

MORE EDUCATION, LESS MORTALITY:  
THE ROLE OF THE EMPLOYER IN A MORE HIGHLY EDUCATED  
NURSING WORKFORCE

By

Terri A. Clark

A Dissertation Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctorate of Education in Educational Leadership

Austin Peay State University  
May 2022

Dissertation Committee:

Dr. John R. McConnell III, Committee Chair

Dr. James M. Thompson

Dr. Benita Bruster

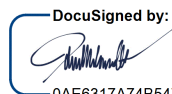
Dr. Debra Rose Wilson

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Terri A. Clark

Approved:

DocuSigned by:



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Dr. John R. McConnell III, Committee Chair

DocuSigned by:



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Dr. James M. Thompson, Committee Member

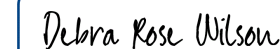
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Dr. Benita Bruster, Committee Member

DocuSigned by:



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Dr. Debra Rose Wilson, Committee Member

DocuSigned by:



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Dr. Chad Brooks, Associate Provost and Dean, College of Graduate Studies

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Terri A. Clark

January 31, 2022

Dedicated to my Mom (1955-2018).

## ACKNOWLEDGEMENTS

This part of my journey has been a labor of love for my children; may all of your dreams come true. First of all, thank you to my professors and my dissertation committee; I appreciate your investment in me. Thank you to the university where I teach for supporting me in this endeavor. I cannot say that this was initially the plan that I created for myself, but I am so thankful for the colleagues, students, and friends I have found along the way. Thanks to my husband for your unconditional love and for putting up with my countless hours at the computer. Thanks to Elle for giving me my very first nursing educator job and for being my biggest cheerleader through thick and thin. Thank you to Debra Rose for being my mentor and friend. Thanks to Dr. McConnell for making me want to be a better professor. I am thankful this mountain is coming to an end, but I am genuinely thankful for the experiences along the climb.

## ABSTRACT

There is a problem in the United States regarding the percentage of bachelor-prepared nurses in the workforce. The primary purpose of this study was to explore the role of the employer in a more educated nursing workforce through the lens of connectivism. A mixed methods study was conducted during the COVID-19 pandemic in the fall of 2021. Chief nursing officers ( $n = 89$ ) from hospitals and long-term care facilities across one southeastern state were surveyed regarding the percentage of Bachelor of Science in Nursing (BSN)-prepared registered nurses (RNs) in their facilities. Fisher's exact test ( $r \times 2$ ) was conducted to determine if there was a significant association between the reported percentage of BSN-prepared RNs and the plans, policies, and promotions of the employer, as well as the location and type of facility. Findings suggest that the employer does play a role in the education level of nurses. There was a significant association between the reported percentage of BSN-prepared RNs and the presence of plans and goals for the facility suggesting that the employers' plans and goals increase the percentage of BSN-prepared RNs in a facility. There was also a significant association between the reported percentage of BSN-prepared RNs and the type of facility suggesting that there are more BSN-prepared RNs in the hospital setting than in the long-term care setting. An additional significant association was found related to magnet status suggesting that maintaining or pursuing magnet status does increase the percentage of BSN-prepared RNs in a facility. Four main themes evolved during the coding of the qualitative data. The four main themes were: 1) the need for more nurses, 2) the need for more resources, 3) the need for partnerships, and 4) the ramifications of the pandemic. The implications for practice included raising awareness regarding the need for more BSN-prepared RNs, developing goals related to this initiative, and forming partnerships with key stakeholders.

*Keywords:* RN-to-BSN, registered nurse, connectivism, nursing shortage, pandemic, partnerships, COVID-19

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## **Chapter I**

### **Introduction**

The COVID-19 pandemic placed a spotlight on the value of healthcare professionals during a crisis. Healthcare workers were deemed essential employees and revered as heroes of the pandemic. Prior to the COVID-19 upheaval, The World Health Assembly designated 2020 as "The Year of the Nurse" (Loveday, 2020). The events of 2020 highlighted the vital role nurses play in the healthcare continuum. While the value of the nurse is undeniable, there is an identified problem in the United States related to the number of bachelor-prepared registered nurses (RNs; Campaign for Action, 2018; Institute of Medicine [IOM], 2010).

While most of the general public is familiar with the role of the nurse, the majority are unaware of the various educational pathways that can lead to someone claiming the title of RN. All RNs take the same national licensure exam, but not all RNs hold the same education level. Nurses can sit for the RN licensure exam with a diploma degree in nursing, Associate's Degree in Nursing (ADN), or a Bachelor of Science in Nursing (BSN). All three nursing programs are known for their rigorous content and demanding requirements, but the push for more BSN-prepared nurses has become a national initiative (IOM, 2010).

In 2010, the IOM released a directive for the profession of nursing to increase the percentage of BSN-prepared nurses in the country to 80% by the year 2020. The IOM push came after the findings in a 2003 study concluded a link between nurse education levels and patient mortality rates (Aiken et al., 2003). The Aiken et al. (2003) study found that "a 10% increase in the proportion of nurses holding a bachelor's degree was associated with a 5% decrease in the likelihood of patients dying within 30 days of admission" (p. 1617). A more recent study out of

Korea found that the length-of-hospital stay for surgical patients decreased when the number of BSN-prepared nurses increased (Cho et al., 2018).

Research continues to support the findings that there is a connection between the education level of nurses and patient outcomes (Aiken et al., 2003; Aiken et al., 2014; Cho et al., 2018; Kutney-Lee et al., 2013; Rosenberg, 2019; Zittel et al., 2016). Evidence has consistently linked BSN-prepared RNs to lower patient mortality rates and more positive patient outcomes compared to care provided by non-BSN-prepared RNs (Aiken et al., 2003; Aiken et al., 2008; Cho et al., 2018; Kutney-Lee et al., 2013, Yakusheva et al., 2014). While the care provided by ADN-prepared nurses continues to be valued and necessary to meet the demands in our world, the need to produce more BSN-prepared RNs remains a problem that cannot be ignored.

According to The 2017 National Nursing Workforce Survey, only 41.8% of the newly licensed nurses were BSN-prepared in the United States (Smiley et al., 2018). Obtaining a BSN upon initial RN licensure is only one pathway to becoming a BSN-prepared RN. Students may elect to initially enroll in a BSN program and sit for the licensure exam, or they may complete an associate's degree program first. Students who choose this route will complete their associate's degree, become a RN, and then enroll in a RN-to-BSN program to obtain their BSN degree. RN-to-BSN programs are for RNs to obtain their bachelor's degree while working as RNs. *The Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing* report showed that there were 65,931 RN-to-BSN graduates in 2019 (American Association of Colleges of Nursing [AACN], 2020a). The Campaign for Action's website, organized by the Robert Wood Johnson Foundation (RWJF), includes data related to the IOM initiative. The Campaign for Action combined data to include nurses with a BSN upon licensure and those who obtain their BSN post-licensure; this report reflects that as of 2019, the percentage of employed nurses with a

BSN degree or higher in nursing is at 59% (Campaign for Action, 2021). Despite the time that has passed since the seminal work of Aiken et al. (2003) and continued research by others, the IOM's goal of 80% of BSN-prepared RNs by the year 2020 remains unmet. The recent report from the National Academies of Sciences, Engineering, and Medicine (NASEM) continues to affirm the need for more BSN-prepared RNs (NASEM, 2021).

There are multiple stakeholders invested in the endeavor for a more highly educated nursing workforce. Nurses, educators, professional organizations, government agencies, accrediting bodies, licensing boards, and employers of nurses are all critical stakeholders in this initiative (NASEM, 2021). Medical facilities that employ nurses are often motivated to support this goal, as the nurses' education level affects their ability to receive magnet status designation from the American Nurses Credentialing Center (ANCC). The ANCC (2021) requires all nurse leaders and nurse managers to have a BSN or higher for this designation. Nursing regulatory bodies are charged with protecting the public and assuring that nurses provide safe and competent care (Squires & Dorsen, 2018). Since research supports the findings that a more educated nursing workforce decreases patient mortality rates and improves patient outcomes (Aiken et al., 2003; Aiken et al., 2008; Kutney-Lee et al., 2013; Yakusheva et al., 2014), there is cause for key stakeholders to gather more information on this topic.

Further research is needed on how to increase the number of BSN-prepared nurses. The seminal research of Aiken et al. suggests that employers of nurses need to be involved in recruiting and retaining BSN-prepared nurses (Aiken et al., 2003). Researchers have identified a need for new methods to be explored to increase the number of BSN-prepared RNs (Clarke, 2017; Zittel et al., 2016). The IOM stated that this plan needs to include collaboration among stakeholders, financial support for nursing education, and an enhanced culture of education that



focuses on the importance of lifelong learning (IOM, 2010). Multiple researchers recommend that collaboration with key stakeholders, such as employers of nurses, is a critical component in the ability to pursue this initiative (Angel, 2020; Duffy et al., 2014; Hawkins et al., 2018; Straka et al., 2019; Wilson et al., 2021). This study will attempt to fill a significant gap in the literature by exploring the value of partnerships between nurses and employers of nurses. Studies were conducted across multiple states regarding the pursuit of a more educated nursing workforce (Haverkamp & Ball, 2013; Jones et al., 2019; Schuler et al., 2017). This proposed study will help fill the gap in Tennessee.

There are over 98,000 licensed RNs in Tennessee (Tennessee Department of Health, 2021), working in approximately 120 hospitals and 300 long-term care facilities throughout the state. According to the Campaign for Action, the percent of BSN-prepared RNs in Tennessee was at 54.7% in 2018, which was slightly below the national average of 57% (Campaign for Action, 2018) and significantly below the national benchmark of 80% (IOM, 2010). The researcher in this proposed dissertation study will explore the employers' role in a more highly educated nursing workforce. The researcher will employ a mixed methods approach through the lens of connectivism.

Connectivism places importance on the value of networking (Siemens, 2004). This study will aim to provide more information regarding the employers' role in the United States' initiative of a more educated nursing workforce (IOM, 2010) by striving to discover employers' perceptions, plans, promotions, problems, and policies. It will focus on connections between the employers of nurses and their impact on the percentage of BSN-prepared RNs in the workforce.

Since research supports the finding that more education does indeed lead to decreased mortality rates and improved patient outcomes (Aiken et al., 2003; Aiken et al., 2008; Kutney-

Lee et al., 2013; Yakusheva et al., 2014), any information that leads in that direction is valuable and potentially impactful. Collaborating with key stakeholders in this process could potentially lead to an increased level of protection for the public.

### **Objectives for this Research**

1. Examine the perceptions of employers of nurses related to a mandatory bachelor's degree requirement for nurses.
2. Identify barriers reported by employers of nurses in supporting a more educated nursing workforce.
3. Investigate the current culture in hospitals and long-term care facilities regarding the need for a more educated nursing workforce.
4. Report associations between percentage of BSN-prepared RNs and the role of the employer.
5. Report associations between percentage of BSN-prepared RNs and the location of employment.
6. Compare and contrast the perspective of hospitals and long-term care facilities regarding a more educated nursing workforce.
7. Provide nursing regulatory bodies with additional information to make data-driven decisions.
8. Contribute to a more competent nursing workforce and a safer public.

### **Research Questions (RQs)**

RQ1: How do employers of nurses support or oppose a minimum bachelor's degree requirement for nurses?

RQ2: What are the supports and barriers reported by employers of nurses in requiring a more educated nursing workforce?

RQ3: Is there an association between the role of the employer (employers' plans, policies, or promotions) and the number of bachelor-prepared nurses in the workforce?

RQ4: Is there an association between the location of employment (by region or by type) and the number of bachelor-prepared nurses in the workforce?

### **Research Hypotheses**

$H_o$ : There is no association in the percentage of BSN-prepared RNs based on the given employee variable.

### **Conducting the Study**

A survey was distributed to chief nursing officers (CNOs) in hospitals and long-term care facilities across Tennessee over a three-month period in the fall of 2021. The Chief Nursing Officer Survey was predominately distributed via email using an embedded Qualtrics link. The Chief Nursing Officer Survey contained eight quantitative questions. The survey was developed and used in North Carolina and was found to be a valid and reliable quantitative instrument (Schuler et al., 2017). Three qualitative questions were added to the survey to gain more information on the specific research questions (Squires & Dorsen, 2018). The qualitative questions followed the quantitative questions and served to affirm quantitative responses using concurrent triangulation. The quantitative and qualitative data were collected concurrently and assessed for similarities and incongruences in an effort to cross-validate findings (Creswell, 2009).

Certain assumptions and limitations were recognized in the preparation of this study. The assumptions included that the instrument used would elicit reliable responses, the participants

would answer the questions honestly, and study results would be meaningful. There were also recognized possible limitations of this study. The participants of the study will be limited to one state in the Southeastern United States. The participants will be selected using a purposive sample. Sample size, location, and sampling method could limit the generalizability of the findings. The findings of this study may be limited to the discipline of nursing, as this is a specific problem focused on professions with varying education levels allowed upon initial licensure.

