baccalaureate degree nursing program, a writing skills workshop emerged based on faculty frustration with students' illogical flow of ideas and a gross misunderstanding of essential writing elements (Thorpe & Kulig, 1997). Students (N=97) attended three writing workshops over an academic year. The writing skills workshops consisted of games, small groups, reflective exercises, lecture content regarding the elements of scholarly writing, and APA formatting requirements. After the workshops concluded, students reacted positively and expressed feelings of relief, less frustration with the principles of writing, and more confidence in completing future writing assignments (Thorpe & Kulig, 1997).

Associate Degree nurses may need to gain the background for scholarly writing, as traditional hospital-based nursing programs focus on clinical skill acquisition and procedural compliance (Tarrant et al., 2008). For the associate degree registered nurses returning to the university setting to earn a baccalaureate degree, the ability to acquire, communicate and acknowledge sources of information is one of the many challenges students encounter (Tarrant et al., 2008). Students must learn to format academic papers and effectively use health literature to support thoughts and conclusions. To effectively evaluate and analyze the gap, a quantitative

study was conducted within an RN-BSN program focused on a curricular intervention to develop and strengthen students' writing skills. A pre and post-test were administered to students (N =114) who met the inclusion criteria. The pre-test was delivered immediately after completing the first course of the two-year program; then, an identical post-test was given at program completion. Learning modules were presented over time, focusing on academic writing skills, formatting a paper, how to write an essay, plagiarism, and American Psychological Association (APA) format (Tarrant et al., 2008). The study results indicated that at baseline, students had insufficient knowledge of the skills required for academic writing from pre-test $M = 2.79$ (SD 1.95), and all participants showed statistically significant improvements on the post-test $M = 6.05$ (SD 1.74) (Tarrant et al., 2008). The magnitude of the changes noted in the pre-and post-test scores indicate that students struggle with writing before entering an RN-BSN program, yet, with structured and directed learning experiences early in the program, there is potential for substantial improvement.

However, although a lack of writing comprehension is noted in associate degree nurses, the issue is present in other degree-specific nursing programs. Roberts and Gross (2009) implemented an online scholarly writing tutorial in both RN-BSN and master's degree programs at a large university in California in reaction to the nursing faculty determining that nursing students written work demonstrated inferior sentence structure, spelling errors, and lack coherent arguments using critical thinking from acceptable sources. Most written papers did not conform to the APA format or evaluation criteria set by program standards. Factors that contributed to students writing difficulties included English as a second language, limited exposure to writing before the degree program, a lack of confidence, and time restraints (Roberts & Gross, 2009).

A writing competency deficit was noted in a prelicensure nursing program in Mississippi. In an attempt for faculty to increase knowledge attainment and application of pharmacology concepts, a written assignment that promoted high-quality writing skills was incorporated into the course. The assignment was intended to strengthen and integrate essential course content, with the expectation of knowledge reinforcement and for students to prosper. With dismay, feedback indicated that most nursing students needed help writing the paper and understanding composition and format, leading to confusion and frustration (Koestler, 2010).

Historically, writing aims to help students better understand the content (Troxler et al., 2011). Troxler et al. (2011) reviewed specific programs to teach writing skills to prelicensure baccalaureate nursing students to investigate this assumption further. Two types of programs were found, stand-alone techniques and writing activities noted throughout the curriculum. The stand-alone approaches to writing support were workshops, online tutorials, and writing-intensive courses. Although these specific activities showed improvement in writing abilities, the limited exposure and availability of assistance did not allow for sustained improvement. The writing activities throughout the curriculum included multiple opportunities to improve students' writing in the form of a consistently evolving personal nursing philosophy. The philosophy assignment was integrated into the first course by adding information, and students made active revisions through the final course in the program (Troxler et al., 2011). The research findings conclude that nursing programs must ensure nursing students are consistently exposed to writing exercises and develop their writing skills (Andre & Graves, 2013), aligning with the suggestions from Tarrant et al. (2008).

To further investigate nurses' writing exposure on a more advanced level, Cone and Dover (2012) interviewed graduate faculty to better understand nursing students writing

difficulties and attrition rate from a master's program. Faculty identified poor writing as a significant contributor to student distress, discouragement, and, sometimes, a decision to leave the graduate program. Strong candidates were dropping from the program because of poor writing skills, and with a lack of resources, faculty were left with the burden of addressing this problem. With research and persistence to mitigate the problem, faculty realized there is a lack of coherent and sustainable writing support in the nursing program (Cone and Dover, 2012). The writing deficiency is evidenced by the graduate nursing students' inappropriate grammar, spelling, sentence structure, writing style, and inconsistent use of the correct APA formatting (Cone and Dover, 2012).

A similar approach of considering faculty's perceptions using a mixed-methods study by Latham and Ahern (2013) assessed prelicensure baccalaureate nursing students writing outcomes through 10-15 student focus groups. Faculty noted an absence of student awareness in recognizing the student's writing skills deficit. Faculty reported that students' papers lacked a coherent focus with inadequate support, and many assignments did not meet basic sentence construction, flow, and grammatical conventions required for college-level writing (Latham & Ahern, 2013). The finding was reinforced by subjective conclusions from student participant focus groups conducted over two years. Students in these groups revealed a significant issue in understanding APA format, writing style, and referencing, which hindered effective writing (Latham & Ahern, 2013).

Baccalaureate nursing programs have reported that formal, scholarly writing is only sometimes taught or emphasized (Stevens, 2014). RN-BSN programs note that students need more knowledge to disseminate scholarship beyond the staff nurse role. There needs to be more evidence on how baccalaureate programs are changing to meet the need to develop students'

critical thinking skills beyond relying on a previous English course (Stevens, 2014). In addition to the findings that support the need for writing development in BSN programs, research suggests incorporating writing activities early in the curriculum is beneficial so students can build on their writing abilities (Stevens, 2014). Nursing students cannot be expected to master this process without formal instruction and opportunities for practice.

A descriptive, qualitative study was conducted with BSN graduates ($N = 9$) from a public nursing college to investigate how associate degree students describe scholarly writing development during baccalaureate studies. The participants went through three phases of an interview. In the first phase, the participants identified a need for preparation for writing at the baccalaureate level, and scholarly writing was the program's biggest challenge. The study's second phase established a positive correlation between nursing faculty instruction, writing centers, and peer feedback. The third and final phase of the study aligned scholarly writing with professional identity, which increased awareness of the value of evidence-based writing on patient outcomes (Tyndall & Scott, 2017).

Not only does the lack of writing preparation affect students that are knowledgeable about a specific subject but struggle to apply this knowledge to the writing process, but it also implicates nurses attempting to add to the body of knowledge (Bailey et al., 2015). Although nursing literature emphasizes the importance of effective writing in nurses, Miller et al. (2015) conclude that writing competency in nursing programs is assumed rather than taught. Faculty expect students to have proficiency in basic writing skills. Yet, in a national study, only 40% of students graduating from a four-year college were competent in the knowledge and cognitive skills needed for academic writing (Robinson & Bishop, 2017).

Many registered nurses entering a baccalaureate or master's program have experience writing medical records but little exposure to writing scholarly papers or papers for publication (Robinson & Bishop, 2017). The American Journal of Nursing corroborated the lack of exposure and reported that documents received from Registered Nurses (RNs) were deemed unpublishable, as evidenced by poorly written, illogical work that needed more clarity, organization, and resources (Johnson & Rulo, 2019). Unfortunately, expert nurse clinicians publish less frequently than research nurses and nurse professors as they feel they need to be more qualified to contribute to scientific literature (Hirschey et al., 2019). Reasons for a low publication rate amongst clinical nurses include poor writing skills and low writing self-efficacy, partly due to the need for integration of writing instruction into the nursing curriculum to support and cultivate scholarly writing skills (Bailey et al., 2015). Subsequently, scholarly writing is a necessary skill for both nursing students and RNs; however, appropriate support and resources are needed to enhance the development of their writing ability (Riley, 2019). There is an immediate need to close this lack of writing preparation gap in practicing nurses by preparing nursing students with writing opportunities and support in anticipation of future professional responsibilities.

Writing Self-Efficacy in Nursing Students

The act of writing plays a central role in higher education and can also be described as the ultimate test for undergraduate nursing students. Writing is an indispensable tool in pursuing academic excellence and professionalism, most importantly exercised in disseminating nursing knowledge and reliably documenting nursing care. Writing is an avenue for instruction, a means of coursework, and a prerequisite for student progression (Whitehead, 2002). Rolfe (1997, as cited in Whitehead, 2002) identified writing as one of the most important skills a nurse can adopt

to think critically and investigate best practices successfully. Similarly, Mitchell et al. (2021) conducted a qualitative synthesis of the literature, which revealed academic writing as a significant benefit to nursing students' professional growth and the facilitation of students' connection to a future nursing identity.

As important as the act of writing is, students' perceptions of their writing abilities play a significant role in writing success. Senior baccalaureate nursing students ($N = 54$) underwent an intensive writing course to address a ten-page professional letter and healthcare policy requirement for graduation (Silvia et al., 1999). The grading criteria for the writing component of the papers focused on coherence, clarity, and appropriate grammar. Students perceived writing skills were measured before the pre- and post-writing intensive course using a Likert scale of 1 to 4, poor, fair, good, and excellent. The student's perceptions of their writing skills shifted substantially for the better, from 58% ($n = 29$) good/excellent before the course to 86% ($n = 43$) after the course (Silvia et al., 1999). A marked decrease in poor/fair perceptions before the course went from 42% ($n = 21$) to 14% ($n = 7$) (Silvia et al., 1999). The most striking aspect of the writing course was not only the students enhanced writing ability and increased quality of final draft papers but the distinct increase in the perceived level of writing skills improvement (Silvia et al., 1999).

To further examine nursing students' academic writing experiences and attitudes, Whitehead (2002) utilized a phenomenological approach with nursing students ($N = 10$) in a diploma nursing course. Open-ended interviews with students revealed many underlying patterns, but one emerging theme emerged. Nursing students find the experience of academic writing to be arduous, with a pervading fear of failure due to a lack of support, with little emphasis on writing skills in the nursing program (Whitehead, 2002). The respondent's

experiences aligned with struggling complexities of concepts associated with academic writing. Evidence of fear is presented in students' written products, attitudes, behaviors, and capacity for learning (Schmidt, 2004).

Lundgren and Halvarsson (2009) studied nursing students' expectations, concerns, and apprehensions before and after creating a final nursing thesis. Researchers performed a qualitative study with nursing students in Sweden's last semesters of a baccalaureate nursing program ($N = 150$). An open-ended 20-item questionnaire revealed that some students viewed writing a thesis as an opportunity to increase self-esteem. In contrast, others were worried that it would result in a reduction in self-esteem. The questionnaire results showed that students' writing experiences could be considered in two categories. One category is an appreciation and pride for the thesis, while the other note that the thesis was a chore required to earn a degree (Lundgren & Halvarsson, 2009).

Similarly, a mixed-method study was conducted to evaluate two aspects of writing with baccalaureate nursing students ($N = 82$). One was to understand better the learning of writing content in a Scholarly Inquiry of Nursing course by examining the differences in scores on a writing assignment at the beginning and end of the course. The other was to investigate confidence ratings relative to writing and to measure improvement during the course (Mandleco et al., 2012). Writing Across the Curriculum (WAC) assignments and activities were implemented throughout the course, including writing format, correct and incorrect writing examples, designated writing practice time, finding a professional voice, and appropriate methods for citing material (Mandleco et al., 2012). According to Computerized Language Instruction and Practice Software (CLIPS), after the course, students improved in 12 ($n = 26$) categories, including punctuation, correct word usage, and sentence structure (Mandleco et al.,

2012). Students' confidence in writing also improved from month one ($M = 3.48$) to month four ($M = 4.02$) after receiving faculty instruction and content in class related to grammar and writing (Mandleco et al., 2012).

Associate degree nursing students entering a baccalaureate program report a significant challenge in writing as a source of anxiety (Perfetto, 2015). Students report fear and dread when faced with a substantial writing task and do not feel capable of creating an academic document (Miller et al., 2015). Applied to a learning situation, students demonstrate behaviors consistent with levels of self-efficacy. An increase in self-efficacy is marked by an expenditure of effort, assignment completion, and a progression toward learning goals. The results will be good grades, positive feedback, and, most importantly, a positive sense of self-confidence and self-efficacy (Miller et al., 2015).

On the contrary, students who receive a failure or associated failure, inability to grasp a concept, or earning a poor grade can have lower self-efficacy. Studies show that an essential factor in writing competence can be linked to having confidence that one can be successful in writing, aligning with Bandura's concept of self-efficacy (Miller et al., 2015). Individual writing self-efficacy positively correlates to improved writing competency (Miller et al., 2018). However, the exploration of writing self-efficacy has been sparsely reviewed.

Another study by Miller et al. (2015) utilized a pre-post quasi-experimental project design with online RN-BSN students ($N = 52$) enrolled in a final nursing course. Students in the intervention group took a pre-test, received a writing-intensive intervention with nursing faculty, and scored statistically higher on writing self-efficacy and confidence after the post-test than those who did not receive the intervention (Miller et al. 2015). Consequently, more attention is needed in nursing programs to enhance student's writing abilities to ensure writing competency

and confidence. The results of this study provide an opportunity for further exploration and testing of an evidenced-based writing intervention.

Additionally, a quasi-experimental pre-test/post-test design study by Mitchell et al. (2017) explored writing self-efficacy among first-year nursing students ($N = 132$). Writing self-efficacy was examined utilizing a pre and post-test with efficacy-building scaffolding techniques in a required nursing course. The course outcome required students to create a final academic paper worth 60% of the final grade. The Self-Efficacy Scale for Academic Writing and a State-Trait Anxiety Inventory were utilized to measure data (Mitchell et al., 2017). The scaffolding technique involved a grammar and APA knowledge test and efficacy-building writing instructional methods. The study outcomes demonstrated that discipline-specific writing instruction could influence the self-efficacy of first-year nursing students. The results also suggest scaffolding as an effective technique for improving student writing.

Whereas another pre-post quasi-experimental project design study employed by Miller et al. (2018) with BSN students ($N = 78$) enrolled in either an Evidence-Based Nursing course (intervention group) or a Complex Health Systems course (comparative group) had a negative outcome. A scaffolding educational technique unfolded where assignments were implemented, ranging from simple writing tasks to more complex writing over the course. Students then completed a Post-Secondary Writerly Self Efficacy Scale to determine their confidence level in writing assignments and the holistic scale of the pre-post writing competency. Surprisingly, students in both groups showed increased writing self-efficacy, despite receiving the intervention. Conversely, the lack of correlation between individual self-efficacy and writing competency directly opposes the findings from Miller et al. (2015) in a previous study. Possible

barriers in this study are the time for the allotted teaching, a variety of faculty writing ability skill sets, or students' inflated view of self and their approach to scholarly writing.

Attitudes, perceptions, and challenges influence nursing students' scholarly writing. Students' apprehension towards writing is formed based on limited exposure, time constraints, and a lack of understanding of the relevance of scholarly writing to nursing practice (White & Lamson, 2017). Nursing students must often prepare for written assignments and work to write clearly and effectively (Shellenbarger et al., 2018). For an expanded investigation, a qualitative study examined the academic needs of undergraduate nursing students measured by a survey questionnaire and found that students scored highest on "I am confident to follow comments and suggestions" and adversely scored lowest on "I am confident in my academic writing skills" (Padagas & Hajan, 2020). These statements indicate a reasonable conclusion that students value and welcome feedback but lack certainty in their writing ability. Both studies stress the importance that with support and instruction, the value of writing in a nursing curriculum can generate knowledge, stimulate critical thinking, decision-making, and ultimately professional identity and self-confidence (Mitchell, 2018).

On an expansive level, analyzing all academic writing and professional development levels, a qualitative, systematic meta-analysis reviewed papers and dissertations ($N = 21$) composed of the pre-licensure, continuing education, and graduate-level students' perspectives on the context and benefits of writing. This analysis revealed evidence that writing assignments promote professional identity development (Mitchell et al., 2020). Professional development occurred when nursing students recognized the value of writing to critical thinking, confidence, nursing identity, and bedside clinical practice, despite the location within an educational program (Mitchell et al., 2020). Many students recognized a change in how writing was valued in the

program's progression. Students with less academic experience view writing as a mechanical act required to receive a grade. More experienced students in the baccalaureate program realized that writing positively influenced thinking and aided in the transition to becoming registered nurses. Students nearing the end of baccalaureate studies developed an understanding of the political and conceptual roles of writing. Finally, doctoral students conveyed the transformative benefits of writing and how expectations shifted in a graduate degree program (Mitchell et al., 2020). The study findings revealed that for students to grasp the value of writing, more, not less, writing exposure is needed.

Although writing has multiple practical uses for an entry-level nurse, particularly in the documentation of nursing care and communication among interprofessional disciplines, writing needs to be noticed, considering the scope of subjects to be covered and clinical experience requirements (Sasa, 2020). A lack of writing exposure is particularly prominent in two-year associate degree nursing programs. A National Writing Consensus survey revealed that writing requirements in two-year colleges are predominantly provided by first-year English faculty and then spread throughout the curriculum (Sasa, 2020). To address the lack of writing exposure and practice in associate degree nursing programs, a pilot implementation of multiple low-stakes, reflective structured writing assignments in second-semester associate degree students ($N = 8$) revealed that small, manageable writing assignments best prepared the students to complete a final, high-stakes paper. Students wrote about meaningful clinical experiences in weekly reflection papers, which allowed nursing faculty to provide formative feedback for students to improve upon.

Along with the weekly formative feedback, faculty also conducted short APA reviews, conventions of academic writing, and clinical-related writing workshops. The low-stakes, weekly

writing reflective papers were considered a preparatory exercise for the heavier writing tasks

scheduled later in the course. A high-stakes case study written assignment was required at the

end of the course. Self-evaluations completed by the students in this pilot study ($N = 8$) after

submitting the high-stakes assignment affirmed that the smaller, scaffolded weekly writing

assignments and workshops increased students writing self-efficacy and competence (Sasa,

2020).