Researchers previously stated that the United States has too few RNs with BSN and higher degrees, and that their seminal study findings "provide sobering evidence that this imbalance may be harming patients" (Aiken et al., 2003, p. 8). This study aims to explore the role of the employer in a more highly educated nursing workforce. Increasing the education level of nurses will not solve all of the healthcare issues in the United States post-COVID; however, according to research, it will improve patient outcomes and decrease patient mortality (Aiken et al., 2003; Aiken et al., 2008; Cho et al., 2018; Kutney-Lee et al., 2013, Yakusheva et al., 2014). That is a goal worth pursuing.

## **Chapter II**

### **Synthesis of Research Literature**

There is a problem in the United States regarding the percentage of bachelor-prepared nurses in the workforce (NASEM, 2021). Research supports the findings that there is a connection between the education level of nurses and patient outcomes (Aiken et al., 2003; Aiken et al., 2014; Kutney-Lee et al., 2013; RWJF, 2013; Zittel et al., 2016). Research has consistently linked BSN-prepared RNs to lower patient mortality rates and more positive patient outcomes compared to care provided by non-BSN-prepared RNs (Aiken et al., 2003; Aiken et al., 2008; Kutney-Lee et al., 2013). A review of the literature supports the need for a more educated nursing workforce (Aiken et al., 2003; Aiken et al., 2014; Kutney-Lee et al., 2013; RWJF, 2013; Zittel et al., 2016).

Using the theory of connectivism as a blueprint, the review of the literature will affirm the significance of this study. First, the connection between the education level of nurses and patient mortality will be supported. Second, the national initiative from the IOM will be reviewed. Third, the current status of the United States regarding a more educated nursing workforce will be presented. Lastly, the recommendations for future research will be introduced.

### **Connectivism**

The theory of connectivism is used as a conceptual framework for this study. The term connectivism was first coined by George Siemens in 2004 (Corbett & Spinello, 2020; Downes, 2012). Siemens (2004) introduced connectivism as a "learning theory for the digital age" (Corbett & Spinello, 2020, p. 2). With our rapidly changing technological world, Siemens and Downes worked together to develop the theory of connectivism (Corbett & Spinello, 2020; Downes, 2012; Duke et al., 2013). This theory focuses on the impact of networking and the

power of technology on learning (Corbett & Spinello, 2020; Siemens, 2004). Connectivism is being recognized by medical educators and is recognized as a prominent network learning theory (Goldie, 2016). Connectivism is also being used in nursing education and focuses on the importance of forming networks and extending personal communities to enhance learning (Honey & Procter, 2017).

Recently, connectivism was introduced as a theory to apply to leadership, in addition to being a learning theory (Corbett & Spinello, 2020; Natt och Dag, 2017). Researchers are recognizing the importance of forming networks and leveraging technology in the teaching and the leading of others (Duke et al., 2013). While connectivism starts with the individual, it then places focus on the connections that individuals make with others, with organizations, with information, and with technology (Corbett & Spinello, 2020; Siemens, 2004). Connectivist leadership has been described as a new way of leading that includes a process of creating a collective influence (Corbett & Spinello, 2020). Researchers agree that nurturing connections is a necessary component of connectivism (Corbett & Spinello, 2020; Siemens, 2004).

Theories are used to help us predict behavior (Duke et al., 2013). The theory of connectivism highlights the impact of connections and technology on behavior. Connectivism also recognizes the role that advancements in technology have made in our world (Corbett & Spinello, 2020; Duke et al., 2013). Students and workers in this digital age often demand technology and expect information and connections using digital platforms (Corbett & Spinello, 2020).

The theory of connectivism is used as a guide for this dissertation study to assess the role of networking in a more highly educated nursing workforce. Connectivism places emphasis on the importance of networks of connections in learning and leadership (Goldie, 2016). Siemens

defined a network as "connections between entities" (Siemens, 2004, p. 5). Connectivism focuses on the importance of a multidisciplinary approach (Goldie, 2016). This study will focus on connections between the employers of nurses and their impact on the percentage of BSN-prepared RNs in the workforce using the theory of connectivism as a guide. The review of literature will support the need for increased networking with key stakeholders, such as employers of nurses, in the endeavor for a more highly educated nursing workforce.

### **Nurse Education, Licensure, and Role**

#### **Pathways to Licensure**

Nursing is unique in the fact that it allows multiple educational pathways that lead to the same licensure (IOM, 2010). Students are required to pass the National Council Licensure Exam (NCLEX) to attain licensure as a RN. Currently, three different educational pathways are allowed to gain eligibility to take the NCLEX. Students are allowed to graduate from a diploma program, an associate's degree program, or a bachelor's degree program. Most diploma programs are three-year programs administered in a hospital setting. The ADN program is also usually a three-year program, but it is often administered in the community college setting. The BSN program is usually a four-year program administered in a university setting. Currently, the most common pathway to becoming a RN is through an associate's degree program (IOM, 2010).

#### **The Role of the Nurse**

Some researchers have noted that the complexity of nursing care has increased in recent years (Fagin, 2001; RWJF, 2013). Nurses are often responsible for caring for highly complex patients. Nurses are required to have more advanced critical thinking skills, more managerial skills, and stronger clinical skills for today's more complicated patients (Fagin, 2001; RWJF, 2013). One prominent component contributing to the need for more complex care is caring for an

aging population (RWJF, 2013). Today's nurses are called upon to make critical care decisions, use sophisticated technology, manage chronic conditions, coordinate care, and prevent the occurrence of adverse events (IOM, 2010).

Nurses must also deliver safe, effective, quality care in a variety of settings. Nurses work in hospitals, schools, universities, factories, homes, clinics, hospice centers, long-term care facilities, rehabilitation facilities, wound treatment centers, diabetes clinics, community centers, battlefields, and more (IOM, 2010). Nurses work in the areas of health promotion, disease prevention, and palliative care. Nurses work collaboratively with a variety of health care professionals, many of whom hold master's or doctoral degrees (IOM, 2010).

The demands on the nurse are increasing with more responsibilities related to leadership, designing care, implementing care, and monitoring the transition of care. In 2013, the RWJF acknowledged this and called for a more educated nursing workforce. One answer to this complexity of care issue is focused on the goal of more BSN-prepared RNs in the workforce. For nurses who do not pursue a bachelor's degree upon initial licensure, there is an option to enroll in an RN-to-BSN program. The RN-to-BSN programs are offered by universities for already licensed RNs to take additional courses to complete a BSN degree.

RN-to-BSN education focuses on areas that are often lacking in the associate's degree and diploma programs, such as a focus on research, leadership, community health, health policy, and quality improvement (Sitzman et al., 2020; Zittel et al., 2016). Courses at the baccalaureate level include more content on research, leadership, and community health, which helps the nurse to provide more complex care (RWJF, 2013). The BSN-prepared RNs are noted as having better communication skills, more professional behaviors, and more complex problem-solving skills than the non-BSN-prepared RNs (Aiken et al., 2003). Even BSN-prepared nurses themselves



report feeling more confident and prepared than associate-degree-prepared nurses in the areas of quality improvement and evidence-based practice (AACN, 2019; RWJF, 2013).

A statewide research study was conducted in one midwestern state to compare the BSN-prepared RN with the non-BSN-prepared RN. Researchers from this midwestern state reported that non-BSN-prepared nurses are found to be less able to maintain a cohesive nursing unit (Kumm et al., 2014). This study also found that associate's degree programs in the study did not focus on leadership, healthcare policy, interprofessional communication, community health, or finance. The RWJF agrees that these components better prepare today's nurses for challenges in patient care (RWJF, 2013). The IOM noted that the role of the nurse is a crucial element in a more quality, patient-centered healthcare system (IOM, 2010). According to research, increasing the percentage of BSN-prepared RNs will better prepare the nurse to care for more complex patients and result in improved patient outcomes and decreased patient mortality rates (Aiken et al., 2003; Aiken et al., 2014; Kutney-Lee et al., 2013; RWJF, 2013; Zittel et al., 2016).

### **Connection Between Nurse Education, Patient Mortality, and Patient Outcomes**

#### **Literature Defining the Problem**

Research supports the findings that there is a connection between the education level of nurses and patient outcomes (Aiken et al., 2003; Aiken et al., 2014; Blegen et al., 2013; Cho et al., 2018; Kutney et al., 2013; RWJF, 2013; Zittel et al., 2016). In 2000, a Tri-Council for nursing was formed that included the American Nurses Association, the AACN, and the American Organization of Nurse Executives. They published a statement that not only recommended a highly educated nursing workforce but stated that a more educated nursing workforce was necessary in order to meet the needs in the United States (Zittel et al., 2016).

Aiken et al.'s 2003 seminal study examined the relationship between the education level of nurses and patient mortality rates of patients. The findings revealed that patients had an increased survival rate when cared for by more BSN-prepared RNs versus non-BSN-prepared RNs (Aiken et al., 2003). The study included results from 168 hospitals to include data from 10,184 nurses and 232,342 surgical patients (Aiken et al., 2003). Aiken et al. (2003) found that 19 out of the 168 hospitals assessed had 50% or more BSN-prepared RNs. They also found that 34 out of the 168 hospitals had less than 20% of BSN or higher prepared RNs. Researchers concluded that there was a lower mortality rate and lower failure-to-rescue rate in surgical patients cared for by BSN-prepared RNs (Aiken et al., 2003). Researchers stated that increasing the percentage of BSN-prepared RNs would save lives. They found that "a 10% increase in the proportion of nurses holding a bachelor's degree was associated with a 5% decrease in both the likelihood of patients dying within 30 days of admission and the odds of failure-to-rescue" (Aiken et al., 2003, p. 1617). Failure-to-rescue occurs when a patient experiences a complication, and then further deterioration or even death is not prevented. The Aiken et al. (2003) study focused on failure-to-rescue rates related to surgical patients who developed serious complications and then died. The Kutney-Lee et al. (2013) study also found an improvement in surgical patient mortality rates and failure-to-rescue rates with more BSN-prepared nurses in the hospital. Kutney-Lee et al. (2013) found that there was a direct link between the number of BSN-prepared nurses in a facility and a decrease in postsurgical mortality rates. Studies have found an increase in the number of deaths related to failure-to-rescue with a more significant percentage of non-BSN-prepared nurses (Aiken et al., 2003; Kutney-Lee et al., 2013).

Additional studies support the importance of a more educated nursing workforce (Aiken et al., 2014; Cho et al., 2018; IOM, 2010; RWJF, 2013). Aiken et al. (2014) conducted more

research outside the United States that supports earlier findings. They gathered data from 2007 to 2009 on patients who were 50 and older, were admitted for a minimum of two days, and underwent common surgeries. They obtained discharge data from nine European countries. This study found that with each 10% increase in BSN-prepared nurses in a facility, there was a 7% decrease in patient mortality rates. Data were collected from 300 hospitals to include 422,730 patients and 26,516 health care professionals. The researchers concluded that increased education of nurses would decrease the number of deaths of hospitalized patients (Aiken et al., 2014). Other studies also support the findings associated with more BSN-prepared nurses and the association with fewer pressure ulcers, fewer hospital-acquired infections, fewer incidents of postoperative deep vein thrombosis (RWJF, 2013), and decreased length of stay in surgical patients (Cho et al., 2018).

BSN-prepared RNs and doctors also support the need for more BSN-prepared RNs. A survey was conducted obtaining information from 100 physicians and found that 76% of physicians surveyed agreed that BSN-prepared RNs are more competent than associate-degree nurses (IOM, 2010). Surprisingly, research also found that years of experience are not a replacement for continued education as it relates to nursing practice (Aiken et al., 2003; Kutney-Lee et al., 2013). The critical thinking that is gained from increased levels of education is the crucial factor in what is thought to be connected to better patient outcomes. Years of experience did not replace the effects of increased education. A significant association between years of experience and improved patient outcomes was not found (Kutney-Lee et al., 2013). BSN programs help to develop critical thinking skills in nurses (Phillips & Titzer, 2017). Nurses who return to school have also been found to have a more positive attitude toward nursing (Hewitt, 2016).

These research findings are also affecting accreditation for many hospitals. Strong claims have been made linking the percentage of BSN-prepared nurses hired by a hospital to improved patient outcomes (Aiken et al., 2003). Hospital accreditation is a vital component of quality for hospitals. Hospitals can seek accreditation through the ANCC and the ANA to attain recognition of magnet status. An element of magnet status now includes the requirement of BSN-prepared or higher RNs in all leadership and management positions, as well as a plan to reach the target of 80% of BSN-prepared RNs (RWJF, 2013; Zittel et al., 2016).

In 2014, Aiken et al. continued their research and found that hospitals that employed 60% of BSN-prepared RNs versus 30% of BSN-prepared RNs had a 30% lower mortality rate in patients. Their research included hospitals that employed from 10% to 100% of BSN-prepared RNs (Aiken et al., 2014). The RWJF (2013) released a report supporting the push for more magnet hospitals. One component of magnet status includes more BSN-prepared RNs. Magnet status hospitals have been found to support the finding connected to decreased mortality rates and improved patient outcomes to include fewer pressure ulcers, lower occurrence of falls, and higher patient satisfaction (RWJF, 2013). Research has also found that hospitals with more nurses with BSN degrees or higher have lower failure-to-rescue rates, less postoperative deep vein thrombosis, shorter stays in the hospital, fewer decubitus ulcers reported, and lower congestive heart failure mortality (AACN, 2019). Research strongly links a more educated nursing workforce to better patient outcomes and less patient mortality (Aiken et al., 2003; Aiken et al., 2014; Kutney-Lee et al., 2013; RWJF, 2013; Zittel et al., 2016). This is research that can benefit hospitals, nurses, physicians, families, and patients (RWJF, 2013).

**Benefits to Patients and Families**

Patients and their families trust healthcare providers to provide safe, effective, quality care. While non-BSN-prepared RNs continue to be a valuable source of care, the research cannot be ignored. Nurses have been encouraged, through research, to make pursuing a BSN a priority for the health, safety, and mortality of their patients (Zittel et al., 2016). Kutney-Lee et al. (2013) made the bold statement that if all the hospitals in their study had reached the goal of 80% of BSN-prepared RNs, then "more than 2,100 lives might have been saved" (p. 6). Nurses, stakeholders, and educators have been encouraged to focus on the benefit to the patients and their families through the support of this initiative (Zittel et al., 2016). Even nurses themselves report being better prepared regarding quality and safety in patient care after receiving their BSN degree (Djukic et al., 2019).

**Benefits to Hospitals**

Beyond having a more educated nursing workforce that benefits patients and their families, it also benefits hospitals. Increasing the percentage of BSN-prepared RNs is said to benefit hospitals economically as well (Zittel et al., 2016). Aiken et al. (2014) stated that hospitals investing in nursing would be a wise investment. Researchers state that a more educated workforce increases nurse retention rates (Aiken et al., 2008) and that organizations with a higher percentage of BSN-prepared nurses have less turnover-related costs, a pipeline of nurses to fill leadership positions, and a more stable work environment (RWJF, 2013).

Accreditation, funding, reimbursement, patient outcomes, decreased mortality, and improved patient outcomes are all worthwhile goals for a hospital. Research also links decreased hospital-acquired conditions with a higher percentage of BSN-prepared RNs (Zittel et al., 2016). Health care quality measures are directly connected to the care provided by the nurse (IOM,

2010). While there is a cost to education, research suggests that the cost of education would be recovered through performance-based payment structures and fewer patient complications (RWJF, 2013). In light of all the benefits to patients and hospitals, the IOM developed a nationwide initiative to promote more BSN-prepared nurses in the workforce.

### **National Initiative for More BSN-Prepared Nurses**

As addressed above, multiple studies have been conducted to examine the relationship between nurse education levels and patient outcomes (AACN, 2019; Aiken et al., 2003; Aiken et al., 2014; Kutney-Lee et al., 2013; RWJF, 2013; Zittel et al., 2016). In 2010, the ANA and the Organization for Associate Degree Nursing focused on supporting the transition of nurses from the associate's degree to the bachelor's degree by partnering with various stakeholders such as nursing leaders, universities, colleges, healthcare leaders, regulatory agencies, and state legislatures (Zittel et al., 2016). In 2010, the IOM released a publication, *The Future of Nursing: Leading Change, Advancing Health*. The specific recommendation from the IOM stated that the proportion of nurses with a baccalaureate degree needed to increase from 50% to 80% by the year 2020 (IOM, 2010). The report released by the IOM also included a plan to help achieve this goal. This plan included recommendations on how to improve nursing education (IOM, 2010). An additional report was recently released in May 2021, building upon the previous report that continues to support the importance of achieving the 80% goal (NASEM, 2021).

The IOM made a clear directive that focused on steps to achieve the goal of 80% of BSN-prepared RNs in the workforce. The IOM stated that this plan needed to include collaboration among stakeholders, financial support for nursing education, and an enhanced culture of education that focused on the importance of lifelong learning (2010). It recommended a seamless transition through the different levels of nursing education by placing a large part of the

responsibility on the academic institutions to provide a more seamless progression through the nursing education pathways (IOM, 2010). Increasing the number of nursing faculty was also recommended to increase the capacity at nursing schools to produce more BSN-prepared RNs (2010). The IOM recommended the collaboration of leaders, accrediting bodies, healthcare facilities, and academic institutions to work toward this goal. The IOM recommended changes in policies at the local, state, and national levels (IOM, 2010).

While the research and recommendations are strong for a more educated nursing workforce, progress has been slow (Zittel et al., 2016). In 2013, the ANCC estimated the need for 760,000 more BSN-prepared RNs for the 80% goal to be achieved (Kutney-Lee et al., 2013). Reports reflect that 45% of RNs were BSN-prepared in 2008 and 49% in 2010. Reports show that the percentage of employed nurses with a BSN degree or higher in nursing is at 59% (Campaign for Action, 2021). This is a 21% deficit to the IOM's 80% goal in 2010.

As previously stated, there are multiple pathways to licensure. Students who graduate from a nursing school with a diploma degree, associate's degree, or bachelor's degree are all required to take the same NCLEX to receive licensure as a RN in their state. In 2013, the RWJF reported that 4% of students attend a diploma program, with 53% attending an associate's degree program, and 43% are enrolled in a bachelor's program. In 2019, the National Council of State Boards of Nursing (NCSBN) reported that 171,387 students passed the NCLEX examination. The report also reflects that 0.01% of the new RNs sat for the exam with a diploma degree, 49.5% graduated from an associate's degree program, 49.2% sat for the exam having already attained a BSN (NCSBN, 2019).

A RN-to-BSN program is an option for RNs to attain a BSN degree when they did not attain a BSN prior to initial licensure. There are 777 RN-to-BSN programs and 219 RN-to-

Master of Science in Nursing programs in the United States (Schuler et al., 2017). In 2010, IOM recommended using technology and online courses to help reach the 80% goal. Many of the RN-to-BSN programs are available in an online format.

While there are many options for nurses to pursue their BSN after licensure, another recommendation includes changing the minimum requirement for licensure. This recommendation would no longer allow non-BSN-prepared students to sit for the licensure exam. This recommendation has not been adopted in the United States at this point and is unlikely to be instated in the near future. Some states, such as New York, have implemented mandatory BSN attainment within a designated timeframe. Nurses in New York must obtain their BSN within 10 years of initial licensure (Zittel et al., 2016).

With four million RNs in the United States, there has been increased national awareness surrounding this issue (Kumm et al., 2014). A cultural change has been recommended related to the attitudes surrounding the need for more BSN-prepared RNs in our country (Zittel et al., 2016). While nurses work in a variety of settings, the IOM reported that 62.2% of RNs work in a hospital setting (2010). There has been a notable culture change in some hospitals, with some hospitals beginning to show preferential treatment to the hiring of BSN-prepared RNs over non-BSN-prepared RNs (Aiken et al., 2014). The AACN's (2020b) survey results revealed that 41.1% of hospitals require new hires to have a BSN, and 82.4% of employers prefer BSN graduates.

Researchers agree that continued action is required to meet this goal (Zittel et al., 2016). In 2015, the American Nurses Associates Professional Issues Panel met to help identify reasons why nurses were not pursuing BSN degrees (Zittel et al., 2016). The panel worked to develop recommendations for increasing BSN enrollment. One of the conclusions from the panel



included the finding that nursing education is confusing to the public and needs to be more standardized (Zittel et al., 2016). The confusion makes it difficult to explain the problem and gain support from stakeholders.

Multiple recommendations have been made on ways to increase the percentage of BSN-prepared RNs. One recommendation is focused on the systems in place for educating nurses. Researchers continue to recommend a more standardized educational pathway for nurses and a more seamless educational progression to BSN (Kutney-Lee et al., 2013; Zittel et al., 2016). One idea targeted the idea of enabling community colleges to grant BSN degrees. While this is a valid idea, qualified faculty are still needed to teach at the BSN level. A shortage of nursing faculty is identified as one of the barriers to BSN attainment as well. Studies show that thousands of applicants are turned away from nursing schools in the United States due to the lack of nursing faculty to teach (RWJF, 2013). This barrier would not be eliminated by attempting to educate students at community colleges.

Another contributing factor to not meeting the goal is the lack of funding. Researchers have recommended for years an increase in public funding to support this initiative (Kutney-Lee et al., 2013; Zittel et al., 2016). While the benefits to patients and hospitals are obvious, there is still a cost associated with pursuing this goal. There is also a cost to not pursuing this goal, and that could include the lives of those who die as a result of a less-educated nursing workforce. Research supports the need, and it has provided a wealth of information and recommendations for reaching this goal, yet the goal has not been met. Further research is needed to identify strategies to overcome the barriers to reaching the goal of 80% of BSN-prepared RNs in the workforce. The literature supports the need for more BSN-prepared RNs, and the facts reveal

there is still a gap between the goal and reality. More research is needed on how to implement better strategies for reaching the target of a more educated nursing workforce.

### **RN-to-BSN Enrollment**

While the research and the recommendations are plentiful, the United States has yet to reach the goal set by the IOM in 2010. The need is supported, the recommendations are abundant, but the goal has not been met. One way to step closer to the 80% goal is to increase enrollment in RN-to-BSN educational programs. RN-to-BSN programs are for associate's degree nurses who seek to obtain their BSN. Identifying ways to overcome barriers and enhance supports to RN-to-BSN enrollment is one way to increase the percentage of BSN-prepared RNs in the workforce.

Enrollment is a vital factor in the life of an educational institution. Research recommends academic leaders should develop a solid plan of action when striving to increase enrollment numbers (Talbert, 2012). For the plan of action to be effectively implemented, it should be clearly communicated with the faculty and staff. Research on increasing enrollment revealed that an effective plan includes enhancing partnerships with the community, expanding advertising techniques, and encouraging mentoring relationships (Talbert, 2012).

### ***Identifying Barriers to Enrollment***

There are approximately four million active RN licenses in the United States (Smiley et al., 2018). Calculating that only 59% are reported to have attained a BSN, that leaves a gap of one million nurses who need to complete their BSN to reach the 80% mark. Multiple studies have identified contributing barriers to returning to school for the working nurse. RN-to-BSN prospective students are not traditional students and face a multitude of barriers and challenges when deciding to return to school (Alamri & Sharts-Hopko, 2015; Anbari, 2015; Copenhaver et

al., 2018; Harris, 2014; Megginson, 2008; Merrell et al., 2020; Nininger et al., 2019; Petges & Sabio, 2020; Sarver et al. 2015; Wilson et al., 2021; Zittel et al., 2016). Researchers have recommended highlighting the need to explore strategies to reduce the currently identified barriers (Kumm et al., 2014; Nininger et al., 2019). The Nursing Educational Motivation and Barriers Inventory instrument is used since RN-to-BSN students face unique challenges (Alamri & Sharts-Hopko, 2015). The RN-to-BSN Transition Model also provides a visual representation of the many unique challenges faced by the RN-to-BSN student in returning to school (Anbari, 2015). Many of the studies have overlapping findings related to barriers that include lack of time, role strain, family obligations, fear, lack of recognition, lack of differentiation in nurse roles, lack of academic support, negative previous academic experiences, funding for school, lack of incentives, difficulty acquiring transcripts, confusion over financial aid, technology problems, and planned retirement (Alamri & Sharts-Hopko, 2015; Megginson, 2008; Nininger et al., 2019; Sarver et al., 2015).

Time was rated as one of the primary barriers in many of the studies (Alamri & Sharts-Hopko, 2015; Harris, 2014; Megginson, 2008; Zittel et al., 2016). Studies reveal that nurses reported that there is not enough time due to obligations from working as a nurse, childbearing, and other family responsibilities. Participants expressed concern over being able to balance work-life and school requirements (Alamri & Sharts-Hopko, 2015; Copenhaver et al., 2018; Harris, 2014; Megginson, 2008).

Financial concerns were another top barrier for many participants in the desire to return to school (Alamri & Sharts-Hopko, 2015; Harris, 2014; RWJF, 2013; Sarver et al., 2015; Zittel et al., 2016). Funding is required to pursue a BSN degree. Paying out-of-pocket for school is seen as a barrier, as well as taking on debt for school or having a decrease in pay while in school

(RWJF, 2013; Zittel et al., 2016). Prospective RN-to-BSN students report difficulty in obtaining information on tuition reimbursement and scholarship opportunities (Alamri & Sharts-Hopko, 2015; Sarver et al., 2015).