Faculty and Instructional Support

"Why can't students write?" is frequently asked by nursing faculty teaching

undergraduate and graduate students (Silvia et al., 1999). Poor writing among nursing students

urges nursing faculty to teach writing as part of the standards of the discipline (Sasa, 2020).

Scholarly writing is a powerful force, encompassing the tenants of clarity, relevance, and

accuracy. Writing is a fundamental skill for nurses as part of the interdisciplinary community of

scholars working on global health concerns (Hegyvary, 2000). Employers consider good writing

essential for job survival, and poor writing skills can lead to miscommunication and decreased

quality of nursing care (Silvia et al., 1999). There is an immediate need to teach scholarly writing

to prepare nursing students for potential proposals, policies, and educational writing for the

professional workplace (Royal & Sasnett, 2010).

Faculty at East Carolina University created a course titled "Written Communication and

Documentation in Health Care" offered to junior-year baccalaureate Health Services and

Information Management students (Royal & Sasnett, 2010). Significant writing challenges noted

in class submissions were grammatical errors, fragmented and run-on sentences, and the inability

to transition to new topics. Students also reported a wide range of previous writing exposure and

a lack of mastery (Royal & Sasnett, 2010). Although the students did not enjoy the writing class,

they noted many benefits, including professional preparation for their future workplace. To encourage writing within a classroom, despite the level of preparedness, faculty should design writing assignments with clear instructions, expectations, and guidance to enhance the student's exposure in preparation for professional writing responsibilities.

To align with students' potential lack of mastery and exposure to writing in a health care program (Royal & Sasnett, 2010), nursing faculty recognized that students might avoid writing because of a previous deficit in formal instruction and decreased confidence in the ability to structurally articulate ideas (Cone & Van Dover, 2012). A lack of previous academic support systems for writing and student apprehension inhibits student success. To address this, nursing faculty should be sensitive to associate degree nursing students who may need a conceptual framework for scholarly writing and could be ill-equipped for writing intensive coursework (Tyndall & Scott, 2017). Introductory knowledge, skills, attitudes, and writing resources for associate degree nurses provide a smooth transition toward scholarly writing progression (Tyndall & Scott, 2017).

In response to the absence of professional growth through writing noted in the associate degree curriculum, Smith & Caplin (2012) created a three-credit asynchronous online course for associate degree registered nurses enrolled in a baccalaureate program. They found that when nursing students were asked to write about previous professional work, feelings of inadequacy in recognizing the value of writing contributions emerged (Smith & Caplin, 2012). Through modules on professional writing skills, scholarly reading, self-reflection, idea development, mock publication, and a virtual conference, students met the objectives and completed the course. However, an encouraging yet unintended outcome of the course was the high volume of

subsequent enrollment based on positive student recommendations, even suggesting it be a

program requirement instead of an elective (Smith & Caplin, 2012).

Reinforcing the role of instructional support, a mixed method, descriptive study amongst

occupational health students ($N = 169$) participating in a scholarly writing project proved that

proper instruction and assistance could influence the perceptions of writing (Peganoff O'Brien et

al., 2016). An assignment was given utilizing a scaffolding instructional approach to guide the

students' writing performance. This included sessions on correct APA formatting, the value of

creating an outline, constructing a thesis statement, using a scientific tone, and avoiding

plagiarism (Peganoff O'Brien et al., 2016). Questionnaire responses were calculated on a Likert

scale and nine open-ended questions to evaluate the effectiveness of instruction and self-

reflection of the student's writing growth. The results established four key elements- successful

instructional strategies to support scholarly writing, that students value instructor feedback, a

successful writing experience opens the possibilities for students to write in their professional

future, and that students can develop habits of a writer given the correct structure and learning

style in the assignment construction (Peganoff O'Brien et al., 2016). Achieving academic writing

success requires structured instruction, practice, and feedback from faculty with a passion for

and expertise in scholarly writing (Robinson & Bishop, 2017).

Furthermore, the descriptive study conducted by Peganoff O'Brien et al. (2016) proved

that with a supportive scaffolding technique, students could achieve the expected standard for

writing scholarship, directly correlating to the successful approaches of instruction in the study

conducted by Miller et al. (2015). The study piloted by Miller et al. (2015) reinforces the

conclusions drawn by Peganoff, O'Brien et al. (2016). Both study results conclude that faculty

involvement in the writing process is critical, and additional attention to the writing process is

recommended to teach the next generation of nursing scholars effectively. Yet, a challenge nurse educators face is simultaneously supporting students in developing their writing skills and delivering a dense, didactic, and technical curriculum that meets the baccalaureate educational standards (Miller et al., 2018).

A thorough systematic review of articles ($N = 80$) conducted by Oermann et al. (2015) reports on insights, suggestions, and writing strategies utilized by faculty at the pre-licensure and graduate nursing levels. The researchers conclude that helpful methods include tutoring, librarian assistance, peer review, instructor feedback, and writing courses. However, only one-third of the approaches in the articles were found to improve writing skills specifically. Through this systematic review, the outcome reinforced helpful strategies that are essential but did not establish which approach was most effective in enhancing students' writing, aligning with Miller et al.'s (2015) assumption that faculty often fall short in preparing students for writing experiences (Oermann et al., 2015).

Coincidentally, several themes developed in the analysis of this systematic review, including students revealing that writing assignments are the most common strategy for developing skills, followed by specific strategies for incorporating writing into the entire nursing curriculum. Although courses and workshops on writing can be practical for providing instruction, writing needs to be reinforced and followed up with subsequent writing assignments within courses (Oermann et al., 2015). The use of sequencing or scaffolding writing lessons within a course has been shown to develop and improve students' writing skills (Miller et al., 2015).

A quantitative one-group quasi-experimental study by Mitchell et al. (2017) reviewed first-year baccalaureate nursing students' ($N = 137$) writing self-efficacy. Mitchell et al. (2017)

integrated a scholarly writing course with sequential assignments and instructions. Four measures were used to evaluate the students: the self-efficacy scale for academic writing, an APA and grammar writing test, a state-trait anxiety inventory, and faculty assessments of writing (Mitchell et al., 2017). The students ($N =$132) reported higher writing confidence following the writing intervention. Knowledge of nursing students writing self-efficacy could provide faculty with the information that may support improvements in writing. A suggested role for nursing faculty in writing instruction would be normalizing writing and relieving writing anxiety (Mitchell et al., 2017).

There has been a call to action for nursing faculty to increase scholarly writing opportunities and reinforce student writing skills over the past two decades (Miller et al., 2018). A fundamental obligation for nurses is to disseminate their understanding and add to the body of knowledge. Nurses can improve society and public welfare by writing about acquired knowledge, skills, resources, the need for change, and the implementation of evidence-based outcomes (Johnson & Rulo, 2019). The American Nurses Association (ANA) states that communication competencies are essential for all registered nurses at all practice levels, especially the ability to write concisely, fluently, and eloquently about activities in nursing practice (Johnson & Rulo, 2019). The ANA statement suggests that writing interventions should be incorporated into all nursing curriculums.

Considering this, Riley (2019) conducted a quantitative non-experimental before and after study to assess the effect of a scholarly writing tutorial on scholarly writing assignments in an online RN-BSN program at a large university. Data were collected from students ($N = 54$) in two cohorts enrolled in their first online RN-BSN course. The students were assessed via a rubric pre-intervention, participated in the tutorial, then evaluated against the same rubric post-

intervention. Results revealed statistically significant outcomes from pre-intervention ($Md = 4.4$, $n = 108$) to post-intervention ($Md = 4.75$, $n = 56$) scores in the areas of spelling and grammar, as well as an increase from ($Md = 3.54$, $n = 108$) to ($Md = 4.0$, $n = 56$) scores in APA style formatting (Riley, 2019). Using the scholarly writing tool increased students' scores from pre- to post-intervention, concluding that a scholarly writing tutorial in an online environment can benefit student success. The results were consistent with previous studies on scholarly writing tutorials, aligning with the premise that an online tutorial can enhance student success when interactive, self-paced, and focused on adult learners (Riley, 2019).

Gaps in Literature

Nursing education is undoubtedly challenging today to maintain a comprehensive clinical and didactic component to meet the baccalaureate nursing curriculum needs. Students need to "learn to nurse" while also developing an ability to improve writing skills (Miller et al., 2018). Multiple, complex attempts to explain poor writing amongst nursing students include the erosion of educational standards, insufficient rigor in writing requirements, increased technology, overcrowding of classrooms, and student factors like motivation and overall lack of desire to write (Sasa, 2020). Nevertheless, writing should receive dedicated time in the nursing classroom for students to become confident writers. Nursing faculty must provide practical experiences for students to practice critical thinking and meaningful written experiences to prepare them for the advanced nursing role (Miller et al., 2018). The writing required in each course is directly proportional to and the strongest predictor of student engagement and success. Writing ensures critical thinking, deep learning, and reflective practice, all essential to nursing (Sasa, 2020).

Although the quality of students writing abilities is often scrutinized by faculty, the area of formal writing instruction in nursing programs has yet to receive much attention (Mitchell,

2018). In many instances, student nurses' writing skills are often inadequate, if not poor (Roberts, 2009). Students need help with syntax, grammar, writing style, and the presentation of rational arguments and logical ideas (Roberts, 2009). With a solid foundation in writing and formatting, the task can be manageable, and opportunities to disseminate nursing knowledge are preserved.

One criticism of nursing programs is that the discipline of writing is often provided in other courses within the English departments. Therefore, an emphasis on scholarly writing is seldom nurtured within the nursing curriculum (Mitchell, 2018). Although many expository articles about writing to learn have appeared in nursing literature since the 1980s (Silvia et al., 1999), few studies have been performed on strategies used in nursing programs to improve students' writing skills (Oermann et al., 2015). Faculty should be sensitive to the fact that nursing students may not be prepared to write effectively and need coaching, mentoring, and practice to evolve professional writing development (Tyndall & Scott, 2017).

Statement of the Problem

Accreditation standards for baccalaureate schools of nursing recognize the concept of professionalism, communication, and scholarly practice. In reaction to this conclusion, the American Association of Colleges of Nursing (AACN) integrated innovative core competencies for professional nursing education. These specific AACN domains focus on the need for nurses to be proficient in communicating, articulating findings, and participating in scholarly practice. There is a direct correlation between critical thinking and writing skills on patient safety and quality healthcare (Stevens et al., 2014). There is a need to promote the development of interprofessional collaboration, communication, and scholarly inquiry in nursing education programs. Discipline-specific writing skills applied in academic nursing courses are pivotal as

they serve as pathways for nurses to demonstrate scholarship and evidence-based practice in nursing (Padagas & Hajan, 2020).

Scholarly writing is a requirement in baccalaureate nursing programs. Formal and scholarly writing is vital in nursing as writing allows for an accurate presentation of information, dissemination of knowledge, and communication of new research and evidence (Stevens et al., 2014). Nurses must be prepared to write and communicate effectively, as patient safety, collaboration, and teamwork depend on this concept (Stevens et al., 2014). However, although this is a requirement of a baccalaureate-prepared nurse, reports demonstrate that in RN-BSN programs, writing is only sometimes taught or emphasized. Many universities and nursing programs face the challenge of effectively teaching and developing scholarly writing skills in students due to varying skill levels upon admission to the program (Riley, 2019). Current methods to enhance scholarly writing in RN-BSN completion programs need to be standardized, and more research on effective strategies is necessary (Roberts & Goss, 2009; Stevens et al., 2014). The nature of this problem is educational, in the online classroom, focusing on the scholarly writing abilities of online students in the first RN-BSN class. An emphasis on writing development in an RN-BSN nursing program may give students the confidence to communicate, advocate, and become influential leaders. Thus, cultivating nursing students' confidence in written communication can positively influence nursing practice and patient outcomes (Tyndall & Scott, 2017).

Purpose of the Project

This quantitative, quasi-experimental before and after project aimed to determine if a scholarly writing intervention impacted the writing self-efficacy of online RN-BSN students in the first course, NURS3345 Transition to Professional Nursing. A quantitative design was

chosen, as this research method has assisted in identifying variables that may support nurses in a quest for educational advancement (Perfetto, 2015). A quasi-experimental study was proposed as there was a comparison of pre-posttest PSWSES data before and after the writing intervention. An opportunity existed for all students in the course; the option was not randomly assigned. The project applied a scholarly writing educational module for online RN-BSN nursing students in the first course, NURS3345, Transition to Professional Nursing in Canvas, the online learning platform. The students were post-licensure nurses returning to school to earn a baccalaureate degree.

Practice-based Question: Does the implementation of a scholarly writing intervention impact the online RN-BSN students' Post-Secondary Writing Self-Efficacy Scale scores?

Project Objective/Evaluative Outcome

BSN programs may be more likely to cover topics relevant to liberal education, organizational and systems leadership, evidence-based practice, health care policy, finance, regulatory environments, interprofessional collaboration, and population health, which all include the ability for professional, scholarly writing. This study aimed to assess the impact of a scholarly writing tool on students in the first RN-BSN online course. A structured yet flexible online scholarly writing tutorial proved beneficial as an added resource within RN-BSN courses (Riley, 2019). Results indicated a statistically significant impact on nursing students' pre and post-test PSWSES scores after a scholarly writing intervention.

The students in this course must produce a professional, scholarly, APA-formatted paper discussing a nursing philosophy and goals. Although the assignment intentions are intended for self-reflection and motivation, the task often creates frustration, anxiety, confusion, and low self-

efficacy. Scholarly writing abilities and confidence did improve with assistance from a scholarly writing intervention.

Significance of the Project

Professional writing is an outcome of baccalaureate nursing education, as writing contributes to communicating effectively and working as a productive multidisciplinary team member. Nurses must adequately document patient care, formulate, or revise policies and procedures, design educational materials, and contribute to professional publications (Latham & Ahearn, 2013). The need for nurses to be strong, influential writers to present and defend ideas is highly emphasized in today's complex and technical, ever-evolving, and often complex healthcare environment (Miller et al., 2018). Scholarly writing skills are valuable in helping succinctly share professional information, research, and findings (Riley, 2019). However, as nursing students become more diverse in educational background, experience, age, language fluency, and writing skills, this requirement is often misaligned with the curricular outcome. Writing anxiety and apprehension are common responses to any writing task, despite the level of educational background. Evidence shows that the student's writing anxiety and performance level is related to self-efficacy (Mitchell et al., 2017).

A call to action to reinforce professional writing skills in undergraduate and graduate nursing programs has increasingly received attention over the past twenty years (Miller et al., 2018). Nursing students can benefit from scholarly writing as this skill enhances the ability to verbalize thoughts on research, clinical practice, assessment, and education (Riley, 2019). Writing allows the student to apply and synthesize the information learned, providing an opportunity for self-reflection and creating meaningful content. However, scholarly writing remains a problem for RN-BSN students (Stevens et al., 2014).

Additionally, there is a need for additional studies to be performed on strategies utilized in nursing programs to enhance students' writing skills (Oermann et al., 2015). Faculty find it challenging to incorporate writing into didactic nursing courses and deliver a dense and heavily technical health sciences curriculum. Nursing faculty expect students, without guidance, to be able to adequately write and address all aspects of a writing assignment with essential, generic instruction (Mitchell, 2018). Methods used to enhance scholarly writing in RN-BSN programs are not standardized, and more research on effective strategies is necessary (Riley, 2019). The current project addressed students writing behaviors, self-efficacy, and writing confidence.

Nature, Scope, Limitations, and Delimitations of the Project

Nature

A quantitative, quasi-experimental before and after-study design was used for this study. A quantitative research project was based on the idea that the investigator was identifying a problem based on trends in the field or issues noted, which needs an explanation as to why this is happening (Cresswell, 2015). An effective teaching intervention was required to develop, refine, improve, and encourage the professional writing skills of nursing students. A quasi-experimental project aimed to establish a cause-and-effect relationship between a dependent and independent variable. A quasi-experimental did not rely on a random assignment but utilized non-probability convenience sampling (Doherty & Skalsky, 2021). Each participant received access to a scholarly writing intervention in the Canvas Learning Management System (LMS).

This project implemented a scholarly writing intervention based on prior research found in the literature review. The academic writing intervention outlined the importance of scholarly writing to nursing, APA formatting and grammar focus, provided samples with errors and corrections, and how to initiate, organize and conclude a paper. The goal of this intervention

aligned with the American Association of Colleges of Nursing Essential 1.2b- "demonstrate intellectual curiosity," 4.1a "demonstrate an understanding of different approaches to scholarly practice," 4.1e "participate in scholarly inquiry as a team member," 9.3f "engage in professional activities," 9.5a "describe nursing's professional identity and contributions to the healthcare team," 10.3d "demonstrate self-efficacy consistent with one's professional development" (AACN, 2021). The project identified how an online scholarly writing intervention affected the self-efficacy of newly enrolled online RN-BSN students.

Scope

The project determined the impact of a scholarly writing intervention on the self-efficacy of online RN-BSN nursing students in the first online class, Transition to Professional Nursing, at a large, southern university. The accessible population included RN-BSN students enrolled in the Transition to Professional Nursing course at the time of implementation who were willing to participate in this study. The number of participants in this study was determined using G* Power. The potential participants were invited to complete a demographic survey, take the Post-Secondary Writerly Self Efficacy Scale (PSWSES) twenty-question pre-test, attend an asynchronous scholarly writing intervention activity, followed by taking the PSWSES post-test to determine the impact of the intervention.

Inclusion criteria were students 18 years or older enrolled in the first course, NURS3345 Transition to Professional Nursing, in an online RN-BSN program. Exclusion criteria were any students in the online RN-BSN courses who were not currently enrolled in the Transition to Professional Nursing course, students that chose not to participate, or any student who did not fully participate in each aspect of the evidenced-based writing intervention and complete the

consent, demographic survey, and the pre-and post-Post-Secondary Writerly Self-Efficacy Scale questionnaire.