Fear is a common thread in many of the studies as well (Harris, 2014; Megginson, 2008; Sarver et al., 2015). Participants reported fear over the use of technology, using computers, and online learning challenges (Megginson, 2008; Sarver et al., 2015). Other identified fears included fear over previous negative academic experiences and fear of failure (Harris, 2014; Megginson, 2008). Other barriers include aging (IOM, 2010; Megginson, 2008; Smiley et al., 2018) and living in a rural area (Merrell et al., 2020; Odahowski et al., 2021).

Another prominent barrier in the motivation to return to school is related to the lack of perceived incentive to obtain the BSN degree (Alamri & Sharts-Hopko, 2015; Harris, 2014; IOM, 2010; Megginson, 2008; Zittel et al., 2016). Nurses report that equal treatment and equal pay among many RNs of different education levels serve as barriers to pursuing further education (Megginson, 2008; Zittel et al., 2016). Nurses also report that a lack of personal support during the decision-making process to return to school (Anbari, 2015) and a lack of information on the importance of returning to school (Zittel et al., 2016) as other identified barriers.

Some of the barriers are directly related to the educational institutions and educational accrediting bodies (Anbari, 2015; Harris, 2014; IOM, 2010; Kumm et al., 2014; Nininger et al., 2019; Zittel et al., 2016). One barrier to RN-to-BSN enrollment is the lack of faculty to teach the courses and a shortage of available clinical sites for clinical placement hours (IOM, 2010). Many researchers report that there is ambiguity over the levels of nursing education and the curriculum for each level (Kumm et al., 2014; Nininger et al., 2019; Zittel et al., 2016). Another issue that

some nurses encounter is the inability to pursue their BSN due to obtaining their associate's degree from a non-accredited school (Nininger et al., 2019). Many universities will only accept students with degrees from accredited schools.

Many of these identified challenges serve as barriers to nurses deciding to continue their education and pursue a BSN degree. This study will strive to identify strategies to remove some of the barriers to enrolling in an RN-to-BSN program. By reducing the impact of these barriers, the goal will be to provide more BSN-prepared nurses in the workforce.

### ***Identifying Incentives to Enrollment***

Multiple studies have been conducted to identify contributing motivating incentives for deciding to enroll in an RN-to-BSN program (Alamri & Sharts-Hopko, 2015; Copenhaver et al., 2018; Gillespie & Langston, 2014; Harris, 2014; Megginson, 2008; Sarver et al., 2015; Thielmann et al., 2019). Some of the main incentives identified include the right timing, user-friendly programs, achieving professional goals, personal fulfillment, expanded knowledge, tuition reimbursement, support, career advancement, love of nursing, increased knowledge, and increased professionalism (Alamri & Sharts-Hopko, 2015; Copenhaver et al., 2018; Harris, 2014; Megginson, 2008; Sarver et al., 2015). One main incentive focused on the desire for recognition, promotion, and respect in the nursing field. Nurses report the perceived incentives of more professional advancement, more freedom in scheduling, more management opportunities, and increased credibility, all connected to pursuing their BSN (Copenhaver et al., 2018; Megginson, 2008).

Financial assistance is identified as another top incentive. Tuition reimbursement or stipends from employers are strong motivators in the decision to return to school (Alamri & Sharts-Hopko, 2015; IOM, 2010; RWJF, 2013; Sarver et al., 2015). Waiving out-of-state tuition,

loan forgiveness programs, and grants are all noted as other incentives related to the financial requirement of school (Fagin, 2001; Megginson, 2008; RWJF, 2013). Nurses identify user-friendly RN-to-BSN programs as another incentive for deciding to go back to school (Fagin, 2001; Harris, 2014; IOM, 2010; Megginson, 2008). One user-friendly component is offering courses online through internet-based courses (Fagin, 2001; IOM, 2010).

Other motivators to enrollment are related to the nurse's attitude and desire for knowledge (AACN, 2019; IOM, 2010; Megginson, 2008; Zittel et al., 2016). A nurse's desire for knowledge and commitment to lifelong learning serves as a strong motivator to pursuing further education (IOM, 2010; Megginson, 2008; Zittel et al., 2016). The incentive comes from finding ways to improve a nurse's attitude toward school and enhance their desire for knowledge.

Another incentive involves support from others. Multiple studies found mentorship and colleague support to be an important incentive for nurses returning to school (Anbari, 2015; Fagin, 2001; Megginson, 2008; Zittel et al., 2016). Participants report encouragement from colleagues who had completed RN-to-BSN programs, mentorship in academics, and mentorship in practice, all as playing a positive role in this transition to school (Megginson, 2008; Zittel et al., 2016).

Government involvement may provide incentives such as mandated BSN education and loan repayment programs in rural areas (Merrell et al., 2020; Zittel et al., 2016). Proposed and actual mandated requirements for BSN attainment also serve as strong motivators. Some states are considering adopting the "BSN-in-10" legislation that requires nurses to obtain their BSN degree within 10 years of initial licensure (RWJF, 2013; Sarver et al., 2015; Zittel et al., 2016).

### ***Increasing Enrollment through Leveraging Technology***

One strategy for increasing enrollment numbers includes leveraging technology to increase awareness of RN-to-BSN programs. Technology can also be used to provide resources, provide education, and enhance partnerships. Technology is a powerful tool in the modern world. Social media and online platforms are commonplace.

Enhancing awareness through the use of online ads and social media is recommended (Spackman & Larsen, 2017; Talbert, 2012). Online avenues such as Facebook, Instagram, YouTube, Twitter, LinkedIn, and Snapchat are being leveraged to increase awareness of programs offered and opportunities available to prospective students (Doney et al., 2020; Spackman & Larsen, 2017). Learning what types of posts are most viewed and shared helps institutions to better leverage the use of technology and social media in their marketing plan (Doney et al., 2020; Spackman & Larsen, 2017). Research shows that social media posts and advertisements perform better when they emphasize human character, reflect the community, or display elements of warmth or humor (Doney et al., 2020). Facebook marketing that highlights the relationship between the student and the institution has been found to be beneficial in increasing enrollment strategies. Social media can be a powerful tool in a marketing plan (Spackman & Larsen, 2017), but developing creative content to share and boosting an online marketing campaign can be costly. A marketing budget must be developed to have access to the one billion Instagram users and two billion Facebook users (Doney et al., 2020; Spackman & Larsen, 2017). One limitation that currently remains in online marketing is the difficulty of identifying a correlation between an online marketing campaign and its impact on student enrollment (Spackman & Larsen, 2017).

Research has found a lack of RN-to-BSN recruitment efforts in rural areas, with only 38% of RN-to-BSN programs targeting rural RNs (Doney et al., 2020). Increasing recruitment efforts in rural community colleges and rural medical facilities are recommended to increase enrollment numbers from these areas. Targeting rural areas would increase the awareness of the need for more BSN-prepared nurses and the potential to improve patient outcomes in these areas as well (Doney et al., 2020; Zittel et al., 2016).

### ***Strategies to Overcome Barriers to Enrollment***

Research highlights five major players in the efforts to increase the numbers of BSN-prepared RNs in the United States: health care organizations, academic institutions, nurse licensing boards, accrediting bodies, and the government (Copenhaver et al., 2018; Fagin, 2001; Harris, 2014; IOM, 2010; Kumm et al., 2014; Mann, 2014; Megginson, 2008; RWJF, 2013; Sarver et al., 2015; Zittel et al., 2016). Strategies have been identified and recommended to reduce barriers and cultivate incentives for returning to school (Megginson, 2008; RWJF, 2013). One study narrowed it down to four main motivators: the right motivation, the right program, the right price, and the right time (Anbari, 2015).

Healthcare institutions that employ nurses play a vital role in helping the United States achieve the goal of 80% of RNs and are urged to help reduce the barriers to enrollment (Megginson, 2008; Sarver et al., 2015). Areas identified as workplace incentives include providing financial assistance, recognition, support, and information (Anbari, 2015; Copenhaver et al., 2018; Harris, 2014; IOM, 2010; Megginson, 2008; RWJF, 2013; Sarver et al., 2015; Zittel et al., 2016). Researchers recommend that healthcare organizations provide financial assistance through tuition reimbursement or tuition assistance for those returning to school (Harris, 2014; RWJF, 2013). Flexible or preferential scheduling is also recommended for those in school to



help reduce the time/role constraint barrier (Harris, 2014; RWJF, 2013; Sarver et al., 2015). Employers of nurses are advised to begin the process of differentiating between the education levels of RNs by providing pay differentials between the levels, increasing opportunities for advancement and leadership, and creating more recognition for those to complete their BSN (Harris, 2014; Megginson, 2008). Creating a culture of support for education within the workplace and encouraging mentoring relationships have both been recommended to reduce barriers (Anbari, 2015; Harris, 2014; Megginson, 2008; Sarver et al., 2015; Zittel et al., 2016). Healthcare employers are encouraged to provide opportunities for RN-BSN mentorship through encouraging connections with peers and providing opportunities to share experiences (Megginson, 2008; Sarver et al., 2015; Zittel et al., 2016). Other ideas include providing a support person at the workplace who is available to answer questions about returning to school (Harris, 2014) or coordinating a blog where fellow nurses can connect to share educational experiences and resources while in school or contemplating school (Sarver et al. 2015). Researchers recommend that healthcare institutions create a "Returning to School" webpage within the institution's nursing webpage to clearly provide information and resources on returning to school (IOM, 2010; Sarver et al., 2015). The recommended webpage could include links to various RN-to-BSN programs, library resources, and other information related to returning to school (Sarver et al., 2015).

Leaders in healthcare organizations are encouraged to cultivate a culture of learning in their facilities. This includes keeping communication regarding the importance of education at the forefront and reminding staff regularly about the resources available to them concerning school (IOM, 2010; Sarver et al., 2015). Healthcare organizations have also been asked to

consider requiring BSN completion within a certain number of years of licensure to increase motivation (IOM, 2010).

Academic institutions also play an essential role in the pursuit of more BSN-prepared RNs. The research includes a number of recommended ideas on how academic institutions can help remove barriers to pursuing a BSN (Carissimi & Burger, 2017; Copenhaver et al., 2018; Fagin, 2001; IOM, 2010; Kumm et al., 2014; Mann, 2014; Megginson, 2008; RWJF, 2013; Talbert, 2012). Academic institutions are asked to explore how the role of the professor, peer support within the school, curricular changes, articulation agreements, and the language used to describe different education levels may motivate students to enroll in school (Carissimi & Burger, 2017; Copenhaver et al., 2018; Fagin, 2001; IOM, 2010; Kumm et al., 2014; Mann, 2014; Megginson, 2008; RWJF, 2013; Talbert, 2012). Academic leaders are encouraged to develop and share a plan of action for their institution on strategies to increase enrollment (Megginson, 2008; Talbert, 2012). When nurses express interest in applying to school, faculty and staff are encouraged to provide prompt feedback and guidance to help alleviate some fears related to returning to school, to provide a welcoming atmosphere, and to provide technological assistance and resources as needed to help alleviate fears related to technology (Copenhaver et al., 2018; Mann, 2014; Megginson, 2008). Schools are also encouraged to promote peer support groups and study groups for new students (Anbari, 2015; Copenhaver et al., 2018).

Since many nurses obtain their associate's degree from the community college setting, RN-to-BSN programs are encouraged to build relationships with the leaders at community colleges to work toward articulation agreements (Megginson et al., 2008; RWJF, 2013). An articulation agreement is an agreement between the university and the community college that the course taken at the community college will successfully transfer toward the BSN degree

(RWJF, 2013). Other ideas from researchers include more significant changes, such as changes to be made in the nursing curriculum, clarification of the nursing education language, increased admission numbers in nursing programs, giving academic credit for work history and experience, and even considering allowing community colleges to educate at the BSN level, as previously mentioned (Carissimi & Burger, 2017; Fagin, 2001; Kumm et al., 2014; Megginson, 2008; RWJF, 2013).

Accrediting bodies and licensing boards are also involved in this endeavor. Hospital accrediting bodies implement magnet status requirements, which support the BSN-in-10 initiative, and require BSN-prepared RNs to hold leadership and management positions (Sarver et al., 2015). Magnet status has been associated with improved patient environments (Aiken et al., 2008). Other researchers have proposed questions regarding the practice of having the same national licensing exam for both associate-prepared and bachelor-prepared RNs (Fagin, 2001; IOM, 2010).