Limitations

Limitations included a one-group design lacking a control group and a limited time window, as each course was only five weeks long. A population limitation was restricted to the cohort of 200 to 250 students at the time of each implementation. The sample was derived from a convenience sample, which impeded the ability to generalize to other students in different nursing program classes or universities and did not allow randomization, leading to a sampling bias. Finally, social bias and possible self-reporting inaccuracies in the PSWSES scale results were additional potential threats.

Delimitations

A delimitation included what the project will not accomplish- a significant increase in writing skills, which takes time, practice, and dedication. Factors out of the project control were the participant's involvement and willingness to complete each step. This project did not address a nationwide issue with nurses' scholarly writing and writing competencies. The project addressed the notion of writing self-efficacy but not academic self-efficacy. The design of this project included post-licensure RN-BSN students in the first online course. Still, it excluded associate degree and graduate nurses and post-licensure nurses enrolled in other classes. Students at the university enrolled in other programs were not studied, as the study investigated how an online scholarly writing intervention impacted RN-BSN nursing students. Other limitations included time and non-intervention-specific issues. A multiple-session writing intervention series was not utilized due to the time constraints associated with the accelerated nature of the course. Non-intervention-specific issues that impacted the successful completion of the study included a

personal or family crisis, medical issues, work or financial constraints, technology challenges, and personal time management.

Theoretical Framework

The theoretical framework that best aligned with the underpinnings of this DNP project was Bandura's self-efficacy theory, a concept that originated from his social cognitive theory (Pajares, 1996). The basis for the social cognitive theory is that the person's thoughts vary between knowledge and action, and through self-reflection, individuals can evaluate their thoughts and experiences (Pajares, 1996). Bandura considered self-reflection the most crucial aspect of this theory, and a sub-set theory was developed- which is defined as the individual's belief in one's capabilities to complete the desired activity (Hirschey, 2019). If a person is deemed capable of specific behavior, then the person is more likely to act. Self-efficacy directly influences a person's choice of activities and resiliency (Fitzgerald, 1991). The premise of self-efficacy directly aligns with the project's proposed question; *Does the implementation of a scholarly writing intervention impact the online RN-BSN student's Post-Secondary Writing Self-Efficacy Scale Scores?* Although scholarly, professional writing is expected of nurses, it is not often taught or emphasized in the curriculum. Also, students may have been out of the academic setting for an extended period without recent writing experience. There is an increase in internationalization and English-speaking ability in nursing programs today. (Rayner et al., 2016). In this technology-driven healthcare system, baccalaureate-prepared nurses must construct clear, coherent messages that can be applied across multidisciplinary teams, effectively addressing patient care needs (Miller et al., 2015). Increasing self-efficacy has been shown to improve writing skills and is a strong predictor of academic success. The self-efficacy

framework sets the tone for students' writing proficiency and capability and lays the foundation for pursuing advanced education.

There are four main concepts related to the self-efficacy theory. The tenets of this theory are listed in subsequent order, as each tenet builds upon another to achieve the desired outcome of confidence and the belief that one can execute successfully. The first component of the self-efficacy theory is arguably the most critical - enactive mastery experience. The enactive mastery experience focuses on the person interpreting their previous results of performance or mastery (Artino, 2012). The second aspect is the observation of others or role modeling through vicarious experiences. Observation occurs when the person witnesses people like themselves successfully performing the task. The third aspect is verbal or social persuasion, widely utilized in academic settings to allow students to believe they can achieve the task, mainly from the instructor. Persuasion is an intricate process, as overly optimistic comments can be ineffective as if the student ultimately becomes unsuccessful with the task, it can lower self-efficacy (Artino, 2012). The fourth tenet of this theory is the psychological and emotional state of the person during the performance in the form of stress reactions and cognitive appraisal (Artino, 2012). The focus is not on the action but on how the person interprets these reactions. This last aspect of the theory can also impact performance and the student's belief in themself.

The theoretical self-efficacy framework is directly applied to the concepts of the DNP project (see Appendix A). In this DNP project, online, post-licensure baccalaureate nursing students received assistance in scholarly writing by utilizing a writing tool and evaluating their writing self-efficacy with the Post-Secondary Writerly Self-Efficacy Scale (PSWSES). The theoretical framework aligned with each step of the DNP project. Enactive mastery experiences were incorporated by contacting willing participants to complete a survey including

demographics, work experience, academic background, prior writing experience, and the pre-PSWSES test. Implementing a learning session addressed the observation of others via visual and auditory components of the scholarly writing implementation. The third aspect of this theory of written persuasion was addressed by an analytic rubric and formative assessment feedback, including revisions and rapid review from faculty (Miller et al., 2015). The last and final aspect, the psychological and emotional state of the person during their performance, was evaluated utilizing the PSWSES posttest, which assessed the nursing students' beliefs in their writing abilities after the implementation.

Definition of Terms

Self-efficacy- "Perceived self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3).

Writing self-efficacy- "the writer's belief about their ability to write in a specific context" (Mitchell et al., 2019).

Online RN-BSN student- "associate degree RNs to the online classroom to earn a baccalaureate BSN degree" (Miller et al., 2015).

Scholarly writing- "Scholarly writing is specialized in a discipline; it communicates original thought using language consistent in the profession, includes evidence-based literature support, and is arranged consistent with the standards for peer-reviewed publication" (Peganoff O'Brien et al., 2016).

*Post-Secondary Writerly Self Efficacy Scale- "*a total of 20 questions, each was designed by directly applying aspects of self-efficacy- mastery experiences, vicarious learning, reduction in stress reaction to negative emotions, and social persuasion to the writerly process. All items are positively oriented using "I can" statements" (Schmidt & Alexander, 2012).

Summary

There is a need for more nurses and nurses who can communicate effectively across the disciplines and contribute to the profession. Often, there is an assumption that associate degree nurses entering an RN-BSN program have a strong sense of writing. Yet, the curriculum historically lacks consistent writing lessons and suggested techniques. A lack of preparedness yet an expectation to write can lead to feelings of low self-confidence and self-efficacy. Nursing faculty should encourage writing and provide opportunities so nurses are prepared and confident for collaborative and scholarly writing in the workplace.

SECTION II: METHODS

Introduction

This DNP project aimed to determine the impact of a scholarly writing intervention on the writing self-efficacy of online RN-BSN students in the first online RN-BSN course. The student's writing self-efficacy was evaluated using a 20-question pre-and-posttest Post-Secondary Writerly Self-Efficacy Scale (PSWSES). With the recent updates to the American Association of Colleges of Nursing domains, there is a significant focus on professional and scholarly writing in the baccalaureate curriculum. Changes were implemented in interprofessional communication, the creation of evidence-based teaching materials, proposed healthy policy changes, and effective communication of scholarly findings (AACN, 2021). These AACN revisions rely heavily on professional writing skills, which may need to be more familiar or developed in the RN-BSN student due to a lack of formal instruction in an associate degree program. These students often enter the BSN program with varying skill levels and experience with scholarly writing (Shellenbarger et al., 2018).

The chosen intervention, an online scholarly writing intervention rooted in Bandura's self-efficacy theory, offered advantages to the participants in this study. The NURS3345 Transition to Professional Nursing course was entirely online, and the asynchronous scholarly writing intervention provided flexibility for the participant to complete it at a time of convenience. Scholarly writing involves more than simple grammar and mechanics, encompassing the affective domain, which can elicit feelings in the writer. Hence, if a student suspects incompetence in creating a scholarly paper, feelings of low self-efficacy or belief in oneself can surface. Findings suggest that positive emotions associated with writing development

can transfer to the final product, whereas negative emotions disrupt and interfere with the student's writing ability (Shellenbarger et al., 2018).

An appropriate design method was an integral part of the DNP project, as the design allowed for a successful correlation between the data retrieved, the aim of the research question, and, eventually, the conclusion and recommendation for further research opportunities (Tappen, 2011). The specific design methodology guided the data collection, arguably the backbone of the entire project. This section will further explain the most appropriate research design method for the DNP project, which answered the following- *Does the (I) implementation of a scholarly writing intervention (O) impact the online RN-BSN students' (P) Post-Secondary Writing Self-Efficacy Scale scores?*

Project Design

A one-group quantitative quasi-experimental before and after project design explored the impact of a scholarly writing intervention. The project aimed to impact students writing knowledge and confidence. PSWSES scores obtained from the pre-test were compared to those obtained from the post-test after implementing a scholarly writing intervention in the participant's first class within the RN-BSN accelerated online program. The quantitative study was unbiased, numerically based, used an objective approach, and primarily focused on prior research in the form of a literature review to interpret results, compare data to past research, and collect data using specific instruments (Creswell, 2015). A one-group quasi-experimental before and after design precisely fit this project as the population sample was not randomly assigned, and the intervention was available for all the current students within the NURS3345 Transition to Professional Nursing course (Creswell, 2015). A one-group design is categorized as a quasi-experiment without a control group comparison. A significant strength of a one-group quasi-

experimental before and after design was the accessibility of the group, utilizing an existing group of participants, in this case, enrolled students, in the educational setting (Creswell, 2015). These studies also require fewer resources than a traditional experimental study, can evaluate the effectiveness of an intervention, and reinforce the researcher's desire to examine if the scholarly writing intervention (independent variable) affected the student's self-efficacy scores (dependent variable) in a specific, controlled setting (online classroom).

The RN-BSN students who voluntarily participated in this project received the PSWSES pre-test, participated in the scholarly writing intervention, and responded to the PSWSES post-test. Numerical responses were statistically analyzed by comparing the dependent variable, the pre to post-PSWSES results, after implementing the independent variable, the scholarly writing intervention. The quantitative data were analyzed using an IBM SPSS Statistics Version 28 data analysis system, as the collected data did not include any manipulation or open-ended questions.

Sample and Setting

Following the American Sentinel College of Nursing and Healthcare at Post University IRB and the project site IRB approval, this DNP project took place in a College of Nursing and Health Innovation accelerated online RN-BSN program at a large public university in the south-central United States. This educational institution is the largest university in the northern part of the state, with enrollment currently around 48,000 students, consisting of full, part-time, and online learners (University of Texas, 2022). The university welcomes many international students with cultural and ethnic backgrounds from all over the world. The student body represents more than 100 countries and ranks number three in the nation for ethnic diversity. The university has state-of-the-art science, engineering, and healthcare research facilities and holds an R-1 Carnage Classification, implicating very high doctoral research activity.

Specifically, the College of Nursing and Health Innovation (CONHI) is noted as one of the top 100 schools for online baccalaureate and master's programs and the sixth-best nursing school in the state. CONHI has been named a "Center of Excellence" by the National League for Nursing four times over (University of Texas, 2022). The recognition noted the college's promotion of faculty pedagogical expertise, demonstrating measurable and sustainable excellence in research and professional development. All nursing education levels throughout the college are accredited by the CCNE, a mark of distinction, which promotes quality and integrity in all aspects of the educational experience (American Association of Colleges of Nursing, 2021).

CONHI provides an accredited, online RN-BSN program offered at an accelerated rate, with program completion time available within nine months. RN-BSN students entering this program are associate-degree registered nurses who return to school for a baccalaureate degree. This project occurred in the RN-BSN program offered entirely online and provided an asynchronous scholarly writing intervention in the Canvas LMS. The nursing department chair provided full support for conducting this DNP project and data collection in the online RN-BSN program (see Appendix B). Inclusion and exclusion criteria were based on the characteristics of the intended participants. The inclusion criteria for this DNP project were willing participants enrolled in the first online RN-BSN course, NURS3345 Transition to Professional Nursing, with access to the Internet. Exclusion criteria were the online RN-BSN students who were not currently enrolled in the NURS3345 Transition to Professional Nursing course or any student who did not fully participate in each aspect of the scholarly writing intervention, give consent, or complete the pre- and post-Post-Secondary Writerly Self-Efficacy Scale questionnaire.

Non-probability convenience sampling was characterized by the researcher selecting specific individuals because the participants were convenient, available, and represented most of the population implied for the project (Creswell, 2015). These individuals were not randomly selected, as noted in probability sampling. Participants were asked to participate in the project based on availability and enrollment in the NURS3345 Transition to Professional Nursing course. The sampling frame included all students enrolled in the first course, NURS3345 Transition to Professional Nursing, in a College of Nursing and Health Innovation Accelerated Online RN-BSN program, within a large public southern university at the time of the project intervention.

As with any sampling method, non-probability convenience sampling had strengths and limitations. The strengths of non-probability convenience sampling were the population of interest, as the participants were considered accessible, available, and met the eligibility criteria for the project. There was also an opportunity to conduct the project without adequate resources or funds. This type of sampling can also overcome many general limitations associated with the research process (Tanderdoost, 2016). Weaknesses accompanying this type of sampling included a possible reduction in generalizing the results, inability to measure sampling errors to show validity, potential researcher selection bias, and non-participation error when subjects withdrew from the study (Stratton, 2019). Participants were chosen based on convenience; there was no indication that the results could be generalized or accurately represent the total population (Trochim, 2006).

To achieve the best possible outcome, a specific sample size was based on a confidence range variability and the possible sampling errors which can occur. To reduce the possibility of a sampling error, best practices suggest a large sample number from the target population

(Creswell, 2015). The accessible population for this project was between 200-250 students, as this was an estimated enrollment range for each course. However, this was dependent on the student census at the time. To determine the size of the sample population, a G*Power tool was used to determine statistical power analysis based on different tests. For this DNP project, with a *t*-test matched pairs parameter, an A priori power analysis was conducted. With input parameters, a 2-tailed *t*-test, with an effect size of 0.5, an α error of probability of 0.05, and a Power of 0.80, the calculated total sample size was 34. Therefore, a sample of *N*=34 was acceptable for this statistical analysis.

Instrumentation

The instrument that best aligned with the DNP project question "Does the implementation of a scholarly writing tool impact the online RN-BSN student's Post-Secondary Writing Self-Efficacy Scale scores" was the Post-Secondary Writerly Self-Efficacy Scale (PSWSES). This 20-item, 0–100-point scale portrayed the self-ratings more accurately than a limited range (Schmidt & Alexander, 2012). The PSWSES was established by applying Bandura's self-efficacy theory, the theory chosen for the framework of this project. The PSWSES included a total of 20 items, each of which was designed by directly applying at least one of the four sources of self-efficacy—mastery experiences, vicarious learning (observation), social (written/verbal) persuasion, and acknowledging the emotional/psychological state to the writing processes (Schmidt & Alexander, 2012). The scale was developed in a college-level writing center to be used across disciplines and for repeated sessions if necessary. The PSWSES was explicitly designed for college-level students, whereas other scales are geared toward elementary or high school applications. The creator provided permission to utilize the scale (see Appendix C).

Post-Secondary Writerly Self-Efficacy Scale

Over the past three decades, there has been much debate about the operation of college writing centers. Researchers argue that writing performance does not sufficiently measure a person's academic abilities. Instead, cognitive factors define the writer's ability and beliefs about how they can perform as a writer (Schmidt & Alexander, 2012). Writing self-efficacy can be learned and developed through consistent self-evaluation, coaching, and repeated practice. Several self-efficacy scales have been created based on Bandura's theory over the past few decades. However, concerns surrounding previous scales include focusing on mastery, which can cue negative thoughts and involve persuasion (Schmidt & Alexander, 2012). There was an obvious need for the development of a new scale.

Utilizing the new PSWSES scale, a quantitative research study was conducted with 505 university students that are clients of a university writing center. At the onset and conclusion of the tutoring sessions, students were asked to take the PSWSES. The results showed a significant increase in writing self-efficacy and a positive correlation between the students' writing self-efficacy and tutors' ratings of students writing self-efficacy (Schmidt & Alexander, 2012). The PSWSES scale can serve as a longitudinal tracking system to record the development of writerly beliefs. Study results underscore the critical responsibility of faculty to cultivate the student-writers awareness of processes and resources that will promote writerly success in college and beyond (Schmidt & Alexander, 2012).

The Cronbach's alpha for the scale is 0.931 (Schmidt & Alexander, 2012), of which 0.90 or 0.95 is highly desirable to indicate internal consistency and reliability (Tappen, 2011). In the initial implementation and study of this scale, the construct validity was evaluated by correlating the student self-efficacy ratings and tutor self-efficacy ratings (of the student), concluding that a

positive correlation exists (178) = .503, *p* < .001, R^2= .25 (Schmidt & Alexander, 2012). A factor analysis using varimax rotations with Kaiser normalization was conducted, including three factors to explain variance (Schmidt & Alexander, 2012).

While other scales refer to writing as a verb or noun, focusing on a written product, which limits the behavioral aspects of writing, the PSWSES scale assesses writerly factors, which describe the attributes and characteristics of the writer, not the result (Schmidt & Alexander, 2012). Self-efficacy is a fluid notion and can be both a current and future belief. Consequently, the PSWSES phrases all items in "I can" statements, requiring participants to evaluate beliefs in their future writing abilities instead of evaluating or demonstrating current skill sets. The nature of this scale primarily emphasizes the incorporation of writing centers and individual services offered. The PSWSES scale incorporates the interaction between the student and the writing center. This provides an opportunity for longitudinal writing development and tracking, as opposed to a limited intervention (Schmidt & Alexander, 2012).

Other writing scales are argued to have a significant focus on mastery experiences (for example- "correctly spell all words"), social persuasion (for example- "I try to write in a way that is distinct as possible), and negative thoughts (example- "one of my goals is to make a few changes as possible) (Schmidt & Alexander, 2012). The initial scale considered for this project was the Self-Efficacy for Writers Scale (SEWS), a tool developed by White & Brunning (2005). However, the last two statements on social persuasion and negative thoughts were noted in this scale, leading Schmidt and Alexander to develop a new measurement in 2012 (Schmidt & Alexander, 2012). Negativity aligns with conclusions established by Shellenberger et al. (2018) that positive emotions associated with writing can convey the final product, while negative emotions interrupt or impede the student's writing ability. Also, the nature of previous writing

scales did not apply to college writing. The scales were limited and used for one-on-one sessions, linked to a product, containing confusion between past and future writing ability, or focused on elementary-aged children (Schmidt & Alexander, 2012). Therefore, the SEWS was ruled out.

Data Collection

The nursing department chair granted permission to conduct the project and IRB approval from the American Sentinel College of Nursing & Health Sciences at Post University, and the project site was obtained (See Appendix C). Data collection only occurred after the American Sentinel College of Nursing and Healthcare at Post University IRB (see Appendix D) and the project site IRB approval (see Appendix E). The sampling units were online RN-BSN nursing students enrolled in the first course in the program, NURS3345 Transition to Professional Nursing. To align with the Health and Human Services regulations, the researcher obtained legal informed consent from the subjects (U.S. Department of Health and Human Services, 2021). Informed consent was based on respect for persons and must be legally obtained before initiating research with participants. The informed consent was provided to all participants through QuestionPro, sent by the designated proxy, on the first day of project implementation. The consent stated the project's purpose, expectations during the participation, procedures, foreseeable risks, maintenance of confidentiality and anonymity, where the participant could direct questions, the availability to opt-out of the study at any time, a statement from the IRB describing the voluntary nature of this project, the use of collected data, and no reimbursement for participation (Tappen, 2011). The IRB board reviewed the informed consent before the administration to maintain compliance with consent standards. This DNP project imposed minimal risk to the participants, as evidenced by meeting the specifications defined by the Human Research Protection Program (2015), as the probability and magnitude of harm or

discomfort anticipated in the research was not greater in and of themselves than those ordinarily encountered in daily life.

The student researcher created a recruitment flyer with details about the project's purpose and an invitation to participate with guidelines on time commitments. The designated proxy, a doctorly prepared faculty member at the university with no perceived power over the students, invited participants to participate by sending this flyer to the student's assigned university email address and posting an announcement within the Canvas course shell. The writing intervention was available to all students in the course, but only students who consented via Question Pro received the demographic survey and pre-and-posttests. The specific QuestionPro link was available to all students through the Canvas announcements page and sent to the student's university emails through Canvas via the proxy. The QuestionPro survey was set to disable all IPO email addresses to maintain anonymity. As a DNP-prepared nurse and faculty in the DNP program, the proxy understood project instructions, limiting issues with validity. All RN-BSN students enrolled in the NURS3345 Transition to Professional Nursing course were invited to participate, but data was only collected with consent. Once the student consented through the QuestionPro survey, the pre-test and demographic survey became visible on QuestionPro. QuestionPro ended the survey if students did not consent. The participant constructed a unique identification number, the first two digits of the mother's maiden name, and four numerals to de-identify participants. The unique identifier-maintained anonymity, as email addresses, phone numbers, or names were not used.

The demographic survey and PSWSES pre-test opened immediately upon participant consent. The demographic data included questions about the participant's age, gender, ethnicity, time since last college-level educational experience, and length of nursing career (see Appendix

F). The 20-question PSWSES test was administered through QuestionPro, and numerical data was recorded. The consent and pre-test were available for two weeks before implementing the scholarly writing educational intervention. The students were then directed to participate in an asynchronous scholarly writing educational tutorial within the Canvas course that focused on professional writing, American Psychological Association formatting, grammar, and writing assistance. The student researcher designed this writing intervention based on collaboration with the American Psychological Association Academic Writer, the American Psychological Association Publication Manual, and evidence-based journal articles from the literature review.

Subsequently, the proxy emailed all the students and posted an announcement within Canvas for the 20-question PSWSES post-test link, and numerical data was collected and filed in an Excel code book. The Excel spreadsheet code book was uploaded into the student researcher's password-protected computer and secured flash drive, which aligned with the CITI research training protocol. All data collected were transferred into an Excel code book, entered into SPSS, and saved on a flash drive. The flash drive is stored and locked in the student researcher's sealed office file box for five years following the final defense. After that time, all information stored in the flash drive will be double deleted and reformatted. After the responses were received and de-coded in the Excel spreadsheet codebook, the data was ready for analysis via IBM SPSS Statistics Version 28 software. The computer used for SPSS analysis was a password-protected personal computer without any public access.

Data Analysis Methods

The DNP project aimed to compare the perceived self-efficacy of professional writing abilities in online RN-BSN students before and after an educational intervention. The sample population included RN-BSN students in the first online course at a large southern university. To

maintain anonymity, participating students created a unique ID based on specific untraceable criteria as a string variable, used on the demographic survey and pre-and-post tests.

Participants' demographic information was gathered after the collection of informed consent. The demographic survey included information to describe the sample population, which included the participant's age, gender, ethnicity, English as a primary language, time from last educational experience, and years of nursing experience. The same participants from the sample population were tested two separate times using the PSWSES scale provided before and after the scholarly writing intervention. Data was collected by the student researcher, downloaded information from QuestionPro was entered into an Excel spreadsheet code book. The student researcher reviewed the variables for accurate coding, names, labels, demographic variables, and twenty pre- and twenty post-questions. The student researcher entered the nominal data from the demographic information and ordinal data from the pre-and-post PSWSES into the IBM Statistical Package for Social Sciences (SPSS) version 28 for statistical analysis. Descriptive statistics were used to analyze and describe the categorical demographic data (Doherty & Skalsky, 2021). Categorical demographic variables were analyzed using frequency distribution and percentages to describe age, gender, ethnicity, English as a first language, time since last educational experience, and length of nursing career. COnt

Continuous variables, the pre-and-post PSWSES scores, also utilized descriptive statistics for analysis. Descriptive statistics were obtained from this data through mean, standard deviation, minimum, maximum, skewness, and kurtosis. Descriptive statistics provided information regarding the distribution of scores for continuous variables (Pallant, 2020). To determine parametric or non-parametric statistical analysis, normality was calculated. Normality was analyzed based on a change variable. The change variable was calculated as the difference

between the total pre-test scores before the intervention and the total post-test scores after the intervention. The normality assumption was tested visually in a histogram with skewness and kurtosis, a detrended normal Q-Q plot, and a boxplot, then statistically through the Kolmogorov-Smirnov test (Doherty & Skalsky, 2021). A bell-curve shape formed on the histogram, as data was normally distributed around a mean. Normal distribution was also present on the histogram by skewness and kurtosis at or near zero (Doherty & Skalsky, 2021). Next, a detrended Q-Q plot depicted the deviation of the scores from the straight line. Normality was indicated, as there was no clustering, and most points were collected around the zero line (Doherty & Skalsky, 2021).

In addition, a boxplot depicted central tendency through the distribution of continuous variables and checked for outliers. Each of the boxes contained fifty percent of the observations. The line in the middle of the box represented the mean, and the whiskers showed the smallest and largest values. Small circles represented outliers. Finally, the Kolmogorov-Smirnov test was the last step to determine normality and assess scores' distribution (Pallant, 2020). A non-significant result, indicating normality, revealed a number greater than .05 (Pallant, 2020).

The data were normally distributed, and a parametric paired samples *t*-test was used (Pallant, 2020). This parametric test collected two data sets before and after an intervention to compare mean scores tested twice on a continuous variable (Pallant, 2020). Statistical significance was defined with a *p*-value of <.05. The results revealed a *p*-value of .012, which indicated statistical significance on the PSWSES scores pre-and-post intervention. However, if a *p*-value >.05 was indicated, there was no statistically significant change in the PSWSES scores in the pre-and-post-intervention groups.

Alternatively, if the data were not normally distributed, a non-parametric Wilcoxon Signed Rank Test would have been used to analyze the data collected. The Wilcoxon Signed

Rank Test is the non-parametric equivalent of the *t*-test, designed to compare two different data collection times. However, the test does not use a mean but a score to rank and compare data (Pallant, 2020). The standardized test statistic is reported as *z* and effect size *r*.

Data Management Methods

Anonymous test results were collected via QuestionPro. The student researcher disabled the collection of IP addresses from this platform. The results were used to identify students' writing self-efficacy in the first class of an accelerated online RN-BSN program. The demographic survey and numerical data acquired were uploaded into the Excel codebook, then exported into SPSS and analyzed by the investigator. The codebook contained all the detailed information needed to transfer into the SPSS database. In SPSS, scores were entered on a grid cell based on values assigned, participant identification numbers, and variables (Creswell, 2015). Data were de-identified using the participant's unique ID number to ensure anonymity. The researcher conducted the Collaborative Institutional Training Initiative (CITI) training and obtained IRB approval to ensure ethical compliance. The unique ID was a string variable, and the demographic information collected was categorical at the nominal level. The demographic information was categorized as age, "18-24= 1, 25-34= 2, 35-44 = 3, 45-54= 4, 55-64= 5, 65+ = 6", gender, "Female = 1, male = 2, nonbinary = 3, gender identification is not listed, please specify = 4", ethnicity "Caucasian= 1, African American = 2, Hispanic or Latino = 3, Asian/Pacific Islander = 4, Native American = 5, Race nor ethnicity not listed, please specify = 6", English as a primary language "yes = 1, no = 2", years since last educational experience, "< 1 year = 1, 1-5 years = 2, 6-10 years = 3, 11-15 years = 4, 16-20 years = 5, 21+ years = 6" and years of nursing experience, "< 1 year = 1, 1-5 years = 2, 6-10 years = 3, 11-15 years = 4, 16-20 years = 5, 21+ years = 6". The PSWSES pre-and-posttest consisted of 20 questions on various

aspects of the participant's beliefs about writing. To evaluate the pre-and post-test continuous

data, collected information from the PSWSES results, on a scale from 0-100, from Pre-Q1-Q20

and Post-Q1-Q20, was entered into the codebook based on the numerical number associated with

each question (see Appendix G). The additional continuous variables, total pre-test and post-test

scores, and the change variable was measured with a scale and entered into the codebook. Unlike

many existing scales, the statements were positively oriented, therefore, did not require reversing

negatively worded items for recoding. Immediately after collecting the data from QuestionPro,

all de-identified information was transferred to the Excel codebook and uploaded into SPSS

software. No personal identifying data was collected or presented during this project. To

maintain the anonymity and privacy of participants, all electronic data will be kept secretly on a

password-protected computer, which only the student researcher has access to for five years

following the completion of the project. After that time, the student researcher will permanently

delete all data by double deleting or reforming the flash drive.

Ethical Considerations

Participants understood, upon consent, that this was a voluntary process and did not feel

coerced or pressured to participate (Trochem, 2006). Participants were voluntary RN-BSN online

nursing students enrolled in the program's first class. The participants were fully aware of the

nature and purpose of this DNP project. However, the project was considered low risk and did

not include any physical or psychological harm more significant than what would be encountered

in everyday life occurrences. The underlying theme of any research study was the protection of

its participants through information confidentiality and participant anonymity (Trochem, 2006).

Participants were assured that the information retrieved would remain private and anonymous,

hence the need for coding data and an Institutional Review Board review. Informed consent was

administered with details about the project, foreseeable risks, benefits, confidentiality, whom to direct questions to, and assurance of volunteerism (Tappen, 2016). Informed consent was reviewed by both necessary boards before participant recruitment, and consent was sent (see Appendix H). All participants knew that participation in this DNP project was strictly voluntary and did not affect course grades or correlate with future grades, nor was there a consequence for not participating.

To avoid any possible ethical issues associated with the DNP project, a designated proxy administered the recruitment email, informed consent, and links to the demographic survey and PSWSES in the appropriate section. The proxy had no perceived power over the participants. To obtain anonymity, the researcher did not know who participated in the project, as the results were encrypted and anonymous. No personally identifiable information was collected at any point during this process. The participant's right to protection, privacy, and anonymity was accomplished via IRB approval, the participant's voluntary consent, and the lack of any perceived power from the researcher.

Internal and External Validity

Project validity assures whether the project will measure what the project is intended to measure. Internal validity is the truth about inferences regarding the cause-and-effect relationships noted within the project, which cannot be explained by outside factors (Trochim, 2006). Casual relationships must be found from the project intervention to the outcome for internal validity to be significant. To ensure the validity of the PSWSES tool, a Cronbach's alpha is listed, which depicts internal consistency, expressed in a number 0-1, and must be determined before a scale can be authorized for research purposes (Tavokol & Dennick, 2011). The Cronbach's alpha for the PWSEWS tool was 0.931 (Schmidt & Alexander, 2012), with 0.90 or

0.95 noted as highly desirable to indicate internal consistency (Tappen, 2011). In a repeat study utilizing the scale in three separate increments, Cronbach's alpha was found to be 0.93, 0.95, and 0.96, respectively (Mitchel et al., 2019). In the initial implementation and study of this scale, the construct validity was evaluated by correlating the student self-efficacy ratings and tutor ratings of the student's self-efficacy, concluding that a positive correlation exists (178) =.503, $p < .001$ (Schmidt & Alexander, 2012). A factor analysis using varimax rotations with Kaiser normalization was conducted, including three factors to explain variance (Schmidt & Alexander, 2012).

External validity related to the approximate truth of the project's conclusions and the ability to generalize the findings (Trochem, 2006). The project must be able to be replicated at a different time and place and with a new participant population to maintain project validity. This project measured associate degree registered nurses returning to an online baccalaureate degree program and the writerly self-efficacy pre-and-post-writing intervention at the designated time of implementation.

Threats to the DNP project existed for a variety of reasons. Potential internal threats were extraneous variables that could provide inaccurate data results related to other explanations of the causal relationship between the dependent and independent variables (Trochim, 2006). A major potential threat was the testing threat, interpreted as the pre-test preparing the participants for the post-test answers (Trochim, 2006). The participant was aware of the posttest questions and knowledgeable of noted weaknesses when participating in the intervention. Regression threat was another possibility with a before and after study design. Therefore, if initial pre-test scores were low, scores could only increase, and regression toward the mean was possible, which is an inaccurate representation of a causal relationship. There was also a chance that participants did

not complete the entire scholarly writing module, which resulted in a mortality threat or a loss of participation. Also, there could have been a lack of accuracy in the student's responses on the self-efficacy scale, as this is subjective.

Potential external validity threats or the lack of ability to generalize the findings involved the chosen sampling model, the interaction of student setting and intervention, and the intervention effect (Trochim, 2006). The sampling model for this project was a non-probability convenience sample, which can cause an external threat to validity, as participants were chosen due to the availability and representation of the intended population (Cresswell, 2015). Non-probability convenience sampling reduced the ability to generalize to the larger population. The student setting was an external threat to validity, as students took this self-paced intervention and pre-and-posttest at home, online, and without supervision. Situational factors like noise, interruptions, other responsibilities, and time of day were not in the researcher's control. Lastly, the intervention effect was a possibility, as changes to the course writing assignment, APA formatting, or scholarly writing for the nursing discipline could occur and therefore impede project results to a future time.

Reducing the chances of an internal or external threat increased the DNP project's rigor. The PSWSES that was developed, proven, and established, with high reliability and validity, was utilized to minimize these threats. The participants were aware of the time allotted to participate in preparation to set aside this time. Suggested locations and times of day were discussed in the intervention instructions. The time allotted between the pre-test, intervention, and post-test was approximately two weeks, which lowered the testing threat potential. As with any project implementation, researchers have uncontrolled internal and external threats, as there is no perfect

design choice or setting. However, awareness of the potential threats was critical in reducing the possibility of occurrence.

Summary

Section two reviewed the project design, projected sample size, instrument for data collection, and data management methods. Each step of the research process was distinctive and built upon one another. The project implementation and outcome anticipation depended on elements out of the researcher's control. Factors within this process included choosing the right sampling plan, recruitment strategies, and sample size and including participants who meet the specific guidelines. The quantitative, quasi-experimental before and after study analyzed RN-BSN students writing self-efficacy before and after a writing intervention. Demographic data and numerical scores were obtained from the PSWSES scale. A descriptive analysis described the sample population obtained from the demographic data. Parametrical numerical PSWSES data were analyzed using a paired samples t-test. All information collected remained confidential, as the researcher de-identified the information to protect participants. These protections focused on four main ideas: respect for the person, beneficence, nonmaleficence, and justice (Tappen, 2011). The researcher maintained these standards to uphold ethical obligations. The results of this data collection and analysis will be discussed in Section III.

SECTION III: RESULTS AND DISCUSSION OF FINDINGS

Introduction

Nurse educators can facilitate students learning and are obligated to help nursing students increase writing self-efficacy (Mandleco et al., 2012). However, addressing the need for more writing competence among nursing students is complex. Prior research illustrates nursing students' continued struggle with scholarly writing due to a variance in academic preparation or lack of previous writing support and practice (Cone & Dover, 2012). Nonetheless, quantitative research surrounding nursing students writing self-efficacy needs to be improved.

This quantitative, quasi-experimental before and after project aimed to determine if a scholarly writing intervention impacted the writing self-efficacy scores of online RN-BSN students in the first nursing course. Approval was gained from the Institutional Review Board from American Sentinel College of Nursing and Health Sciences at Post University and the project site (Appendix D and E). Project implementation began in January 2023 and concluded in May 2023. The PSWSES test scores were collected before and after the scholarly writing intervention and analyzed to measure statistical significance. Data obtained from the project might encourage nurse educators to consider implementing writing assignments aimed at increasing the development of students writing self-efficacy. Emphasizing a strong focus on the attitudes of nursing students' self-efficacy toward the writing process may significantly improve competent writing, which is essential for both academic and professional proficiency. In addition, increasing nursing students writing self-efficacy can act as a conduit between the ability to communicate effectively and improved patient outcomes.

Summary of Methods and Procedures

The analysis method used for this DNP project included the frequency and percentages of the demographic variables to describe the sample population of consenting participants and a statistical comparison of the total pre-and post-PSWSES responses to demonstrate the impact of the writing intervention. The project design used a one-group quantitative quasi-experimental before and after study from a convenience sample of students enrolled in the RN-BSN program at the project site at the time of implementation. The project included a pre-intervention and post-intervention group of online RN-BSN students in NURS3345 Transition to Professional Nursing that consented to the project and met inclusion criteria. The project codebook was created in Excel and consisted of raw scores from the demographic survey and PSWSES pre and post-test.