The government is also a key player in this initiative. Research recommends more nurse involvement in policy decisions and more funding to support loan repayment programs (IOM, 2010; RWJF, 2013; Zittel et al., 2016). Nurses are encouraged to strive to draw legislators' attention in support of this effort (RWJF, 2013). Nurse involvement includes activities such as: holding leadership positions, educating government figures on the need, and pushing for more funding (IOM, 2010; RWJF, 2013; Zittel et al., 2016).

Many efforts have been implemented in pursuit of the 80% of BSN-prepared RNs by the 2020 IOM initiative. In spite of the many efforts, the goal remains unmet. This study will help to use what has been learned in previous research in order to leverage it toward a more educated

nursing workforce. Leveraging networking and partnerships is a key component of the recommended plan for the future.

### **Leveraging Networking and Partnerships**

Research supports the need for networking to increase the number of BSN-prepared RNs (Barton, 2017; Bay & Tschannen, 2017; Carissimi & Burger, 2017; Copenhaver et al., 2018; Doney et al., 2020; Hawkins et al., 2018; Hinic et al., 2017; IOM, 2010; RWJF, 2013; Sarver et al., 2015; Selleck et al., 2020; Straka et al., 2019; Talbert, 2012; Wilson et al., 2021; Zittel et al., 2016). A review of the literature consistently affirms the need for networking between various groups to reach the 80% goal. Over the past decade, included with the IOM (2010) directive, a call has been made for more partnerships. The IOM recommended partnerships in the community with businesses, foundations, community colleges, physicians, other healthcare professionals, secondary school systems, schools of nursing, medical associations, and the government (IOM, 2010). In 2012, the recommendation continued with further suggestions for partnerships with agencies, businesses, and community-based organizations (Talbert, 2012). In 2013, the RWJF continued the push for networking by highlighting the important role that schools of nursing, philanthropic organizations, employers, and the government play in continuing to strive toward this goal. In 2016, Zittel and others documented action steps for the educational advancement of nurses. Collaboration between community colleges and universities through articulation agreements is encouraged. Zittel et al. (2016) also pointed out how New York now requires a mandatory attainment of a BSN within 10 years after over 100 letters of support were sent to decision-makers regarding this legislation. Letters were sent from long-term care facilities, schools, medical groups, and faculty and deans. Key stakeholders, accrediting

organizations, university administrators, and regulatory bodies are urged to collaborate to support the educational advancement of RNs (Zittel et al., 2016).

In 2017, multiple researchers continued to recommend networking as a main strategy in this endeavor, with a particular focus on the importance of partnerships between healthcare organizations and academic institutions (Barton, 2017; Bay & Tschannen, 2017; Carissimi & Burger, 2017; Hinic et al., 2017). A professor-in-residence was introduced in one hospital to reinforce the importance of the partnership between nurse education and practice. The professor-in-residence was available to answer questions for those interested in returning to school, provide resources, and help with the clinical needs of universities (Hinic et al., 2017). Other institutions have partnered to align goals and missions to help promote the culture of lifelong learning and improved quality initiatives. These partnerships have resulted in improved patient outcomes that benefit the school, hospitals, and the communities (Bay & Tschannen, 2017; Hinic et al., 2017). Researchers have been focused on removing barriers to achieving higher education levels in nursing (Barton, 2017). Leaders in healthcare facilities and schools of nursing are encouraged to lead in this endeavor (Barton, 2017; Bay & Tschannen, 2017). Partnerships were also encouraged between credentialing centers, hospitals, universities, and legislators (Bay & Tschannen, 2017; Carissimi & Burger, 2017; Hinic et al., 2017). The focus on partnerships between universities and hospitals continued into 2018. In Tennessee, a partnership between Belmont University and University Medical Center was formed to help promote a more highly-educated workforce (Copenhaver et al., 2018).

In 2020, researchers continued to highlight the importance of collaboration (Doney et al., 2020, Merrell et al., 2020, Selleck et al., 2020). The RN-to-BSN programs were encouraged to continue to build partnerships with stakeholders in rural areas and with community colleges

(Doney et al., 2020; Merrell et al., 2020). The Doney et al. (2020) study reported that only 41% of RN-to-BSN programs had connections with community colleges. Researchers acknowledge that partnerships not only take mutual respect, trust, perseverance, and time to flourish and grow but are a necessary component to this plan of action (Merrell et al., 2020; Selleck et al., 2020).

### **Gaps in the Literature**

In 2003, Aiken et al. released the findings that the education level of nurses was directly connected to patient mortality rates and patient outcomes. Then, in 2010, the IOM stated, "at no time in recent history has there been a greater need for research on nursing education" (p. 198). While multiple strategies have been implemented since that time in an effort to achieve the 80% goal, the United States has fallen short. An evaluation could be performed of the last decade to highlight the strengths and weaknesses of the efforts toward this target. This evaluation could also include key factors that have supported success, areas that need improvement, and the cost associated with additional improvements. Failing to meet the 80% target leads to the "now what" question (Patton, 2017).

Aiken et al.'s (2003; 2014) seminal research repeatedly recommended policy changes related to the national nursing workforce and the need for adequate funding from governmental and local stakeholders for this goal to be achieved. Many institutions are encouraged to support nurses in their endeavors to return to school through tuition reimbursement and more flexible scheduling while in school. More comparative effectiveness research is needed to compare the cost of supporting a nurse to go to school and the money saved by having more BSN-prepared nurses (Aiken et al., 2014). Employers of nurses need to be educated on the value of their investments toward the goal of education related to improved quality of care for their patients (Aiken et al., 2003).

Further research is recommended to identify new, creative, strategic methods of increasing enrollment numbers (Clarke, 2017; Talbert, 2012; Zittel et al., 2016). This research includes topics related to the barriers and incentives for RN students in returning to school (Alamri & Sharts-Hopko, 2015; Duffy et al., 2014; Megginson, 2008) and ideas on providing a more seamless academic pathway (Kumm et al. 2014; Megginson, 2008).

The IOM stated that this plan needed to include collaboration among stakeholders, financial support for nursing education, and an enhanced culture of education that focused on the importance of lifelong learning (2010). The collaboration was to include healthcare leaders, accrediting bodies, healthcare facilities, and academic institutions to work toward this goal. The plan included recommendations for changes in policies at the local, state, and national levels (IOM, 2010). Key stakeholders, accrediting organizations, university administrators, and regulatory bodies are urged to collaborate to support the educational advancement of RNs (Ihedura-Anderson, 2021; Merrell et al., 2020; Phillips & Titzer, 2017; Zittel et al., 2016).

Conversations have begun throughout many states regarding a possible mandatory BSN minimum requirement for nurses. New York has implemented a policy change to include a BSN requirement within 10 years of initial licensure as a RN (Newland, 2018). Research has been conducted across multiple states regarding the pursuit of a more educated nursing workforce (Haverkamp & Ball, 2013; Jones et al., 2019; Schuler et al., 2017). This proposed study will help fill the gap in Tennessee. Policy change is recommended at the state and legislative levels (Diaz Swearingen et al., 2013). Researchers agree that the need for collaboration with key stakeholders, such as employers of nurses, is a critical component in the ability to pursue this initiative (Angel, 2020; Duffy et al., 2014). A state-by-state progression of research on this topic has been recommended (Angel, 2020; Schuler et al., 2017).

The need for a more educated nursing workforce is supported by the literature. While progress has been made in increasing the number of BSN-prepared nurses in the workforce, further progress is needed. According to research, a more educated nursing workforce will save lives. This is a study that is crucially important in the United States. Hence, the results of this study will add to the corpus of knowledge on the role of the employer in a more educated nursing workforce. Using the theory of connectivism as a guide, the researcher will focus on networking with the employers of nurses to strive to fill a gap in the literature concerning the number of BSN-prepared RNs.

In light of the review of the literature, and using the theory of connectivism as a framework, the following research questions were used as a guide in this research study:

RQ1: How do employers of nurses support or oppose a minimum bachelor's degree requirement for nurses?

RQ2: What are the supports and barriers reported by employers of nurses in requiring a more educated nursing workforce?

RQ3: Is there an association between the role of the employer (employers' plans, policies, or promotions) and the number of bachelor-prepared nurses in the workforce?

RQ4: Is there an association between the location of employment (by region or by type) and the number of bachelor-prepared nurses in the workforce?



## **Chapter III**

### **Method**

The review of the literature supports the value of BSN-prepared RNs, but a deficit remains with regards to the number of BSN-prepared RNs in the workforce. Key stakeholders are urged to collaborate to support the educational advancement of RNs (IOM, 2010; Zittel et al., 2016). The connectivism conceptual framework was used as a guide in this dissertation study to explore the employers' role in a more educated nursing workforce. A detailed overview of the research design, setting, and context are included in this chapter, as well as a description of the participants, materials, procedural steps, and data analysis.

#### **Overview of the Research Design**

The researcher explored the employers' role in a more educated nursing workforce using a mixed methods approach during the 2021-2022 academic year. Quantitative and qualitative data were collected to strive to answer the research questions and add to the existing body of knowledge on this topic. The quantitative data are essential in examining how the employers' plan, policies, promotions, type of facility, and location of facility impact the percentage of BSN-prepared RNs. Qualitative data were collected to explore CNOs' perceptions related to a mandatory bachelor's degree for nurses. The qualitative questions followed the quantitative questions and served to validate quantitative responses using triangulation (Creswell, 2009). The study was conducted through the lens of connectivism.

The dependent variable was the percentage of BSN-prepared RNs employed at each facility. The independent variables included the employers' plans, policies, and promotions related to the support of a BSN degree. Other independent variables measured were the type of

facility and the location of the facility. The perceptions of the CNOs were assessed through the quantitative and qualitative elements of the survey.

### **Research Setting and Context**

The review of the literature revealed a need for a state-by-state progression of research to be conducted on this topic (Angel, 2020; Schuler et al., 2017). An aim of this study was to attempt to fill the research gap in Tennessee. There are over 98,000 licensed RNs in Tennessee (Tennessee Department of Health, 2021), and the percentage of BSN-prepared RNs in Tennessee was reported at 54.7% in 2018, which was slightly below the national average of 57% (Campaign for Action, 2018) and significantly below the IOM's goal of 80% (IOM, 2010).

### **Participants**

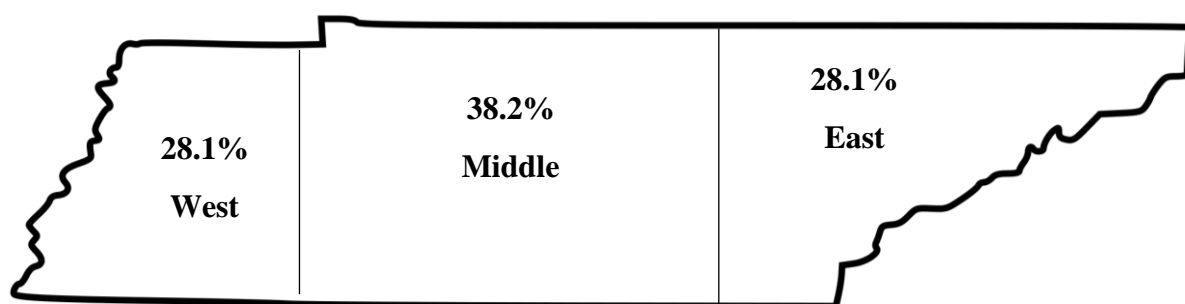
Purposive sampling was used to identify potential participants. Participants were selected based on their job titles. The CNOs from hospitals and long-term care facilities across Tennessee were invited to participate in this study. The CNOs in Tennessee were identified through mailing lists and online searches. There are approximately 120 hospitals and 300 long-term care facilities throughout Tennessee. The goal was to invite at least one prominent nurse leader from each of the 420 facilities to participate in the study. The inclusion criteria consisted of the requirement of being a prominent nurse leader (e.g., CNOs, nurse managers, directors of nursing) in a hospital or long-term care facility in Tennessee. Participants were not be excluded based on age, race, gender, language, or preexisting conditions.

The focus of the study was on nurse leaders from hospitals and long-term care facilities. Exclusion criteria consisted of CNOs from other types of healthcare facilities, such as private clinics, public health clinics, home healthcare agencies, and academic institutions. All participants were working adults. None of the subjects were infants, children, or prisoners. All

subjects were employees. Some subjects may have been pregnant, economically challenged, or students, but personal identifiable information was not included to safeguard the identity of the CNOs within the population. The survey did not violate any rights or harm the welfare of any participant. Data were stored on a secure drive and will be destroyed one year after the completion of the study. Informed consent was required to participate in the study. Demographic information on participants is provided (see Table 3.1 & Figure 3.1).

**Figure 3.1**

*Location of Facility: Region of Tennessee*



*Note.* Employers of nurses reported being from various regions of Tennessee ( $n = 89$ ); Five of the employers (5.6%) reported “other” which included employers who work throughout the state and/or the northeast portion of the state.