Regarding statistical power, utilizing a *t*-test matched pairs parameter, the G*power software indicated a medium effect size (Cohen's $d = .50$), with an α error of probability set at 0.05, and a Power of 0.80, the statistically significant sample size was 34 participants. The total sample size was ($N = 46$), thus, providing sufficient statistical power for the current analysis. The latest version of SPSS (28.0) was used for all statistical analyses. All project variables were presented using descriptive statistics, such as means, standard deviation, minimum/maximum values for continuous variables, and frequencies and percentages for categorical variables. After inputting the completed Excel codebook into SPSS, normality tests were conducted. The assumption of normality was met visually through a histogram (see Figure 1), detrended normal Q-Q plot (see Figure 2) and boxplot (see Figure 3), and statistically through the Kolmogorov-Smirnov test (see Table 1). The normality of the distribution of change scores is also presented in Figure 1, which is a histogram presenting the bell-shaped distribution of pretest to posttest

change scores, and the distributions of scores were approximately normal as the skewness and kurtosis were not greater than three times the standard error of each value. Figure 2 depicts a detrended normal Q-Q plot of pretest to posttest change scores along a straight line, and Figure 3 reveals a boxplot presenting the outlier scores for the pretest to posttest change scores.

Finally, Table 1 presents the Kolmogorov-Smirnov test ($p > .05$) of normality of pretest to posttest change scores. To assess the normality of the distribution scores, a significant value of > 0.05 indicates normality (Pallant, 2020). The change variable noted a statistical result of $p = .200$, and the assumption of normality was met, which implicated the parametric paired samples t-test. In addition, a descriptive analysis of pretest, posttest, and pre/post change scores was conducted (see Table 2). Data indicated that the average pretest score was 69.21 ($SD = 22.49$, MIN/MAX = 18.00-99.00), posttest scores were 76.29 ($SD = 18.96$, MIN/MAX = 29.00-100.00), and pre/post change score was 7.08 ($SD = 18.44$, MIN/MAX = -40.00-60.00).

Next, further tests were conducted to produce inferential findings. First, as data was found to be normally distributed, a paired samples t-test analysis was used to determine if pretest-to-post-test mean scores changed at a statistically significant level ($p < .05$). Specifically, pretest-to-post-test change scores were computed by subtracting pretest scores from respective post-test scores. Results implicated a statistically significant impact after the writing intervention ($p = .012$). The results were normally distributed as reflected in the data analysis, and because the same group was measured at two different times using the same tool, a paired t-test with an analysis of the means was the appropriate data analysis method (Pallant, 2020).

The paired samples t-test (see Table 3) analyzed pretest to post-test changes in mean scores. Statistical analysis indicated that pretest to posttest changes in mean scores did achieve statistical significance, $t(45)= -2.60, p <.05$. Specifically, the mean score increased at a

significant level from pretest (M = 69.21, SD = 22.49) to posttest (M = 76.29, SD = 18.96) with a small/medium (small = .2/medium = .5) effect size of Cohen's d = -.38. In addition, a graph (see Figure 4) visually depicts the mean pretest to mean posttest change.

Summary of Sample and Setting Characteristics

This project took place at a large, public, four-year university in the south-central United States with an R-1 Carnegie classification of moderate research activity of doctoral studies in the College of Nursing and Health Innovation accelerated online RN-BSN program. The university uses Canvas as the campus-wide learning management system for online and hybrid courses. The project was implemented within the first course of the RN BSN accelerated online program by providing an asynchronous scholarly writing intervention in the Canvas learning management system. Typically, accelerated online RN to BSN learners are older than traditional BSN students, juggling childcare and family responsibilities and managing financial needs while attending school (Cipher & Wilder-Urban, 2022). Participants of this project completed the demographic data, pretest, and post-test through Question Pro, an online survey platform. The scholarly writing intervention was available within the Canvas learning management system, strategically placed in week three, to allow participants to fully complete the pretest before distributing the post-test.

IRB approval included three Spring 2023 course start dates to ensure an adequate sample size. The project began in January 2023, with an accessible sample size of N = 214 students enrolled in NURS3345 Transition to Professional Nursing. Of those students, n = 51 took the pretest, n = 45 took the post-test, yet after cleaning and screening the data, n = 20 pre-and-post tests were complete. The project was implemented in the February 2023 start date, with an accessible sample size of N = 218. Of those students, n = 57 took the pretest, n = 31 took the

post-test, but after cleaning and screening the data, only $n = 15$ students completed both. The statistically significant $N = 34$ was not yet obtained, and the project was finally implemented in the April 2023 course, with an accessible population of $N = 167$ students, $n = 45$ students took the pretest, $n = 23$ took the post-test, and after cleaning and screening the data, $n = 11$ students completed both, resulting in a final sample size of $N = 46$.

The demographic data for the consenting participants resulted in the following results (see Table 4; Figure 5): over one-third of the sample were between the ages of 45-54 ($n = 17$, 37.0%), as well as either a White/Caucasian ($n = 18$, 39.1%) or Black/African American ($n = 17$, 37.0%) racial/ethnic identity. Most of the sample was female ($n = 42$, 91.3%) and spoke English ($n= 39$, 84.8%). About one-third of the sample reported the last educational experience between 1-5 years ($n = 17$, 37.0%), while about one-quarter reported a level of nursing experience between 6-10 years ($n = 12$, 26.1%).

Major Findings

This project aimed to assess the impact of a scholarly writing intervention on nursing students' PSWSES writing self-efficacy scores in the first RN-BSN online course. The evaluative outcome indicated a statistically significant impact ($p = .012$) from nursing students' pre-PSWSES scores to post-PSWSES scores after a scholarly writing intervention. The assessment of normality was used to determine the appropriate statistical test for analyzing the total pre-PSWSES scores and total post-PSWSES scores to determine if the writing intervention resulted in a change to the total scores. Different statistical approaches were used to assess the normality of the distribution of scores. Tests of normality were met based on results displayed visually through a histogram, detrended normal Q-Q plot and boxplot, and statistically through the non-significant Kolmogorov-Smirnov result of $p = .200$. Normal distribution occurs when a non-

significant result indicates a significant value of $p > .05$ (Pallant, 2020). Therefore, data analysis of this DNP project's results used the parametric paired samples t-test to evaluate a change from the total pre-PSWSES scores ($M = 69.21$, $SD = 22.49$) to the total post-PSWSES scores ($M = 76.29$, $SD = 18.96$), $t(45) = -2.60$, $p = 0.12$. This analysis demonstrated that the independent variable, the scholarly writing intervention, significantly impacted the dependent variable, pre-and-post-PSWSES scores, with an increase of $M = 7.08$.

A significant finding of this project, congruent with results from recent literature about the problem of poor writing skills among nursing students, included that most of this sample population lacked writing self-efficacy, as evidenced by the pre-test PSWSES scores data collected. However, after implementing an evidenced-based scholarly writing intervention, results indicated a statistically significant impact on post-test PSWSES scores. These results are consistent with the literature that to build self-efficacy, the intervention must provide skill-building opportunities to show how the task should be accomplished (Miller et al., 2015). In addition, the marked increase in students writing self-efficacy after the evidenced-based scholarly writing intervention, rooted in Bandura's self-efficacy theory, provided guidance beyond writing mechanics. The intervention focused on the importance of scholarly writing, elements of a scholarly paper, and APA format, grammar, and academic writing; however, it also incorporated identifying specific challenges to writing, time management, writing goals, and accessing resources for support. With an underlying, subtle emphasis on writing mechanics yet incorporating a significant focus on the positive aspects of writing, the intervention avoided writing instruction framed as addressing deficiency, which inevitably leads to resistance (Mitchell, 2018). The inherent dangers of writing assessments that strictly focus on surface

formatting characteristics limit students' examination of the writing process, creativity, emotions, and self-efficacy.

The theoretical framework utilized as the foundation for this project was based on Bandura's self-efficacy theory (1997), defined as the individual's belief in oneself to complete a desired activity (Hirschey, 2019). Although each aspect of the self-efficacy theory was addressed in this project, the fourth tenant, the psychological and emotional state of the person during their performance, best measured an increase in self-efficacy. The final tenant directly aligns with Bandura's (1997) indication that a high confidence level about accomplishing a specific task translated into increased self-efficacy. The PSWSES post-test explicitly assessed the nursing students' belief in their writing abilities after the writing intervention.

Fundamental knowledge of basic writing skills is essential in an academic program. However, the student must also feel competent to complete the writing task. Students with lower writing ability expectations demonstrate a lower writing performance. In addition, poor writing was noted to be a significant contributor to student stress and discouragement, which leads to failure or attrition from nursing courses (Cone & Dover, 2012). To improve writing performance and students' self-efficacy, nursing faculty must provide skill-building opportunities and address student confidence (Miller et al., 2015). The outcome of this DNP project supports the previous research, which demonstrates that student self-efficacy and learning motivation can be enhanced when teaching strategies model desired behaviors, guide students in setting attainable learning goals, and promote self-assessment of progress toward these goals (Miller et al., 2015). In addition, the results of this project align with the findings from Mitchell et al. (2017), which suggest that writing self-efficacy is best established in the first course within a nursing program.

Implications for Nursing Practice

Based on the findings from this project, several implications were discovered. Evidence from the project results indicated that writing could be successfully taught in an online environment to RN to BSN students. An evidenced-based scholarly writing intervention proved beneficial for nursing students writing self-efficacy. Although numerous prior research studies stressed the importance of incorporating scholarly writing into the nursing curriculum (Thorpe & Kulig, 1997; Silvia et al., 1999; Hegyvary, 2000; Whitehead, 2002; Schmidt, 2004; Tarrant et al., 2008; Lundgren & Halvarsson, 2009; Roberts & Goss, 2009; Royal & Sasnett, 2010; Cone & Dover, 2012; Mandleco et al., 2012; Smith & Caplin, 2012; Andres & Graves, 2013; Friberg et al., 2013; Latham & Ahern, 2013; Hunker et al., 2014; Stevens et al., 2014; Bailey et al., 2015; Oermann et al., 2015; Peganoff O'Brien et al., 2016; Tyndall & Scott, 2017; White & Lamson, 2017; Shellenbarger et al., 2018; Johnson & Rulo, 2019; Riley, 2019; Mitchell et al., 2020; Padagas & Hajan, 2020;; Williams & Walker, 2020) limited research studies have addressed the concern surrounding nursing students writing self-efficacy (Miller et al., 2015; Mitchell et al., 2017; Robinson & Bishop, 2017; Miller et al., 2018; Mitchell & McMillian, 2018; Hirschey et al., 2019; Sasa, 2020; Mitchell et al., 2021). In addition, some improvement in writing skills has been shown in traditional or BSN programs delivered in a classroom setting. However, few studies have demonstrated the efficacy of writing in online RN-BSN programs (Stevens, 2014). Considering students' perceptions of their self-efficacy related to scholarly writing will help nursing faculty develop teaching strategies and appropriate writing assignments in the online classroom (Tornwall & McDaniel, 2022).

This project addressed the gap in the literature concerning a need for more information surrounding writing self-efficacy in nursing education. Nursing students can benefit from

engaging in scholarly writing as it enhances the student's ability to verbalize thoughts on research, clinical practice, assessment, and education (Roberts & Gross, 2009; Riley, 2019). Much nursing involves telling a story at a shift report, clinical case conferences, charting, or nursing rounds. All these actions affect sharing of nursing wisdom; however, the most crucial sharing of wisdom is through written communication (Pearson, 2019). The future of the nursing profession depends on nurturing and developing scholarly writing activities of nurses at all levels of practice and disseminating valuable nursing knowledge.

Nonetheless, scholarly writing can be intimidating for nurses returning to school (Tesh et al., 2014). Therefore, as entry-level BSN students strive for increased writing self-efficacy, achieving competent academic writing may be attainable with an evidence-based scholarly writing intervention. As evidenced by the results of this DNP project and previous research (Miller et al., 2015; Mitchell et al., 2017; Robinson & Bishop, 2017; Mitchell et al., 2017), increasing writing self-efficacy directly affects improving writing skills. In an academic context, self-efficacy helps students decide how much effort, resilience, and persistence to apply to an assignment (Robinson & Bishop, 2017). Consequently, increasing writing self-efficacy has the potential to increase scholarly writing competence.

Recommendations

Nursing faculty should be sensitive to the fact that associate degree nurses returning to school to earn a baccalaureate degree may need a conceptual framework for scholarly writing and be ill-prepared for writing intensive coursework (Tyndall & Scott, 2017). Literature shows that nursing students need support organizing and synthesizing concepts to generate new ideas, and many nursing students need more critical thinking and performing writing tasks (Padagas & Harjan, 2020). Upon admission, baccalaureate nursing students often demonstrate basic written

communication skills and have varying skill levels (Riley, 2019). In a sample of accelerated online BSN students (*N*=93), lower writing sub-scores on standardized preadmission assessment and first-semester course grades were strongly correlated with poor performance in subsequent semesters (Cipher & Wilder-Urban, 2022). This reiterates Mitchell et al. (2021) findings that low writing self-efficacy and writing ability struggles have been connected to delayed student progression through academic programs.

Practice Increases Self-Efficacy

The observation that students enter nursing programs underprepared to write at the expected level is present from undergraduate to doctoral levels of education, indicating that expectations change as the purposes of writing become more advanced (Thorpe & Kulig, 1997; Robert & Gross, 2009; Cone & Dover, 2012; Latham & Ahern, 2013; Mitchell et al., 2018; Johnson & Rulo, 2019). Novice nursing students might still need to adequately grasp the language, concepts, and values of nursing. Incorrect syntax, word choices, and awkward expressions of disciplinary concepts should be pointed out and corrected but not harshly penalized, especially at the beginning of a program (Mitchell et al., 2018). Writing is a developmental practice, and traditional grading models focusing on APA and grammar hinder student engagement with their writing (Mitchell et al., 2018). Planned strategies that enable students to learn to write effectively are critical for student success (Oermann et al., 2015). A common theme in the current literature is the use of nursing course assignments to promote writing development. Low-stakes activities like self-assessment, journaling, and reflection can identify ongoing student writing needs and direct writing support (Greenleaf-Brown & Cicchino, 2022).

Furthermore, a lack of preparedness and feelings of low writing self-efficacy are noted in the literature as inhibiting scholarly writing development (Shellenbarger et al., 2018). Writing efficacy is developed gradually through the student's continued writing practice, instructor feedback, and self-evaluation (Schmidt & Alexander, 2012). Although writing workshops are practical for providing instruction about writing in nursing, the most potent tool is writing activities in subsequent nursing courses (Oermann et al., 2015). Because writing practice and feedback affect the development of writing self-efficacy, faculty should consistently integrate additional writing practice into the nursing curriculum (Oermann et al., 2015; Mitchell, 2018). As clinical skills sharpen with practice and experience, writing expertise expands and grows with use (Bleich et al., 2020). Writing ability is a skill that students can develop and improve upon. With writing interventions, nursing students can improve writing self-efficacy over time (Miller et al., 2015; Miller et al., 2018; Mitchell et al., 2017; Tyndall & Scott, 2017).

Data resulting from this project might encourage nurse educators to assess nursing students writing self-efficacy by implementing a self-efficacy survey. Students with low writing self-efficacy may be identified and academically supported to reach their full potential. Identifying students with low writing self-efficacy based on the results is essential so that remediation of writing abilities may occur to enhance writing competence. Focusing on improving the nursing students writing self-efficacy could lead to more nurses who feel they can advance their nursing education to the graduate level and participate in evidence-based practice (Andre & Graves, 2013; Mitchell, 2018).

New Self-Efficacy Writing Tool

While the PSWSES instrument implemented in this project was a valid and reliable tool for post-secondary students, however, upon using this tool, it is noted that specific questions are

aimed at writing centers as opposed to direct faculty instruction. For example, question twenty states, "When I work with a writing tutor, I can learn new strategies which promote my development as a writer." Although the scholarly writing intervention provided steps on accessing the university writing center, actively working with a writing tutor was not required.

Additionally, four of the twenty PSWSES questions surrounded the concept of writing a draft, suggested when writing but not required in the accelerated online course. Therefore, the most recent tool created in 2021, the Situated Academic Writing Self-Efficacy Scale (SAWSES), is suggested for future research. The SAWSES was created by moderate correlations with previously validated writing self-efficacy tools yet is specific to the nursing discipline (Mitchell et al., 2021). The SAWSES is like the PSWSES as both scales are rooted in Bandura's self-efficacy theory, contain twenty positive "I can" statements, and are presented on a 0-100 rating scale. However, although in its infancy, the SAWSES was piloted successfully with undergraduate and graduate nursing students. This tool demonstrated strong reliability scores in nursing and interdisciplinary post-secondary students. The tool is also broken down into three identified factors that have the potential to detect gaps in students' self-assessed ability to master writing, writing essentials, reflective writing, and creative identity. The tool detected differences in writing self-efficacy in students who reported liking, disliking, or feeling somewhere in between about writing. One notable marker within this tool is that it focuses on the writer and their ability and does not focus on external factors such as a tutor or writing center. Also, assessing writing self-efficacy can change through the curriculum, from teacher to teacher and individual class, as students continually adapt to new writing contexts as they progress through a program. Additionally, writing becomes more complex as a writer moves from one level of education to another. Therefore, regularly implementing a self-efficacy writing scale, such as the

nursing-specific SAWSES, into the nursing curriculum will help measure writing self-efficacy that stimulates student reflection, ultimately affecting writing development (Mitchell et al., 2021).

Partnership With a Writing Center

Scholarly writing is a necessary skill for registered nurses and nursing students. However, appropriate support and resources are needed to enhance the development of scholarly writing (Riley, 2019). Research from the literature indicates that baccalaureate nursing students working with tutors in the writing center better understand the course assignment, review the grading rubric with tutors, and pay more attention to writing mechanics. Faculty also report positive outcomes of using the writing center as an academic support strategy. Faculty spend less time on the logistics of writing and more time grading the content. (Latham & Ahern, 2013). Initial writing submissions from entry-level baccalaureate nursing students are potentially inundated with problematic grammar, syntax, and APA style. This can be overwhelming for nursing faculty to grade while also focusing on content. A suggestion is that faculty either focus on sentence-level errors or content.

Given that the intent of a writing activity in an entry-level baccalaureate course is learning to write competently, faculty comments should focus on the content and conventions of writing specifically for nursing. Subsequently, refer students to the campus writing center for sentence-level errors (Sasa, 2020). Critical components of successful writing include faculty support and awareness of writing center assistance. A gradual yet guided introduction to professional writing, with various sources of feedback, offers many learning opportunities.

Future Suggestions

Future research recommendations would be to change the sample to include RN-BSN students in the last course of the program, Nursing Capstone, to determine the writing self-efficacy of graduating students and compare it to the writing self-efficacy of entry-level students. The advantage of focusing on entry-level RN-BSN students for this project was to assess critical issues with writing self-efficacy early in the student's nursing education to address writing struggles and proactively ensure writing competence before graduation. Another recommendation is to institute longitudinal studies that assess writing self-efficacy at the end of each course through graduation. Finally, a third recommendation is incorporating prerequisite writing courses into nursing education programs. Assessing and identifying nursing students writing self-efficacy and previous academic writing experiences may be helpful for nurse educators. Self-efficacy could be measured before and after prerequisite writing education courses, providing students a baseline in writing competence before starting a baccalaureate degree program, including high-stress levels related to extensive didactic coursework.

Discussion

This project assessed the impact of a scholarly writing intervention on PSWSES scores before and after a writing intervention and an online RN-BSN course. The statistically significant results proved that a scholarly writing intervention rooted in Bandura's self-efficacy theory benefits nursing students writing self-efficacy. The results of this project could be applied to students and other disciplines, as the scale measured overall writing self-efficacy at the post-secondary level. Faculty catalyze the writing experience for their students. When developing assignments, an awareness of students writing self-efficacy is essential, as the transformative power of writing lies in the act of writing itself, not in the text produced (Mitchell et a., 2020). In

addition, when students enjoy writing, the knowledge gained is retained longer (Lundgren & Halvarsson, 2009).

A significant strength of this project is surrounding the data analysis results. A significant increase in the pre-test (M = 69.21) to post-test scores (M = 76.29) indicated a change variable of 7.8 with a normal distribution of scores around the mean and a Kolmogorov-Smirnov test (p = 2.00), indicating normality. A parametric paired sample t-test revealed statistical significance (p = 0.12) based on pre-and post-test scores. In addition, the internal consistency of the PSWSES 20-question test was assessed using Cronbach's alpha. The overall Cronbach's alpha coefficient reported for both pre-and-post-test scores was 0.98, indicating a high internal consistency among items.

Limitations found in this project surround sampling. Overall, a relatively small sample size of N = 46 based on the number of respondents who completed both the pre and post-test surveys participated. However, the total accessible population was approximately 599 potential participants. The project was implemented three times in three different course start dates over 15 weeks. Obtaining the sample size required based on G* Power for statistical significance (N = 34) occurred after the third implementation.

Furthermore, this project included a one-group design lacking a control group and was derived from a non-probability convenience sample. This sampling method is based on the availability of participants at the time of project intervention and can reduce generalizability (Cresswell, 2015). In addition, participant attrition was a significant limitation. Participant attrition increased steadily with each project implementation, noted as 60%, 73%, and 75%, respectively. Data also were discarded related to incomplete aspects of the pre-and-post survey, mainly due to the inaccuracy of participants' unique IDs.

Results from this project align with results from the literature review due to the perceived benefits from students when a writing intervention is implemented. Statistical significance on writing competencies of nursing students using a pre-and post-format with an asynchronous tutorial intervention was found in the literature review (Tarrant et al., 2008; Robert & Gross, 2009; Riley, 2019). This modality offers support in online nursing courses (Riley, 2019). Additionally, the results of this project support Mitchell et al. (2017) findings which revealed that baccalaureate nursing students reported an increase in writing confidence following a writing intervention. Overall, the project results align with previous research, yet additional studies at multiple institutional sites and throughout the nursing program would help infer the results beyond the population studied.

Conclusions and Contributions to the Profession of Nursing

Nurses in practice and nurse educators share a common goal, improving patients' lives, and this should be reflected in scholarly writing. However, the primary emphasis on concise charting and multiple-choice examinations in an associate degree program can hinder the development of scholarly writing skills (Thorpe & Kulig, 1997). Nevertheless, writing has become an essential component of the baccalaureate-prepared nurse and is an instrumental communication tool for disseminating knowledge, implementing evidence-based practice, and developing professional identity (Andre & Graves, 2013; Mitchell, 2018). Writing is a critical skill for nurses in many aspects of practice, including communication, disseminating knowledge, documenting patient care, patient education, and utilizing evidence-based practice (Andre & Graves, 2013; Latham & Ahearn, 2013; Mitchell, 2018).

Writing skills are not just necessary to succeed in academia but are required in nursing practice. Writing confidently and communicating innovations in clinical practices and outcomes

to multiple stakeholders is a critical nursing leadership trait. Nurses must have strong writing skills to have a voice in healthcare decision-making and serve as leaders in the broader healthcare system (Bleich et al., 2020). Expressing ideas through clear, accurate, and succinct writing is an essential proficiency. This problem could negatively affect interprofessional communication and patient care if the nurse's writing skills do not meet specific standards or expectations.

Additionally, nursing faculty should teach students that writing assignments contribute more to learning than just making a grade and have a purpose for their future practice setting (Mitchell et al., 2020). Mitchell et al. (2018) argue that good writing leads to good nursing. The benefits of writing in the nursing discipline are well documented. Writing can cultivate a professional identity and allow students to develop a passion for areas of nursing practice. Writing also plays a role in academic socialization, providing opportunities for students to develop as scholars and thinkers by reflecting on practice and communicating with the broader nursing community.

A critical outcome of baccalaureate nursing education is effectively communicating patient care needs and innovations within an interprofessional team (Latham & Ahern, 2013). Additionally, the progression of scholarly writing in nursing education is acknowledged in the Essentials document, which provides a framework for nursing education created by the American Association of Colleges of Nursing (Riley, 2019). Written communication, defined as using written memos, letters, and complex technical reports, was a desirable and sought-after skill by 93.1% of employers of new, four-year college graduates (Riley, 2019). More specifically, baccalaureate nursing students need to develop a type of written communication known as scholarly writing, which utilizes specialized nursing language, includes support from

the literature, and is formatted in a manner consistent with peer-reviewed publications (Shellenberger et al., 2018).

Research proves that nursing students often need help with oral and written communication and feel underprepared as communicators and writers. In response, writing skills must be explicitly supported throughout nursing education (Greenleaf-Brown & Cicchino, 2022). Results from this study prove that the development of scholarly writing cannot be left to chance. Nurse educators should offer students opportunities to assess progress toward achieving self-efficacy in scholarly writing. Additionally, faculty need to be aware of students' perceptions of their strengths and weaknesses in scholarly writing upon entry into a course. Exploration of how student perceptions change after participating in a writing intervention can help faculty close gaps, increase support, and design course content to cultivate a mindset of continuous improvement in scholarly writing skills and focus on areas of student concerns (Tornwall & McDaniel, 2022). Overall, the results of this project indicate that implementing a scholarly writing intervention can enhance students writing self-efficacy.

References

American Association of Colleges of Nursing (2021). *The essentials: Core competencies for professional nursing education.*

https://www.aacnnursing.org/Portals/42/AcademicNursing/pdf/Essentials-2021.pdf

Anderson, N.E. (1981). The historical development of American nursing education. *Journal of Nursing Education, 20*(1), 14-26. https://doi.org/10.3928/0148-4834-19810101-05

Andre, J. D., & Graves, R. (2013). Writing requirements across nursing programs in Canada. *Journal of Nursing Education, 52*(2), 91-97. doi.org/10.3928/01484834-20130114-02

Artino, A.R. (2016). Academic self-efficacy: From educational theory to institutional practice. *Perspectives on Medical Education, 1*(2), 76-85.

Attewell, A. (1998). Florence Nightingale's relevance to nurses. *Journal of Holistic Nursing*, *16*(2), 281–291. https://doi.org/10.1177/089801019801600217

Authement, R.S. & Dormire, S.L. (2020). Introduction to the online nursing education best practices guide. *Sage Open Nursing 6.* doi: 10.1177/2377960820937290

Bailey, A., Zanchetta, M., Velasco, D. & Pon, G. (2015). Building a scholar in writing (BSW): A model for developing students' critical writing skills. *Nurse Education in Practice, 15* (2015), 524-529. http://dx.doi.org/10.1016/j.nepr.2015.07.008

Bandura, A. (1997). *Self-efficacy: The exercise of control.* Freeman

Bleich, M.R., Jones-Scheck, J. & Stuckey, C.H. (2020). Advancing nursing leadership through writing: Strategies for publishing success. *The Journal of Continuing Education in Nursing, 51*(10), 447-449. *doi:10.3928/00220124-20200914-04*

Buerhaus, P.I. (2021). Current nursing shortages could have long-lasting consequences: Time to change our present course. *Nursing Economic$ 39*(5), 247-249.

Cipher, D.J. & Wilder-Urban, R. (2022) dropped courses and persistence in online undergraduate nursing programs. *Journal of Nursing Education, 61*(11), 609-615. doi:10.3928/01484834-20220803-07

Cone, P.H. & Van Dover, L. (2012). Shaping how graduate nursing students write. *Nursing Education Perspectives, 33*(4), 272-274. https://doi.org/10.5480/1536-5026-33.4.272

Creswell, J.W. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson.

Dabbagh, N. (2004). Distance learning: Emerging pedagogical issues and learning designs. *Quarterly Review of Distance Education 5*(1), 37-49.

Doherty, C., & Skalsky, K. (2021). *Statistics and research design for the DNP project*. DEStech Publications, Inc.

Dombrowsky, T. (2022). Independent thinking in nursing: An archaeology of knowledge perspective. *Journal of Nursing Education, 61*(1), 12-18. doi:10.3928/01484834-20211201-01

Fitzgerald, S. (1991). Self-efficacy theory: Implications for the occupational health nurse. *American Association of Occupational Health Nurses, 39(*12), 552-557.

Friberg, F. & Dahlbord-Lyckhage, E. (2013). Changing essay writing in undergraduate nursing education through action research: A Swedish example. *Nursing Education Perspectives, 34*(4), 226-232.

Greenleaf-Brown, L. & Cicchino, A. (2022) Asynchronous peer review feedback in an

    undergraduate nursing course: What students can teach each other about writing. *Nurse*

    Educator, 47(5), 303-307. doi: 10.1097/NNE.0000000000001207

Griffiths, Y.G., Coppard, B. & Lohman, H. (2005). From pedestal to possibility: Learning

    scholarly writing using a unique course assignment. *Journal of Allied Health, 34*(2), 97-

    100.

Hegyvary, S.T. (2000). Standards of scholarly writing. *Journal of Nursing Scholarship, 32*(2),

    112.

Hirschey, R., Rodgers, C. & Hockenberry, M. (2019). A program to enhance writing skills for

    advanced practice nurses. *The Journal of Continuing Education, 50*(3), 109-114.

Human Research Protection Program (2015). *Tip sheet: Minimal risk.*

    https://irb.ucsf.edu/sites/hrpp.ucsf.edu/files/tip-sheet-minimal-risk.pdf

Hunker, D.F, Gazza, E.H. & Shellenbarger, T. (2014). Evidence-based knowledge, skills, and

    attitudes for scholarly writing development across all levels of nursing education. *Journal*

    of Professional Nursing, 30(4), 341-346,

    http://dx.doi.org/10.1016/j.profnurs.2013.11.003

Houser, J. (2018). *Nursing research: Reading, using, and creating evidence* (4th ed.).

    Burlington, MA: Jones & Bartlett Learning.

Iheduru-Anderson, K.C. (2020). Students' perspectives of factors related to the delayed

    completion of online RN-BSN programs. *BMC Nursing, 20*(53), 1-13. https://doi.

    org/10.1186/s12912-021-00574-7

Johnson, J.E. & Rulo, K. (2019). The problem of the profession: How and why writing skills in

    nursing must be improved. *Journal of Professional Nursing, 35*(2019), 57-64.

    https://doi.org/10.1016/j.profnurs.2018.05.005

Kauffman, H. (2015). A review of predictive factors of student success in and satisfaction with

    online learning. *Research in Learning Technology, 23*.

    http://dx.doi.org/10.3402/rlt.v23.26507

Keating, S.B. & DeBoor, S.S. (2018). *Curriculum development and evaluation in nursing*

    education (4th ed.). Springer Publishing Company

Koestler, D. (2010). Improving NCLEX-RN first-time pass rates with a balanced curriculum.

    Nursing Education Perspectives, 36(1), 55-57. doi: 10.5480/11-591.1

Latham, C.L. & Ahern, N. (2013). Professional writing in nursing education: Creating an

    academic community writing center. *Journal of Nursing Education, 52*(11).

    doi:10.3928/01484834-20131014-02

Lundgren, S., & Halvarsson, M. (2009). Students' expectations, concerns, and comprehensions

    when writing theses as part of their nursing education. *Nurse Education Today, 29*(5),

    527–532.

Luthy, K.E., Peterson, N.E., Lassetter, J.H. & Callister, L.C. (2009). Successfully incorporating

    writing across the curriculum with advanced writing in nursing. *Journal of Nursing*

    Education, 48(1), 54-59.

Mandleco, B.L., Bohn, C., Callister, L.C., Lassetter, J. & Carlton, T. (2012). Integrating

    advanced writing content into a scholarly inquiry in a writing course. *International*

    Journal of Nursing Education Scholarship, 9(1). doi:10.1515/15487-923X.2213

McEwen, M., Pullis, B.R., White, M.J. & Krawtz, S.K. (2013). Eighty percent by 2020: The present and future of RN-BSN education. *Journal of Nursing Education, 52*(10), 549-557. doi:10.3928/01484834-20130913-01

Miller, L.C., Russell, C.L., Cheng, A. & Skarbek, A.J. (2015). Evaluating undergraduate nursing students' self-efficacy and competence in writing: Effects of a writing-intensive intervention. *Nurse Education in Practice, 15*(2015), 174-180. http://dx.doi.org/10.1016/j.nepr.2014.12.002

Miller, L.C., Russell, C.L., Cheng, A. & Zembles, A. (2018). Testing the efficacy of a scaffolding writing intervention with online degree completion nursing students: A quasi-experimental design. *Nurse Education in Practice, 32*(2018), 115-121. https://doi.org/10.1016/j.nepr.2018.06.011

Mitchell, K.M. (2018). Constructing writing practices in nursing. *Journal of Nursing Education, 57*(7), 399-407. doi:10.3928/01484834-20180618-04

Mitchell, K.M., Blanchard L. & Roberts, T. (2020). Seeking transformation: How students in nursing view their academic writing context- a qualitative systematic review. *International Journal of Nursing Scholarship, 17*(1). https://doi.org/10/1515/injnes-2020-0074

Mitchell, K.M., Harrigan, T. & McMillian, D.E. (2017). Writing self-efficacy in nursing students: The influence of a discipline-specific writing environment. *Nursing Open 4*(2017), 240-250. doi: 10.1002/nop2.90

Mitchell, K.M., McMillina, D.E., Lobchuk, M.M. & Nickel, N. C. (2021). Writing activities in the hidden curriculum in nursing education. *Nursing Inquiry, 28.* https://doi.org/10.1111.nin.12407

National Academies of Sciences, Engineering, and Medicine (2021). *The future of nursing 2020–2030: Charting a path to achieve health equity.* Washington, DC: The National Academies Press. https://doi.org/10.17226/25982.

Nelson, S. & Rafferty, A.M. (2010). *Notes on Nightingale: The influence and legacy of a nursing icon.* Cornell University Press.

Oermann, M.H., Leonardelli, A.K., Turner, K.M., Hawks, S.J., Derouin, A.L. & Hueckel, R.M. (2015). Systematic review of educational programs and strategies for developing students and nurses' writing skills. *Journal of Nursing Education, 54*(1), 28-34. doi:10.3928/01484834-20141224-01

Padagas, R.C. & Hajan, B.H. (2020). Academic reading and writing needs of undergraduate nursing students in research. *International Journal of Learning, Teaching and Educational Research, 19*(5), 318-335. https://doi.org?10.26803/ijlter.19.5.20

Pallant, J. (2020). *SPSS survival manual: A step-by-step guide to data analysis using IBM SPSS* (7th ed.). Open University Press; McGraw-Hill Education

Pearson, G. (2019). Sharing the wisdom of nursing through scholarly writing. *Journal of the American Psychiatric Nurses Association, 25*(2), 88. doi://10.1177/1078390319829761

Peganoff O'Brien, S., Marken, D. & Bennett Petry, K. (2016). Student perceptions of scholarly writing. *The Open Journal of Occupational Therapy, 4*(3). https://doi.org/10.15453/2168-6408.1253

Perfetto, L.M. (2015). Facilitating educational advancement of RNs to the Baccalaureate: What are they telling us? *Nursing Education Perspectives, 36*(1), 34-41. doi: 10.5480/13-1161.1

Rayner, G., Papakonstantinou, T. & Gleadow, R. (2016). Comparing the self-efficacy and writing-related abilities of native and non-native English-speaking students. *Cognet Education, 3*, 1-11.

Riley, E. (2019). Exploring strategies to enhance scholarly writing for RN-BSN students using an online tutorial. *Teaching and Learning in Nursing, 14*(2019), 128-143. https://doi.org/10.1016/j.teln.2018.12.011

Roberts, S.T. & Goss, G. (2009). Use of an online writing tutorial to improve writing skills in nursing courses. *Nurse Educator, 34*(6), 262-265.

Robinson, L.B. & Bishop, M. (2017). Creating a writing course to improve the writing self-efficacy of graduate writing students. *Clinical Nursing Studies, 5*(4), 88-95. doi: 10.5430/cns.v5n4p88

Royal, P.D. & Sasnett, B.S. (2010). Building a writing curriculum for allied health professional students. *The Journal of Health Administration Education, 27*(1), 46-53.