The Chief Nursing Officer Survey (Schuler et al., 2017) was distributed to CNOs in hospitals and long-term care facilities across Tennessee over a three-month period in the fall of 2021. Permission was granted from Mary Schuler, the developer of the instrument, via email to use the Chief Nursing Officer Survey in this study (see Appendix A). The survey was distributed via email using an embedded Qualtrics link. A copy of the informed consent, the adapted Chief Nursing Officer survey, the Qualtrics link, and the institutional review board approval are in the

appendices (see Appendices B, C, D, & E). See the research matrix for more details on survey question and research question alignment (see Table 3.2).

**Table 3.1**

*Demographic Characteristics of the Participants (n = 89)*

<b>Demographic</b>		<b>Frequency (n)</b>	<b>Percentage (%)</b>
Gender	Female	83	93.3
	Male	6	6.7
Race	White	83	93.3
	Black	5	5.6
	Asian	1	1.1
	Native Hawaiian or Pacific Islander	0	0
	American Indian or Alaska Native	0	0
	Hispanic Origin	0	0
Age	Mean	49.45 years	
	Median	50.5	
	Mode	52	
	Range	30-70 years	
	30-50 years of age	n = 44	
	>50 years of age	n = 44	
	Unknown age	n = 1	
Highest Level of Education	Doctoral Degree	9	10.11
	Master's Degree	39	43.82
	Bachelor's Degree	27	30.34
	Associate's Degree	13	14.61
	Diploma Degree	1	1.12
Place of Employment	Hospital	50	56.2
	Long-Term Care	39	43.8
Facility Part of System	Yes	72	80.9
	No	17	19.1

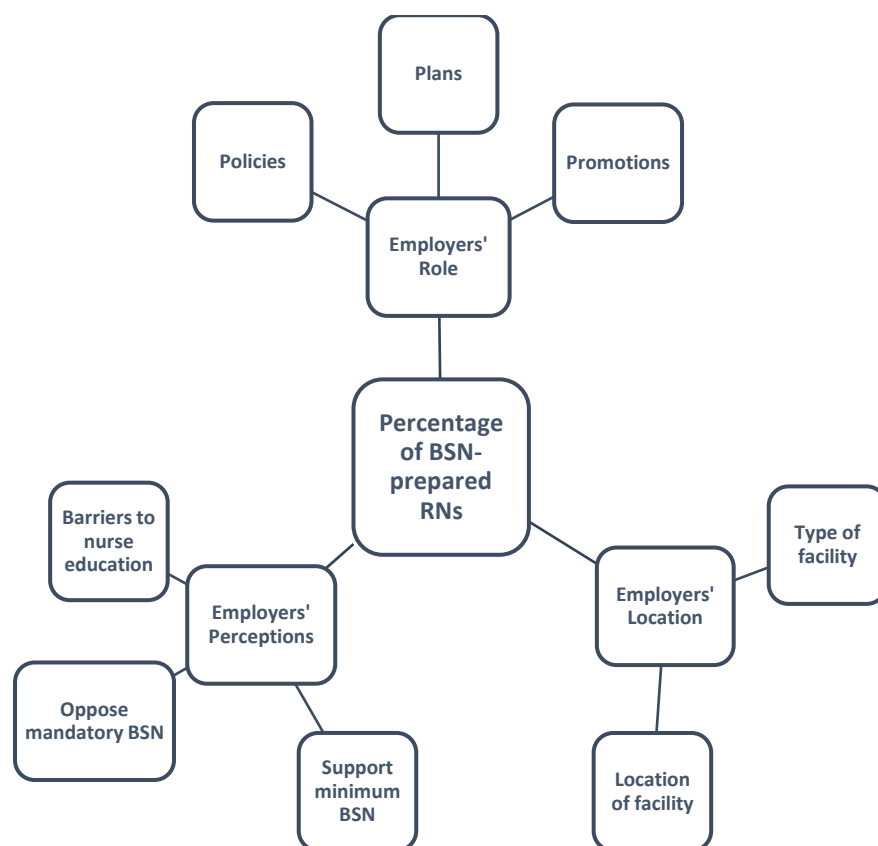
The Chief Nursing Officer Survey was developed and used in North Carolina and was found to be a valid and reliable quantitative instrument. The original Chief Nursing Officer Survey was piloted in 2012. In 2013, the survey was reviewed by experts throughout North

Carolina and then reviewed annually. An executive committee in North Carolina determined the reliability of the survey (Schuler et al., 2017).

The original Chief Nursing Officer Survey used in North Carolina contained eight quantitative questions (Schuler et al., 2017). Three qualitative questions were added to the survey used in this study. Qualitative questions were added to gain more information for the specific research questions (Squires & Dorsen, 2018). The perceptions of CNOs were assessed through five questions. Two questions are quantitative and give categorical choices on supports and barriers to BSN education. Three of the questions are qualitative and allow the CNO to report supports, barriers, and experiences related to a more educated nursing workforce. The dependent variable was assessed in relation to five independent variables. The employers' plan, policies, promotions, location, and facility type will be related to the percentage of BSN-prepared RNs in the facility (see Figure 3.2).

### **Procedure**

Data collection was conducted during the fall of 2021. Participants' contact information was attained through online searches and purchased mailing lists. Participant data were reviewed electronically. Email addresses and phone numbers were maintained on a spreadsheet on a secure hard drive. Data were stored on a secure drive and will be destroyed one year after the completion of the study. The survey did not violate any rights or harm the welfare of any participant. Participants' responses were confidential.

**Figure 3.2***Concept Map*

*Note.* Concept map shows using the theory of connectivism to explore the role of the employer in the percentage of Bachelor of Science (BSN)-prepared registered nurses (RNs) in the workforce.

In an effort to increase the response rate of the study, the survey was distributed in three phases. In Phase I of the project, participants were invited to participate in the study via email and online forums. Details of the study and instructions were included in the email with a Qualtrics link embedded into the email. The Qualtrics link included the informed consent information (see Appendix B), demographic information (see Appendix C), and the adapted Chief Nursing Officer Survey combined questions (see Appendix D). Permission to conduct the research was obtained from Austin Peay State University's Institutional Review Board (see Appendix E). The survey included eight multiple-choice questions and three open-ended

**Table 3.2***Research Matrix*

<b>Research Question(s)</b>	<b>Constructs or Variables</b>	<b>Instruments</b>	<b>Data Collection (e.g., timing, frequency)</b>	<b>Data Analysis Method</b>
RQ1: How do employers of nurses support or oppose a minimum bachelor's degree requirement for nurses?	Perceptions of chief nursing officers (CNOs).	CNO Survey: Q14, Q17, Q18, and Q19	The survey was administered using Qualtrics. Survey was sent to CNOs in hospitals and long-term care facilities in Tennessee.	NVivo 12 plus software and manual coding were used to analyze the qualitative elements of the survey.
RQ2: What are the supports and barriers reported by employers of nurses in requiring a more educated nursing workforce?	Perceptions of CNOs.	CNO Survey: Q15, Q17, Q18, and Q19	Approximate number of hospitals in TN is 120. Approximate number of long-term care facilities is 300.	Statistical Package for the Social Sciences 27 was used for descriptive statistics.
RQ3: Is there an association between the role of the employer and the number of bachelor-prepared nurses in the workforce?	Variable (V) 1: Percentage of BSN-prepared RNs V2: Employers' plans V3: Employers' policies and promotions	CNO Survey: Q9, Q10, Q11, Q12, and Q16	The survey was distributed via email throughout September, October, and November. Email reminders and phone calls were implemented to help increase participation and a few face-to-face visits were utilized to increase participation.	SPSS was also used to analyze the quantitative portions of the study. Fisher's exact test was conducted in quantitative data analysis.
RQ4: Is there an association between the location of employment and the number of bachelor-prepared nurses in the workforce?	V1: Percentage of BSN-prepared RNs V4: Employers' type of facility V5: Location of the facility	CNO Survey: Q5, Q6, and Q10		

questions. The survey took approximately 10 minutes to complete. The survey information was shared through the Tennessee Nurses Association, Tennessee Health Care Association, the American Organization of Nurse Leaders, LinkedIn, Facebook, and direct email lists. See Appendix F for the script of the recruitment email used.

In Phase II of the study, an attempt was made to contact potential participants who had not yet responded to the survey. The CNOs were called and given information on the study and directed to a repeat email that was sent. See Appendix F for a copy of the recruitment script used for the phone calls. Phase III of the study included some face-to-face visits to increase participation. See Appendix F for a copy of the script used for face-to-face visits. A data collection log was maintained, and multiple attempts were made to reach participants through these various mediums. A final email reminder was sent to potential participants who had not yet responded. Data collection ceased one week after the final email reminder was sent. See Research Timeline for more details (see Table 3.3).

### **Data Analysis Process**

#### **Preparation of Data for Analysis**

The recommended steps from Creswell and Plano Clark (2018) were followed in data analysis. Raw data were exported from Qualtrics into comma-separated values (CSV), Excel, and Statistical Package for Social Sciences formats and saved on a secure system. Identifying information from the informed consent was removed and replaced with an assigned numeric value. Data were assessed for errors. Inclusion and exclusion criteria were also evaluated. A total of 125 surveys were submitted. Twenty-one of the surveys were incomplete, with less than 75% of the survey being completed. Incomplete surveys were excluded. One of the remaining survey submissions was from a Kentuckian; this did not meet the Tennessee inclusion criterion and was



excluded. Six of the remaining participants did not report being nurse leaders; these did not meet the inclusive criterion of being a nurse leader and were excluded. Another eight participants did not report working in a hospital or a long-term care facility; these did not meet the inclusion criteria for employment and were excluded. The final sample size included 89 participants for both the quantitative and qualitative portions of the study.

**Table 3.3**

*Research Timeline*

<b>Date</b>	<b>Activity</b>
Beginning of September 2021	Formulated contact list for potential participants: purchased mailing lists, performed online searches.
End of September	Emailed potential chief nursing officer (CNO) participants: included welcome email, informed consent, and Qualtrics link.
October/November	Placed phone call reminders to participants who had not responded. Face-to-face visits conducted.
Mid-November	Sent a final email reminder to complete the survey.
End of November	Data collection ended.
November/December	Data analyses: Qualtrics, Statistical Package for Social Science, NVivo, and manual coding.
January 2022-March 2022	Reported results and findings.

The qualitative portion of the survey included three open-ended questions. The data for each qualitative response was saved individually into a portable document format (PDF) and saved on a secure device. The PDF documents were uploaded as files into the NVivo 12 Plus software. A project file was created for each individual qualitative question.

## **Data Exploration**

An initial Qualtrics report was run to visually inspect the results and begin to gain familiarity with the data. Any initial thoughts were recorded in a Word document and saved for later reference as the analysis progressed. NVivo word cloud images were created and saved for each qualitative question. A data analysis log was developed and maintained throughout the process.

## **Data Analysis**

The research matrix provides alignment of the research questions with the specific survey questions and data analysis methods used (see Table 3.2). Qualitative data were coded using NVivo, version 12 plus. The open-ended qualitative questions were coded and placed into approximately 30-40 nodes or categories (see Appendices G & H). The nodes were then assessed and categorized into four main themes (see Appendices I & J). The sample size was sufficient to reach the goal of data saturation (Squires & Dorsen, 2018). A qualitative expert was consulted during the coding process. The researcher also used concurrent triangulation with the quantitative data to cross-validate the findings. Quantitative questions from the survey were compared to the qualitative results and assessed for similarities and differences that confirm or disconfirm the findings and results.

Quantitative data were analyzed using SPSS version 27, and Qualtrics. Descriptive statistics and Fisher exact tests were used to describe variables and explore associations in the study. Descriptive statistical analyses were conducted to assess the demographic characteristics of participants and to provide a quantitative summary of the sample.

Fisher's exact tests ( $r \times 2$ ) were conducted using SPSS version 27 to determine if there was a significant association between the reported percentage of BSN-prepared RNs and the

various independent variables. Four assumptions were checked and met prior to conducting the test for each independent variable. There was one dependent polytomous nominal variable, one independent nominal variable used for each individual test that was conducted, independence of observations, and purposive sampling. Fisher's exact tests ( $r \times 2$ ) were used due to inadequate sample size for the chi-square test of homogeneity, as established according to Cochran (1954). Fisher's exact corrects for smaller sample sizes with cell frequencies less than five. An alpha of .05 was used to assess Fisher's exact results. Post hoc analyses were conducted as necessary for pairwise comparisons using multiple Fisher's exact tests ( $2 \times 2$ ) with Bonferroni correction. Statistical significance was suggested at  $p < .007$ . Phi coefficient was used to assess effect size as recommended for  $2 \times 2$  tables (Kotrlík, et al., 2011) and Cohen's (1992) suggestion was utilized for interpretation of the strength of association.