Sasa, R. (2020). Nursing care paper as a writing intensive requirement in clinical nursing courses. *Teaching and Learning in Nursing, 15*, 137-144. https://doi.org/10.1016/j.teln2020.01.008

Schmidt, K.M. & Alexander, J.E (2012). The empirical development of an instrument to measure writerly self-efficacy in writing centers. *Journal of Writing Assignment, 5*(1). https://escholarship.org/uc/item/5dp4m86t

Schmidt, L. (2004). Evaluating the writing to learn strategy with undergraduate nursing students. *Journal of Nursing Education, 43*(10), 466-473.

Shellenbarger, T., Gazza, E.A. & Hunker, D.F. (2018). Advancing scholarly writing of baccalaureate nursing students using the knowledge, skills, and attitude self-assessment for writing development. *Nurse Education Today, 69*(2019), 109-112. https://doi.org/10.1016/j.nedt.2018.07.006

Silva, M. C, Cary, A. H. & Thaiss, C. (1999). When students can't write. *Nursing and Health Care Perspectives, 20*(3), 143-145. https://link.gale.com/apps/doc/A54727542/HRCA?u=txshracd2597&sid=bookmark-HRCA&xid=8566e1eb

Smith, Y. M. & Caplin, M. (2012). Teaching the literacy of professionalism when clinical skills are not enough. *Nurse Educator, 37*(3), 121-125.

Stevens, C.J., D'Angelo, B., Rennell, N., Muzyka, D., Pannabecker, V. & Maid, B. (2014). Implementing a writing course in an online RN-BSN program. *Nurse Educator 39* (1), 17-21.

Taherdoost, H. (2017). Determining sample size; How to calculate the survey sample size. *International Journal of Economics and Management Systems, 2*, 237-239. https://www.iaras.org/iaras/filedownloads/ijems/2017/007-0032(2017).pdf

Tappen, R. M. (2011). *Advanced nursing research: From theory to practice*. Jones and Bartlett Learning.

Tarrant, M., Dodgson, J.E. & Law, B. (2008). A curricular approach to improve the information literacy and academic writing skills of part-time post-registration nursing students in Hong Kong. *Nurse Education Today, 28*, 458-468. https://doi.org/10.1016/j.nedt.2007.08.001

Tavokol, M. & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education, 2,* 53-55. doi: 10.5116/ijme.4dfb.8dfd

Tesh, A.S., Hyde, Y.M., Kautz, D.D. (2014). A writing-intensive introductory course for RN to BSN students. *Nurse Educator, 39*(1), 6-7. doi: 10.1097/NNE.0000000000000008

Thorpe, K. & Kulig, J.C. (1997). The enhancement of writing skills among post-RN students. *The Journal of Continuing Educating in Nursing, 28*(1), 39-43.

Tornall, J. & McDaniel, J. (2022). Key strategies in scholarly writing instruction for Doctor of Nursing practice students: A Q-methodology study. *Nurse Education Today, 108*(2022). https://doi.org/10.1016/j.nedt.2021.105192

Troxler H., & Jacobson Vann J.C., & Oermann M.H. (2011). How baccalaureate nursing programs teach writing. *Nursing Forum, 46*, 280-288. https://doiorg.ezproxy.uta.edu/10.1111/j.1744-6198.2011.00242.x

Trochem, W.M.K. (2006). *Ethics.* https://conjointly.com/kb/ethics-in-research/

Tyndall, D.E. & Scott, E.S. (2017). Writing development in an associate degree in nursing to baccalaureate degree in nursing students: Moving out of the comfort zone. *Journal of Nursing Education, 56*(3), 182-185. doi:10.3928/01484834-20170222-11

University of Texas. (2022). *About.* https://www.uta.edu/about

U.S. Department of Health and Human Services (2021). *Informed consent FAQs.*

https://www.hhs.gov/ohrp/regulations-and-policy/guidance/faq/informed-

consent/index.html

Williams, L.A. & Walker, C. (2020). Faculty created competition to enhance scholarly writing

for students in a baccalaureate nursing program. *Nurse Educator, 46*(2), 73-75. doi:

10.1097/NNE.0000000000000879

White, B. J. & Lamson, K.S. (2017). The evolution of a writing program. *Journal of Nursing*

Education, 56(7), 443-445.

Whitehead, D. (2002). The academic writing experiences of a group of nursing students: A

phenomenological study. *Journal of Advanced Nursing, 38*(5), 498-506. https://doi-

org.ezproxy.uta.edu/10.1046/j.1365-2648.2002.02211.x

Table 1

Kolmogorov-Smirnov test of Normality of Pretest to Posttest Change Score

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CHNG	.094	46	.200[*]	.980	46	.618

[*]. This is a lower bound of the true significance.

[a]. Lilliefors Significance Correction

Table 2

Descriptive Analysis of Pretest, Posttest, and Pre/Post Change Scores (N=46)

Variable	M (SD)	Minimum/ Maximum	Skew (SE)	Kurtosis (SE)
Pretest Scores	69.21[1] (22.49)	18.00-99.00	-.94 (.35)	-.19 (.69)
Posttest Scores	76.29[2] (18.96)	29.00-100.00	-.96 (.35)	.26 (.69)
Pre/Post Change Scores	7.08[3] (18.44)	-40.00-60.00	.09 (.35)	1.04 (.69)

Table 3

Paired Samples T-Test Analysis of Pretest to Posttest Changes in Mean Scores (N=46)

| Timepoint	n	M (SD)	t(df)	p
			-2.60 (45)	**.012**
Pretest	46	69.21 (22.49)		
Posttest	46	76.29 (18.96)		

*Cohen's d = -.38. This is in a small/medium (small = .2/medium = .5) effect size.

Table 4

Descriptive Analysis of the Project Participant Characteristics (*N=46*)

Variable	N	%
Age		
18-24	2	4.3
25-34	12	26.1
35-44	14	30.4
45-54	17	37.0
55-64	1	2.2
Race/Ethnicity		
White/Caucasian	18	39.1
Black/African American	17	37.0
Hispanic/Latino	8	17.4
Asian/Pacific Islander	3	6.5
Gender		
Female	42	91.3
Male	4	8.7
Speaks English		
Yes	39	84.8
No	7	15.2
Educational Experience		
< 1 year	9	19.6
1-5 years	17	37.0
6-10 years	8	17.4
11-15	6	13.0
16-20	5	10.9
21 +	1	2.2
Nursing Experience		
< 1 year	9	19.6
1-5 years	10	21.7
6-10 years	12	26.1
11-15	6	13.0
16-20	3	6.5
21 +	6	13.0

Figure 1

The Distribution of Pretest to Posttest Change Scores
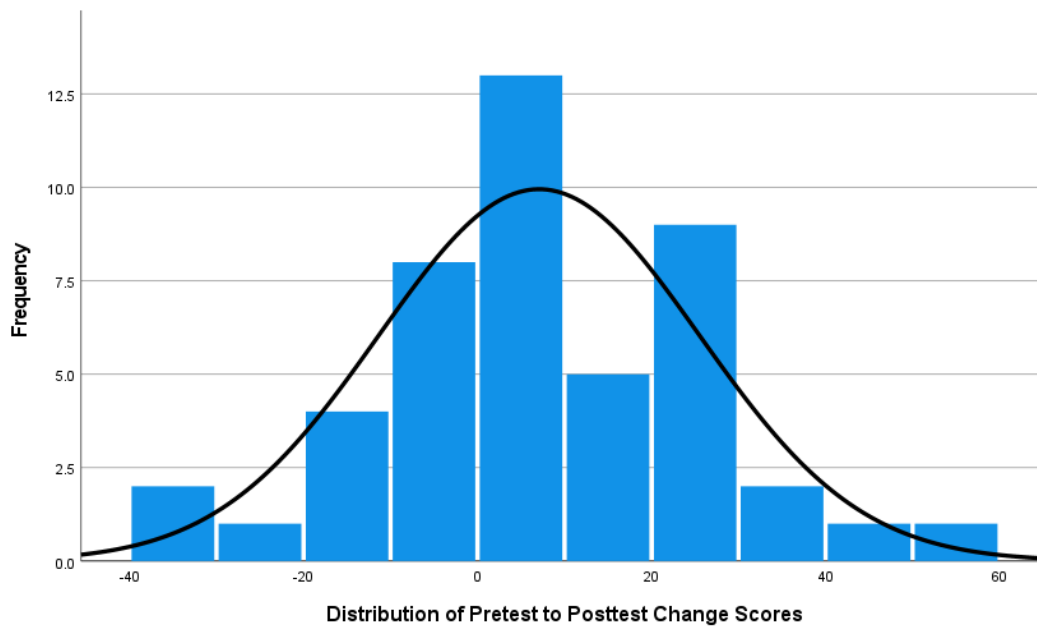
Figure 2

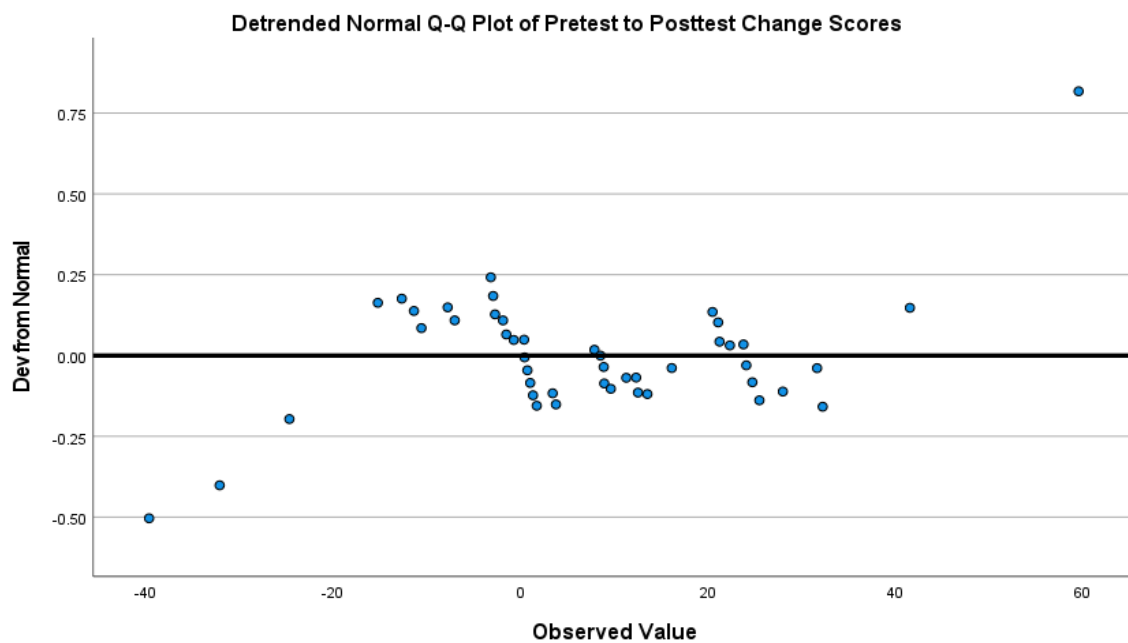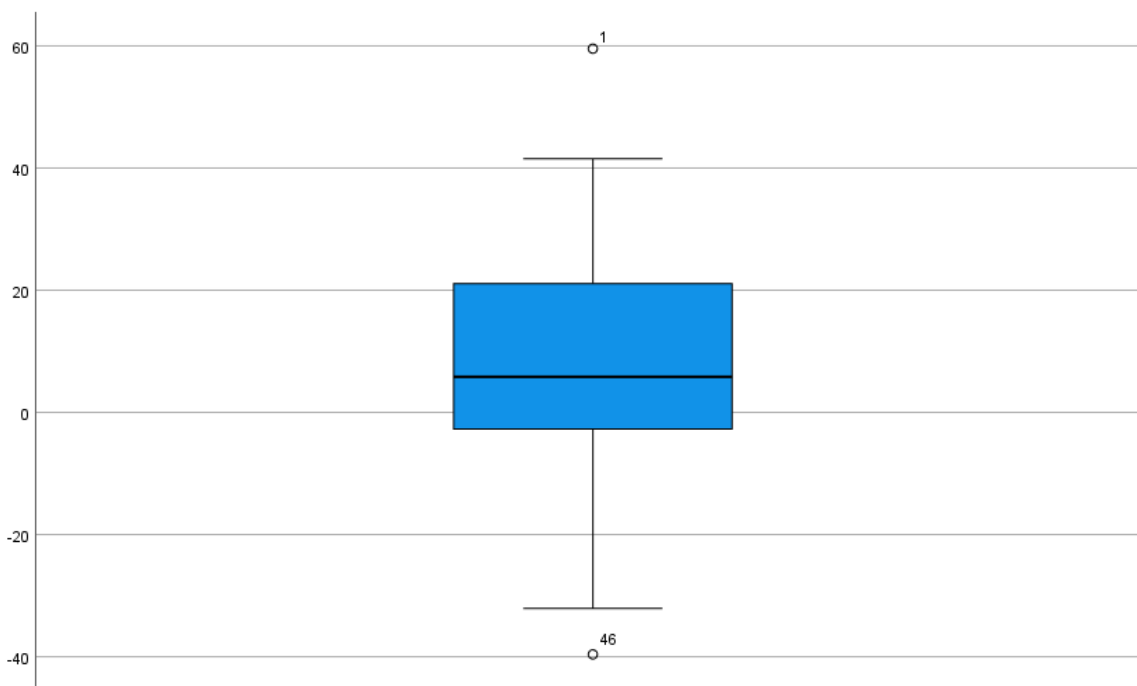*Detrended normal Q-Q plot of Pretest to Posttest Change Scores*

Figure 3

Boxplot of Presenting the Outlier Scores for the Pretest to Posttest Change Scores

Figure 4

Graph Presenting the Mean Pretest to Posttest Change for the Dependent Variable
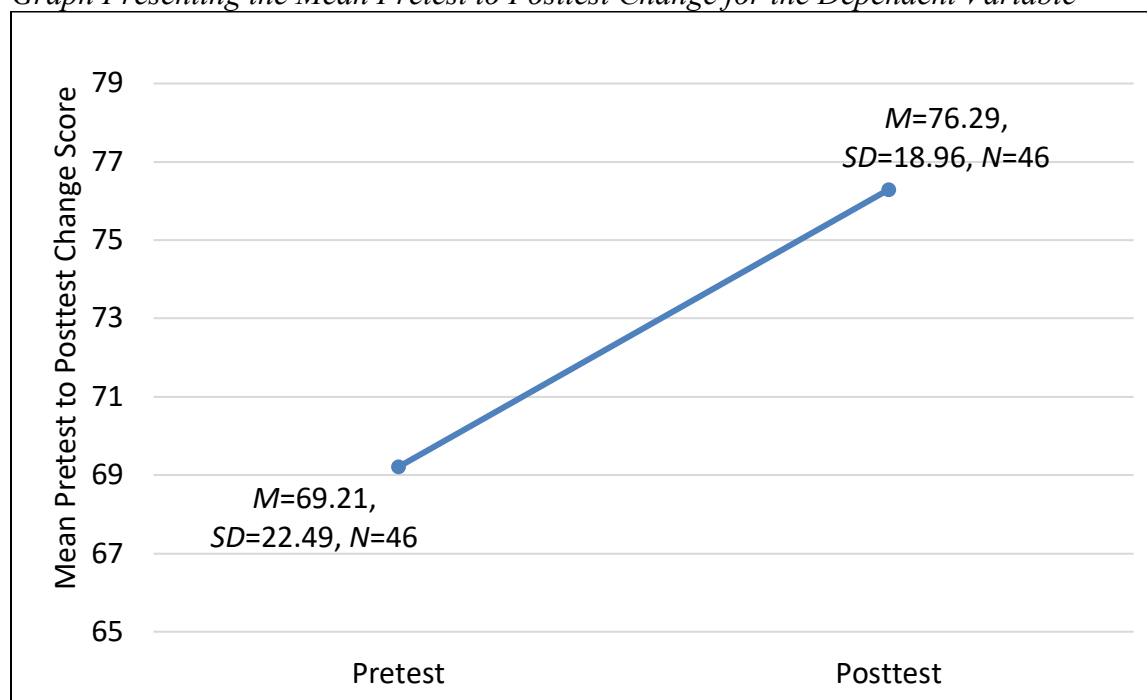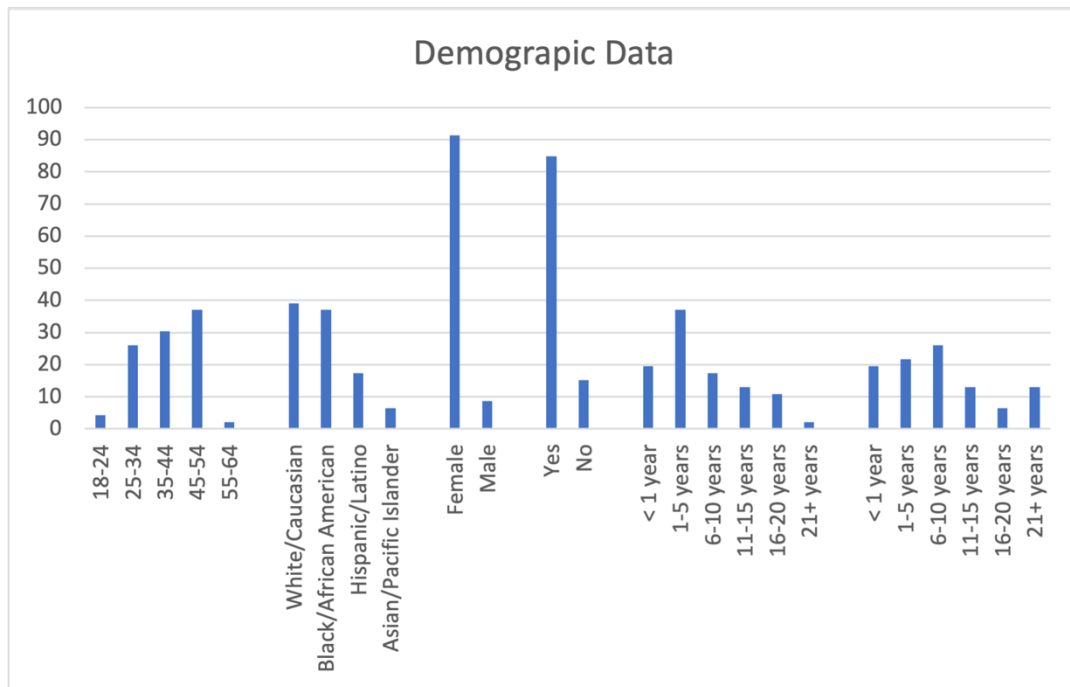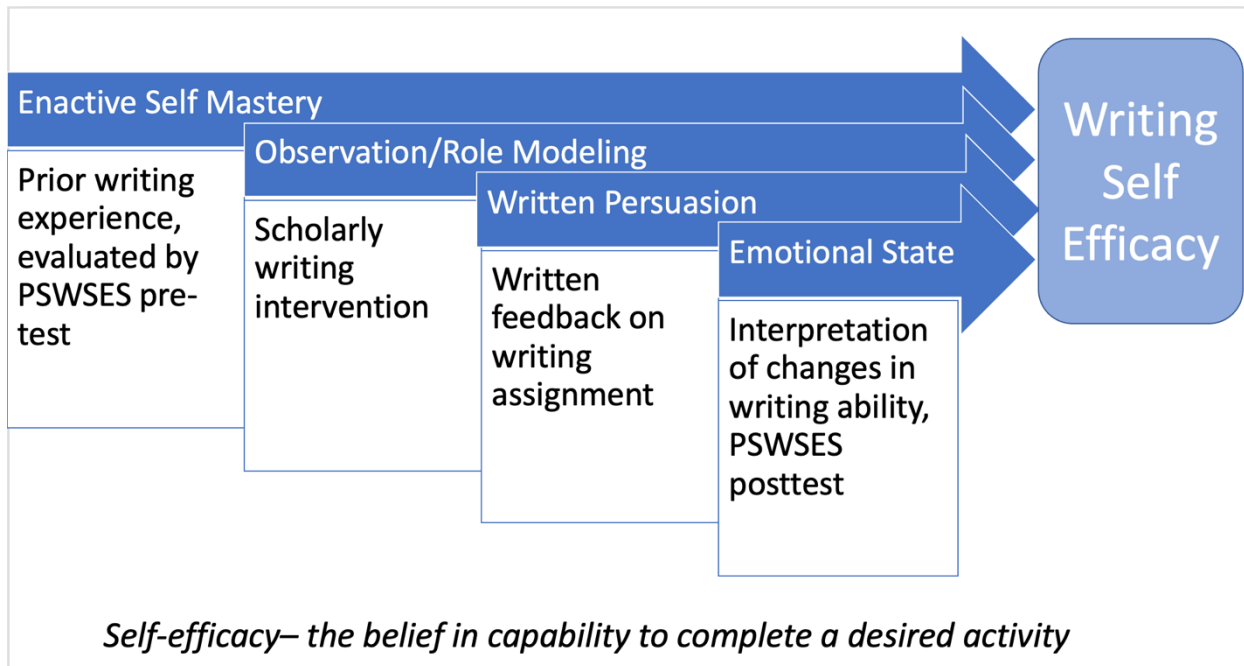
Figure 5