The hypotheses were:

$H_o$ : There is no association in the percentage of BSN-prepared RNs based on the given employee variable.

$H_a$ : There is an association in the percentage of BSN-prepared RNs based on the given employee variable (employers' plans, policies, promotions, location, or facility type).

Efforts were made to increase the validity and quality of the study. Sample sizes were equal for the quantitative and qualitative portions of the study. Joint displays were used to converge both types of data. The study has mixed methods components of quality, including research questions with quantitative and qualitative components, hypotheses, logic, and theory (Creswell & Plano Clark, 2018).

### **Researcher Reflexivity**

Since there was a qualitative portion of this mixed methods study, the researcher included a researcher's reflexivity section to guide the development, implementation, and analysis of this study. The researcher acknowledges having strong ties to ADN and BSN nurses. The researcher has served as a full-time faculty member in a RN-to-BSN program for three years. Prior to teaching in this program, the researcher taught in an ADN program for 10 years. The researcher has been a nurse for 25 years. After reading the literature in support of a more educated nursing workforce, the researcher felt motivated to help the United States make steps toward the goal of 80% of BSN-prepared RNs. The researcher has a strong connection to many associate's degree nurses and a passion for seeing them take steps toward attaining their BSN. It is the researcher's hope that this study will help Tennessee make strides toward a more highly educated nursing workforce.

### **Issues of Trustworthiness**

The Chief Nursing Officer Survey used was developed and distributed in North Carolina and was found to be a valid and reliable quantitative instrument (Schuler et al., 2017). The adapted survey was assessed for content validity by a team of experts. Each question was assessed and revised as needed to increase the validity and reliability of the results. The survey was validated prior to use in the study. Consultation from a qualitative research expert independent of the study was obtained during the development of the qualitative portion of the survey.

Efforts were made to increase the trustworthiness of the study (Squires & Dorsen, 2018). Triangulation with joint display tables were used to increase credibility. A researcher reflexivity section was included to reveal to the reader any potential personal biases that could influence the

results to increase confirmability. The researcher also attempted to mitigate researcher bias through self-awareness and objectivity. A data analysis log and audit trail were maintained during the process.

### **Assumptions and Delimitations**

Certain assumptions were recognized in the preparation of this study. The assumption was made that the instrument used elicited reliable responses, the participants answered the questions honestly, and the study results were meaningful. The assumption was also made that the participants are representative of other employers of nurses in Tennessee. The researcher delimited the study to prominent nurse leaders (e.g., CNOs, nurse managers, directors of nursing) in hospitals or long-term care facilities across Tennessee.

Qualitative experts were consulted in the development of the qualitative portion of the survey. During participant selection, the researcher sent the survey to facilities throughout Tennessee, where contact information was obtained, and not just certain areas of the state. Participants did not receive any extra credit in any courses for participation in the study. This study is not connected to a specific journal or publication criteria. The researcher is aware not to focus the analysis of the data to reflect the researcher's personal thoughts or expectations.

### **Significance of the Study**

Using the theory of connectivism as a guide, the researcher focused on networking with the employers of nurses to strive to fill a gap in the literature concerning the number of BSN-prepared RNs in the state. The information obtained in this study will be used to help inform other employers of nurses, nurse regulatory bodies, educators of nurses, policy makers, professional organizations, and licensed nurses on the perceptions of employers regarding a more educated nursing workforce in the State of Tennessee. The information gleaned from this study

may then be used to guide the decisions of nurses and stakeholders in steps to take in moving toward the goal of 80% of BSN-prepared nurses in the United States. Steps toward increasing the education level of nurses are simultaneously steps toward saving lives.

## **Chapter IV**

### **Findings**

The purpose of this study was to explore the role of the employer in a more highly educated nursing workforce through the lens of connectivism. A mixed methods study design was used to seek a more complete understanding of the research problem (Creswell & Plano Clark, 2018). Closed-ended questions with predetermined responses, categories, and scales were used in combination with open-ended questions. Qualitative questions were included “to validate the quantitative outcomes with qualitative data representing the voices of the participants” (Creswell & Plano Clark, 2018, p. 198).

Convergent design data collection was used. Convergent design provides complementary data on the same topic (Creswell & Plano Clark, 2018). Quantitative and qualitative data were collected at the same time; data were analyzed separately and then merged. An equal sample size was used for both the quantitative and qualitative samples. The quantitative statistical results were combined and compared with the qualitative findings. Data were analyzed for areas of convergence and divergence by assessing for similarities, differences, and themes. The results and findings are organized according to the four research questions.

#### **Support Versus Opposition (RQ1)**

The majority of employers did not report having plans in place to increase the percentage of BSN and higher prepared nurses, with 56.2% ( $n = 50$ ) reporting they did not and 43.8% ( $n = 39$ ) reporting that there were plans and goals in place. For the employers who did have plans and goals in place, 56.4% ( $n = 22$ ) reported the plan including a target date, and 43.6% ( $n = 17$ ) reported having no set target date. The employers who reported having a plan also reported that their efforts were targeted primarily at staff nurses ( $n = 35$ , 89.7%), then managers ( $n = 16$ ,

41%), then clinical experts ( $n = 12$ , 30.8%), and then educators ( $n = 12$ , 30.8%). The majority of employers reported that their facilities did not have, or were not pursuing magnet status ( $n = 69$ , 77.5%); 22.5% ( $n = 20$ ) reported that their facility currently had, or was pursuing, magnet status. The percentage of BSN or higher prepared nurses reported by employers of nurses is summarized in Figure 4.1, with only 19.1% of employers reporting their facility having 76-100% of BSN or higher prepared RNs in their facilities ( $n = 17$ ). The majority reported only having 0-15% BSN-prepared or higher RNs in their facility ( $n = 23$ , 25.8%).

When asked about strategies and incentives used in their facilities to increase the number of BSN and higher prepared nurses, employers reported tuition reimbursement, promotion or clinical ladders, and partnering with an institution or agency to promote educational advancement as the top three strategies used. Awarding bonuses at the completion of BSN or higher degree and required for current employees within a defined period were listed as the two least used strategies. Details on results and other strategies used are listed in Figure 4.2. The open-ended replies included responses related to the presence of incentives, such as tuition reimbursement, pay differential, and advancement and promotion.

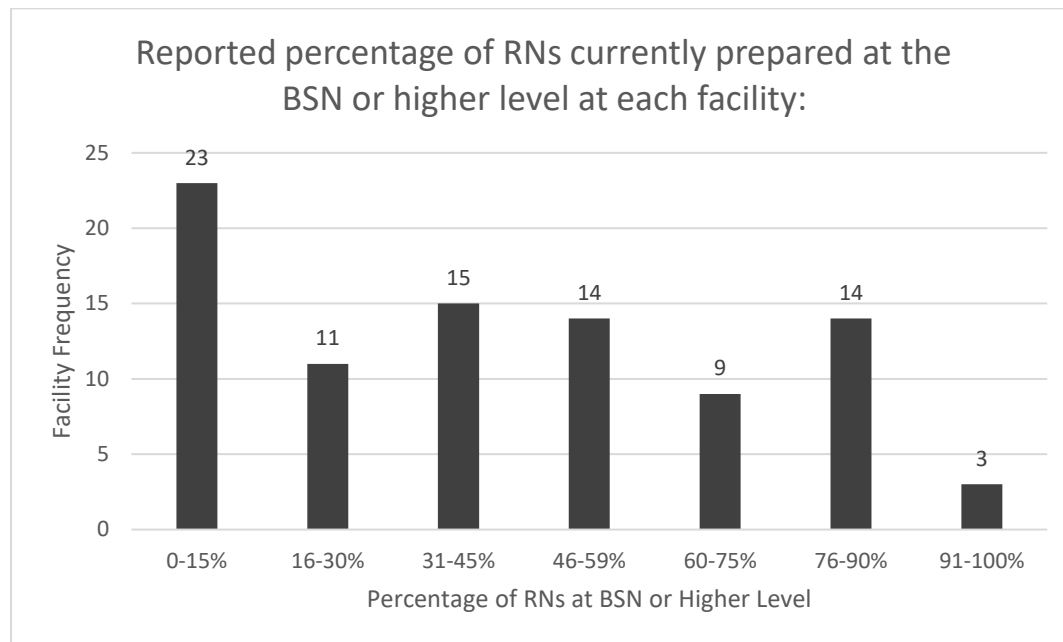
Employers' open-ended responses were also evaluated, revealing responses in opposition and in favor of a mandatory BSN requirement. Opposition statements included, "I disagree with the mandatory minimum as this does not allow for evaluation or consideration of a person's life experience and natural skills and, therefore, would exclude a significant percentage of talented, valuable team members from our workforce" (participant 70), "I am opposed in that financially it would be a stretch to compensate the higher education. It would be a strain with minimal benefit to the facility" (participant 31), and "I believe there are very good associates prepared nurses and then very educated (Bachelor's and higher) who aren't very good nurses. I believe compassion,



passion, desire to help, desire to be kind and go beyond the minimum standard of care cannot be obtained via degrees” (participant 48).

**Figure 4.1**

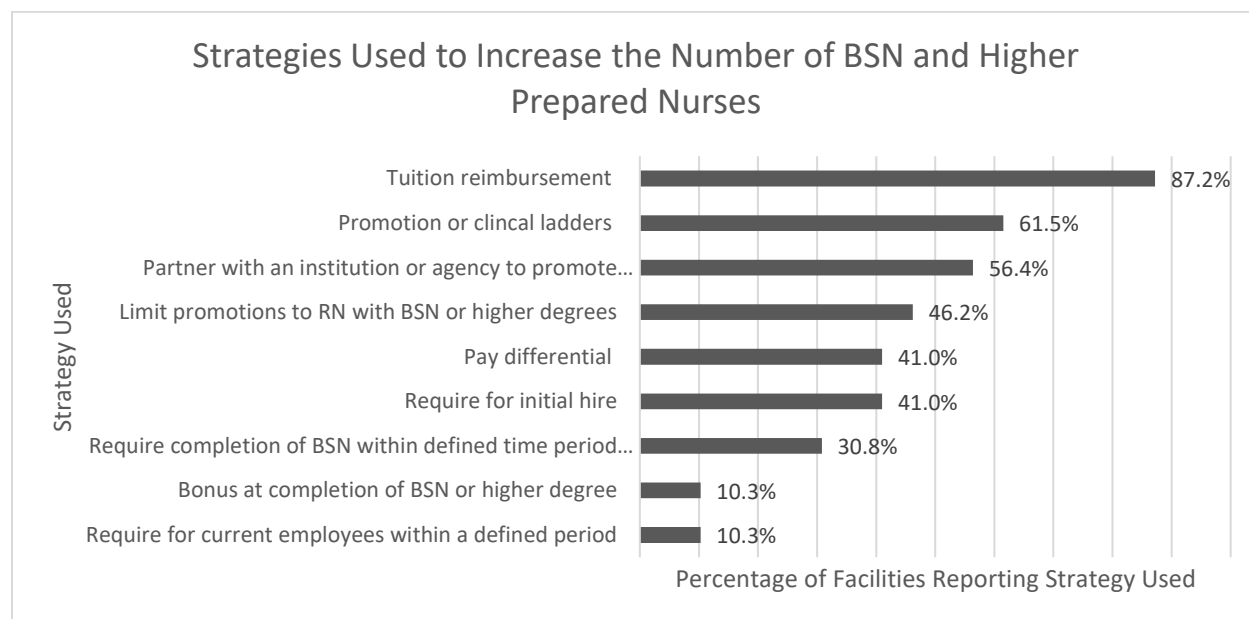
*Percentage of Registered Nurses (RNs) at Bachelor of Science in Nursing (BSN) or Higher Level*



Supporting statements included, “I support minimum standard BSN” (participant 19), “I feel strongly about the importance of a BSN. It is quite noticeable the difference in the different programs and the professionalism that is generated by a higher degree” (participant 41), and “The BSN prepared RN is well rounded and has the educational background to adapt to any nursing position. Critical thinking skills and pathophysiology are the keys to an excellent RN which the BSN/RN seem to possess at point of graduation. This should be the standard that sets the professional nurse apart from other medical positions (LPN, MA, ADN). The BSN prepared RN holds himself/herself at a higher standard of professionalism that I have noticed over the past 18 years in practice than the other positions” (participant 13).