The Distribution of Demographic Data

Appendix A

Self-efficacy– the belief in capability to complete a desired activity

Appendix B

COLLEGE OF NURSING AND HEALTH INNOVATION — UNIVERSITY OF TEXAS ARLINGTON

_____

November 9, 2022

Dr. Jeanean Boyd
Chair, Undergraduate Nursing
College of Nursing and Health Innovation
University of Texas Arlington
411 S. Nedderman Drive
Arlington, TX 76019

Permission to Conduct Research

Dear Dr. Boyd:

My name is Maura Bernasconi and I am a DNP student at American Sentinel College of Nursing and Health Sciences at Post University in Waterbury, Connecticut. Currently, I am employed as adjunct RN-BSN faculty at the University of Texas, Arlington (UTA) in the online course, Transition to Professional Nursing. The research I wish to conduct for my DNP project involves, "*A "Writing Remedy" for Scholarly Writing Self-Efficacy in a Baccalaureate Nursing Course.*" The project will be conducted under the guidance of Dr. Jill Baldwin, DNP Chair of American Sentinel College of Nursing and Health Sciences at Post University, Dr. Shawn Buhrow, Committee Member from American Sentinel, and Dr. Esther Dorsey, Committee Member from the University of Texas.

The written request for permission is a confirmation of your previous consent granted on August 18, 2022, to initiate DNP research involving the RN-BSN students in the accelerated, online College of Health and Nursing Innovation at UTA after the Investigational Review Board (IRB) from American Sentinel College of Nursing and Health Sciences at Post University and the University of Texas, Arlington. I will contact Dr. Deborah Behan for guidance on IRB approval for UTA research after the DNP defense. Thank you kindly for allowing me to implement my academic endeavors and consistent, unfailing support.

My cell number is 508-942-5418 or email maurab@uta.edu

Sincerely,
Maura Bernasconi, MSN/Ed RN CNE
DNP Student

Approved:
November 9, 2022
Jeanean Boyd, DNP, MSN, BSN
Chair, Undergraduate Nursing
College of Nursing and Health Innovation
University of Texas Arlington

Appendix C

Katherine Schmidt   📁 Inbox - Google   December 9, 2021 at 5:19 PM

Re: DNP Educational Leadership Student seeking PSWSES permission

To: Maura Bernasconi

📖 Siri found new contact info   Katherine Schmidt schmidtk@wou.edu   add... ⊗

Dear Maura:

Yes, you have our permission to utilize PSWSES, and, yes, please feel free to adapt the scale to serve your needs.

I have attached a .pdf of the revised scale for your use. We have changed one item from the original scale: Item 19, *I can invest a great deal of effort and time in writing a paper when I know the paper will not be graded*, did not load specifically on any given factor and the communality was low. We also were aware of the absence of a statement regarding writing resources; therefore, item 19 was replaced by a writing-resource-oriented statement: *I can find and use resources that help me with my writing*.

We created the instrument for open use, and our scoring guide is very basic at this time: someone who averages above 84 across the questions is above average Writerly Self-Efficacy, and those who score below 67 on average across questions is below average self-efficacy (based on quartiles).

Good luck with your DNP project!

Katherine

Appendix D

Post UNIVERSITY

AMERICAN SENTINEL
COLLEGE OF NURSING
& HEALTH SCIENCES

January 9, 2023

Maura Bernasconi
DNP Student
American Sentinel College of Nursing & Health Sciences at Post University

Re: A "Writing Remedy" for Scholarly Writing Self-Efficacy in a Baccalaureate Nursing Course.

Dear Ms. Bernasconi,

On January 9, 2023, the Institutional Review Board (IRB) of American Sentinel College of Nursing & Health Sciences at Post University has approved the above-referenced IRB application addendum. The contingencies have been addressed and the IRB approves the addended protocol. Work on this project may continue. This approval is for a period of one year from the dates of this letter and will require continual approval if the research extends beyond one year. If you make changes to the protocol during the period of this approval, you must submit a revised protocol to the American Sentinel College IRB for approval before implementing the changes.

If you have any questions regarding the IRB's decision, please contact me through asc-irb@post.edu.

Sincerely,

Kris Skalsky

Kris Skalsky, EdD, MSNEd, RN
Chair
American Sentinel College of Nursing & Health Sciences at Post University IRB

C. Dr. Jill Baldwin

Appendix E

IRB Protocol Form

Protocol # 2023-0117

The title of my proposed DNP project is "A "Writing Remedy" for Scholarly Writing Self-Efficacy in a Baccalaureate Nursing Course".

Original Protocol | Review List | History

Creator Information
Maura Eileen Bernasconi
Clinical Assistant Professor, Nursing - Undergrad
maurab@uta.edu | (817) 272-2776

To Be Completed by IRB Staff

Status	Approved On Dec 05, 2022
Anniversary Date	Dec 05
Review Type	Reliance
Category	○ Federally Funded ○ Non Federally Funded
	○ FDA Regulated ○ Non-FDA Regulated
	○ Clinical Trial ○ Non-Clinical Trial

1. Protocol Personnel

UT Arlington Protocol Personnel

Investigator Information	Investigator Role	Investigator Type	Training Information
Maura Eileen Bernasconi Clinical Assistant Professor, Nursing - Undergrad maurab@uta.edu	(817) 272-2776	Principal Investigator	Faculty	
Kristine Cope Adjunct Assistant Professor, Department of Kinesiology kristine.cope@uta.edu	Protocol Personnel	Faculty	

2. Protocol Information

a. Protocol Title
The title and research summary of your research study.

The title of my proposed DNP project is "A "Writing Remedy" for Scholarly Writing Self-Efficacy in a Baccalaureate Nursing Course".

b. Research Summary

The purpose of this quantitative, quasi-experimental before and after study is to determine if the implementation of a scholarly writing intervention impacts the writing self-efficacy of online RN-BSN students in the first course, NURS3345 Transition to Professional Nursing. The project will assess the impact of a 30-minute scholarly writing intervention on Post-Secondary Writerly Self-Efficacy Scale scores in the first class of an RN-BSN program. The student's writing self-efficacy will be evaluated using a 20-question pre-and-posttest Post-Secondary Writerly Self-Efficacy Scale (PSWSES). This project is important as assistance from a scholarly writing intervention could improve professional writing abilities and confidence.

4. Form Attachments

Uploaded Documents

Form	File Name

Form	File Name
American Sentinel College IRB Approval Letter	Bernasconi_Maura IRB approval letter 11_23_2022.pdf
American Sentinel College IRB Approved Application	Bernasconi_Maura IRB Application 11_23_2022.docx
Signed IAA	IAA 2023-0117 Bernasconi.pdf
Reliance Acknowledgement Letter	IRB Acknowledgement Letter 2023-0117 Bernasconi.pdf

Comments

Note : Comments are not seen by the IRB until the protocol is submitted

Ann m Hudson	**IRB Coordinator**	**Mon, Dec 5th 2022, 5:32 pm**
Coordinator I, Special Program, Office Of Research Administration		(3 hours ago)
ann.hudson@uta.edu	(817) 272-1021		

ASC - Post University is the reviewing IRB of record; UTA will rely on their expedited determination for this study.

Reliance documented by uploaded approval letter dated 12/5/2022.

Thank you,

IRB Team

This comment is available to **Public**

Maura Eileen Bernasconi	**Principal Investigator**	**Mon, Dec 5th 2022, 3:23 pm**
Clinical Assistant Professor, Nursing - Undergrad		(5 hours ago)
maurab@uta.edu	(817) 272-2776		

This study has been approved by American Sentinel, as I am a DNP student with this institution, and American Sentinel is my primary IRB. However, the study will take place in a UTA AO course. I will need a formal reliance from American Sentinel and approval, thank you!

This comment is available to **Public**

Appendix F

Demographic Survey

1). Enter your unique identifier (the first two initials of your mother's maiden name and any four-digit number of your choice)

2). **What is your age?**
a). 18-24
b). 25-34
c). 35-44
d). 45-54
e). 55-64
f). 65+

3). **What gender do you identify as?**
a). female
b). male
c). nonbinary
d). gender identification not listed, please specify

4). **Which of the following best describes you?**
a). Caucasian
b). African American
c). Hispanic or Latino
d). Asian/ Pacific Islander
e). Native American
f). race nor ethnicity not listed, please specify

5). **Is English your primary language?**
a). yes
b). no

6). **What is the time frame since your last college-level educational experience?**
a). < 1 year
b). 1-5 years
c). 6-10 years
d). 11-15 years
e). 16-20 years
f). 21+ years

7). **What time frame best describes your professional nursing experience?**
a). < 1 year
b). 1-5 years
c). 6-10 years
d). 11-15 years
e). 16-20 years
f). 21+ years

Appendix G

Western Oregon University Writing Center		This self assessment takes less than 2 minutes to complete, and your identity will remain confidential.
Getting to Know Yourself as a College Writer *		
Student V#: _____		**Please Assess Your Capabilities:**
Today's Date: _____		Never Always 0% 100%
Items	***Example: I can identify incomplete, or fragmented, sentences.***	*66%*
1.	I can indentify incomplete, or fragmented, sentences.	____ %
2.	I can invest a great deal of effort and time in writing a paper when I know the paper will earn a grade.	____ %
3.	I can articulate my strengths and challenges as a writer.	____ %
4.	I can find and incorporate appropriate evidence to support important points in my papers.	____ %
5.	I can be recognized by others as a strong writer.	____ %
6.	When I read a rough draft, I can identify gaps when they are present in the paper.	____ %
7.	I can maintain a sense of who my audience is as I am writing a paper.	____ %
8.	I can write a paper without feeling physical discomfort (e.g., headaches, stomach aches, back aches, insomnia, muscle tension, nausea, and/or crying).	____ %
9.	When I read drafts written by classmates, I can provide them with valuable feedback.	____ %
10.	When I have a pressing deadline for a paper, I can manage my time efficiently.	____ %
11.	I can attribute my success on writing projects to my writing abilities more than to luck or external forces.	____ %
12.	When a student who is similar to me recieves praise and/or a good grade on a paper, I know I can write a paper worthy of praise and/or a good grade.	____ %
13.	Once I have completed a draft, I can eliminate both small and large sections that are no longer necessary.	____ %
14.	I can write a paper without experiencing overwhelming feelings of fear or distress.	____ %
15.	When writing papers for different courses (for example, Biology, English, and Philosophy classes), I can adjust my writing to meet the expectations of each discipline.	____ %
16.	I can map out the structure and main sections of an essay before writing the first draft.	____ %
17.	I can find ways to concentrate when I am writing, even when there are many distractions around me.	____ %
18.	I can find and correct my grammatical errors.	____ %
19.	I can find and use resources that help me with my writing.	____ %
20.	When I work with a writing tutor, I can learn new strategies which promote my development as a writer.	____ %
*	*Ensuring your success as a college writer is our mission; therefore, we are interested in learning more about how you understand yourself as a college writer and how your perception changes over time. You will be asked to complete this survey each time you utilize our services, and we will share the results with you, upon request. Thank you!*	

Appendix H

**American Sentinel College of Nursing & Health Sciences at Post University
DNP Project Consent Form**

**Project Title: A "Writing Remedy" for Scholarly Writing Self-Efficacy in a
Baccalaureate Nursing Course**
**Principal Investigator: Maura
Bernasconi**
**DNP Project Chair: Dr. Jill
Baldwin**
Approval Date: 11/23/2022

Approved Consent is valid for one year from the date of IRB approval.

You are being asked to participate in a DNP student project. This form provides you with information about the project. The project will be described, and all of your questions will be answered before you sign this consent.   Please read the information below and ask questions about anything you do not understand before deciding whether or not to take part in this project.

Why is this project being done?

The purpose of this project is to determine if the implementation of a scholarly writing intervention impacts the writing self-efficacy of online RN-BSN students in the first course, NURS3345 Transition to Professional Nursing.

You are being asked to take part in this project because you are 18 years or older, and enrolled in the first course, NURS3345 Transition to Professional Nursing, in an online RN-BSN program.

What happens if I participate in this project?

If you agree to take part in this project, you will be asked to fill out a 1-minute demographic survey, take a 2-minute pre-test, and participate in an asynchronous 30-minute writing intervention module, followed by taking a 2-minute post-test. Your participation will last not more than 45 minutes. The demographic survey and pre-tests will be sent through a QuestionPro link. The asynchronous 30-minute writing intervention module will become available through the Canvas course on the first day of week 2. Then, the post-test will be sent through another QuestionPro link.

Describe any foreseeable risks or discomforts to the subject (if there are risks, identify resources available to the participants).

There are no foreseeable risks associated with this study.

What are the possible benefits of the project?

This project/study is designed to learn more about if the implementation of a scholarly writing intervention impacts the online RN-BSN students' Post-Secondary Writing Self-Efficacy Scale scores.

American Sentinel College of Nursing & Health Sciences at Post University
DNP Project Consent Form

Is my participation voluntary?
Taking part in this project is voluntary. You have the right to choose not to take part in this project. If you choose to take part, you have the right to stop at any time. If you refuse or decide to withdraw later, you will not lose any benefits or rights to which you are entitled.
If after receiving the survey/questionnaire, you decide to not take part in this project, do not return the survey/questionnaire(s). If I have not received your completed survey(s)/questionnaire(s) within the first two weeks of the course, I will assume that you decided not to take part in this project and any information received from you will be destroyed.

Whom do I call if I have questions?

The principal investigator (student) carrying out this project is ___Maura Bernasconi_. You may ask any questions you have by contacting her at maura.bernasconi1@students.post.edu.
You may have questions about your rights as a participant in this study. You can contact my DNP Project Chair, _Dr. Jill Baldwin_ by sending a message to their email address _jill.baldwin@instructor.post.edu. You may also contact the American Sentinel College of Nursing & Health Sciences at Post University IRB Director by email at ASC-IRB@post.edu.

Who will see my information?

I will do everything I can to keep your information private (confidential). Any documents that identify you and any information you provide may be looked at by the following:
- The DNP student's Project Chair and Committee members

- American Sentinel College of Nursing & Health Sciences at Post University Institutional Review Board (IRB)

- Regulatory officials from the institution where the project is being conducted who want to make sure the research is safe

The results from this project may be shared at a meeting with the DNP student's Project Committee, at a professional conference, and may also be in published articles. Your name will be kept private when information about this project is presented in any form.

Agreement to be in this study/project

I have read this paper about the project, or it was read to me. I understand the possible risks and benefits of this study. I know that taking part in this project is voluntary. I choose to take part in this study/ and I will get a copy of this consent form.
By clicking the "yes" when prompted in the Question Pro link, I confirm that I have read this form and have decided that I will participate in the project described above.