**Figure 4.2**

*Strategies Used to Increase the Number of Bachelor of Science in Nursing (BSN) and Higher Prepared Nurses*

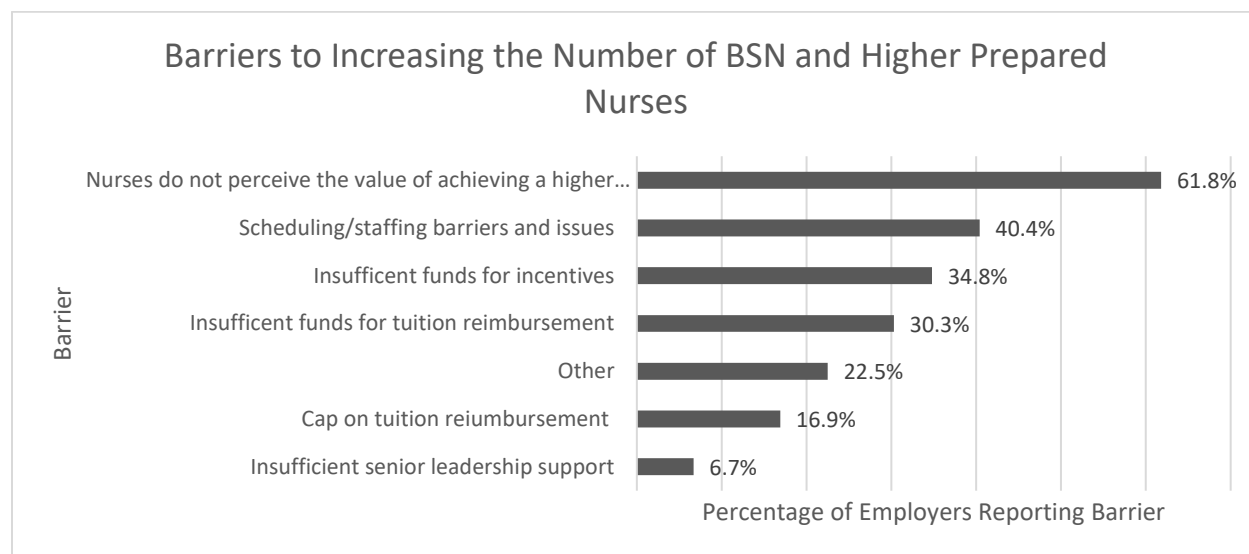


### **Supports and Barriers (RQ2)**

When employers were asked about organizational barriers to increasing the number of BSN and higher prepared nurses, they reported nurses not perceiving the value of achieving a higher degree, scheduling/staffing barriers and issues, and insufficient funds for incentives as the top three barriers identified. Insufficient leadership support was the least reported barrier. Details on results and other barriers indicated are reported in Figure 4.3. The open-ended responses also revealed statements regarding the lack of incentives such as the lack of financial reward and comments such as, “there is no incentive to encourage nurses to earn their BSN such as a clinical ladder at our facility” (participant 75).

**Figure 4.3**

*Barriers to Increasing the Number of Bachelor of Science in Nursing (BSN) and Higher Prepared Nurses*



Four main themes evolved during the coding of the qualitative data. The four themes were: 1) the need for more nurses, 2) the need for more resources, 3) the need for partnerships, and 4) the ramifications of the pandemic. Quotes to support each theme and radial Venn diagrams are to follow.

### **The Need for More Nurses**

One theme that arose during the coding of the qualitative data was regarding the need for more nurses. Table 4.1 provides examples of quotes used in formulating the theme and Figure 4.4 provides a visual display supporting the theme.

### **The Need for More Resources**

Another theme that arose during the coding of the qualitative data was the need for more resources. Table 4.2 provides examples of quotes from the employers to support the theme and Figure 4.5 provides a visual display.

**Table 4.1***The Need for More Nurses Quotes*

<b>Theme/Category</b>	<b>Statements Supporting the Theme</b>
The need for more nurses	<ul style="list-style-type: none"> <li>• Requiring a BSN degree during a nursing shortage would only make things more difficult (participant 36).</li> <li>• Higher education is not a focus of our facility at the present time, largely due to staffing needs and attempts to recruit any level of nurses (participant 81).</li> <li>• The lack of applicants and the fact that our health care system is in desperate need of more nurses actually worries me. There is a nursing shortage and if anything I am afraid we are going to see more Associate degree RN schools and LPN schools on the rise. I can see LPN's being able to do more task and responsibilities that were once strictly for RN's. In my lifetime I have never seen the nursing field in this shape. I think this will have a long term impact on the argument for more BSN nurses (participant 89).</li> <li>• The national nursing shortages are crippling the healthcare system. Requiring a mandatory bachelors would cripple the already devastating nursing shortages even more than what they already are (participant 71).</li> <li>• There are not enough bedside nurses available to meet the demand. Requiring further education may prevent some individuals from pursuing a nursing degree (participant 36).</li> <li>• Nursing shortages are a problem and increasing level of education requirements would only contribute to the problem (participant 84).</li> <li>• I currently oppose the mandate solely due to the fact that nurses are in such a demand at this time. To add an additional two years of school before nurses are produced could be detrimental (participant 86).</li> </ul>

**The Need for More Partnerships**

Another theme arose during the coding of the qualitative data regarding the need for more partnerships. Table 4.3 provides examples of quotes from the employers to support the theme and Figure 4.6 provides a visual display.



**Table 4.2***The Need for More Resources Quotes*

Theme/Category	Statements Supporting the Theme
The need for more resources	<ul style="list-style-type: none"> <li>• The government needs to help make nursing school more affordable at the BSN level if people are going to be required to go that route to become RNs (participant 82).</li> <li>• NCSBN would take a more active approach in supporting nurse longevity and educating corporate healthcare systems on beneficial ways to retain nurses which could be implementing financial assistance in returning to school to further their education and setting reasonable standards on allowing them to succeed in their studies (participant 71).</li> <li>• Total reimbursement for advancement to BSN or higher would help with this goal (participant 64).</li> <li>• If a BSN was made a mandatory requirement I would hope financial resources as well as teaching/learning methods could become available for those associate's degree nurses who are motivated and invaluable to move forward (participant 48).</li> <li>• With advocacy for federal funding for degree completion (participant 37).</li> <li>• Support more grants for RNs wishing to attain a BSN (participant 35).</li> <li>• Need more scholarships available to pay for BSN education (participant 32).</li> <li>• We have employed nurses that would like to advance but class schedules and finances are barriers to this goal (participant 31).</li> <li>• Financial - both in paying for tuition, time away from work required to completed studies that results in lost income, and desire (participant 83).</li> <li>• Time is the main barrier we are all over worked over the past 18 months. Constantly having to ask nurses to work overtime and working tremendous amounts of overtime myself. This is leading to our inability to return to school and further our education (participant 30).</li> <li>• The best way to support a more educated work force is to be able to provide current nurses with a better work/life balance (participant 71).</li> </ul>

**Table 4.3***The Need for More Partnerships Quotes*

<b>Theme/Category</b>	<b>Statements Supporting the Theme</b>
The need for more partnerships	<ul style="list-style-type: none"> <li>• Higher nursing education MUST have value to our financial (CEOs, CFOs) and physician partners. Address higher degree value with organizational leaders first (participant 4).</li> <li>• Our Nursing Professional Development team works closely with the local nursing schools and provides feedback and is highly supportive of curriculums that are utilized (participant 41).</li> <li>• Partner with our nearest educational institutions (participant 15).</li> <li>• Our region has three LPN programs, two ASN level programs, five colleges/universities with BSN and higher level programs. Once the applicant is hired, email communications are sent regularly to staff about partnerships that provide discounted rates and our reimbursement and loan opportunities (participant 62).</li> <li>• The ideal is to have all BSN nurses. Our institution has a program with a local college for a free program to BSN (participant 51).</li> <li>• Clinical partnerships with several local and on-line options. Provided discounts to tuition and fees (participant 43).</li> </ul>

**The Ramifications of the Pandemic**

The final theme that arose during the coding of the qualitative data was regarding the ramifications of the pandemic. Table 4.4 provides examples of quotes from the employers to support the theme and Figure 4.7 provides a visual display.

Other categories were present regarding barriers in pursuing BSN. These barriers included aging nurses, class schedules, lack of incentives (such as monetary or career advancement), lack of support from leaders, need for more funding for school, time constraints, work-life balance, nursing burnout, and a lack of value placed on BSN attainment. Comments were also provided, such as, “there is no incentive to encourage nurses to earn their BSN such as





**Table 4.4***The Ramifications of the Pandemic Quotes*

Theme/Category	Statements Supporting the Theme
The ramifications of the pandemic	<ul style="list-style-type: none"> <li>• Right now with pandemic and COVID rising numbers, warm body is acceptable (participant 17).</li> <li>• At this point in the COVID crisis, such a mandatory minimum would destroy the nursing community (participant 24).</li> <li>• Current barriers stem from the pandemic. We are asking nurses to work more hours with less resources. It is hard to include school with this. Currently I believe with the pandemic, the push for this is on hold (participant 51).</li> <li>• Currently our staff is working more hours than they were hired for due to increased demands during the pandemic. Requiring additional education is hard at this time on the staff (participant 42).</li> <li>• In the time of this nursing shortage coupled with the pandemic I do not believe now is the time to put any limitations on increasing our clinical workforce. We have patients who are not receiving the care needed and nurses leaving the profession overwhelmed with work and guilt (participant 38).</li> <li>• I don't want to down play a BSN, but lets get real. We are in a nursing shortage a once in a life time pandemic. The system cannot spare any more nurses (participant 30).</li> </ul>

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**Role of the Employer (RQ3)**
**Plans and Goals**

Fisher's exact test ( $r \times 2$ ) was conducted to determine if there was a significant association between the reported percentage of BSN-prepared RNs and the presence of plans and goals for the facility. There was a statistically significant difference in the multinomial probability distributions between the two groups ( $p = .010$ ). Therefore, we can reject the null hypothesis suggesting that there is an association in the percentage of BSN-prepared RNs based on the plans and promotions of the employer. Observed frequencies and percentages of the estimated percentage of BSN-prepared RNs for each goal category are presented in Table 4.5. Post hoc analyses were conducted and involved pairwise comparisons using multiple Fisher's

exact tests (2 x 2) with Bonferroni correction. There was a statistically significant difference in the proportion of the estimated percentage of BSN-prepared RNs for the facilities with plans and goals present versus not present with a medium positive association at the 0-15% range.

### **Target Date**

Fisher's exact test (r x 2) was conducted to determine if there was a significant association between the estimated percentage of BSN-prepared RNs and setting a goal target date for the facility. The multinomial probability distributions between the two groups were not statistically significantly different ( $p = .236$ ). Therefore, we fail to reject the null hypothesis suggesting that there is no association in the percentage of BSN-prepared RNs based on setting a goal target date (see Table 4.6).

### **Magnet Status**

Fisher's exact test (r x 2) was conducted to determine if there was a significant association between the estimated percentage of BSN-prepared RNs and the magnet status plans of the facility. There was a statistically significant difference in the multinomial probability distributions between the two groups ( $p < .001$ ). Therefore, we can reject the null hypothesis suggesting that there is an association in the percentage of BSN-prepared RNs based on the magnet status of the facility. Observed frequencies and percentages of the estimated percentage of BSN-prepared RNs for the magnet status plans of a facility are presented in Table 4.7. Post hoc analyses were conducted and involved pairwise comparisons using multiple Fisher's exact tests (2x2) with Bonferroni correction. There were statistically significant differences in the proportion of the estimated percentage of BSN-prepared RNs when comparing the presence of magnet status plans versus the lack of magnet status plans at a facility with a medium positive association at the 0-15% range and a large negative association at the 76-90% range.

### Part of a System

Fisher's exact test was conducted to determine if there was a significant association between the estimated percentage of BSN-prepared RNs and the facilities that were part of a system. The multinomial probability distributions between the two groups were not statistically significantly different ( $p = .126$ ). Therefore, we fail to reject the null hypothesis suggesting that there is no association in the percentage of BSN-prepared RNs based on system designation (see Table 4.8).

**Table 4.5**

*Crosstabulation of Percentage of Registered Nurses (RNs) and Presence of Plans and Goals*

Percentage of RNs	Presence of Plans/Goals		<i>p</i> -Value	Post Hoc Effect Size Phi Coefficient
	Yes	No		
0-15%	4 (10.3%)	19 (38%)	.003*	.314
16-30%	4 (10.3%)	7 (14%)	.749	.056
31-45%	8 (20.5%)	7 (14%)	.569	-.086
46-59%	7 (17.9%)	7 (14%)	.771	-.054
60-75%	6 (15.4%)	3 (6%)	.172	-.154
76-90%	10 (25.6%)	4 (8%)	.038	-.240
91-100%	0 (0%)	3 (6%)	.253	.165

*Note.* Fisher exact test (r x 2)  $p = .010$ ; \*Bonferroni correction for seven comparisons was used

for Fisher's exact tests (2 x 2) and established statistical significance at  $p < .007$ .

**Table 4.6***Crosstabulation of Percentage of Registered Nurses (RNs) and Established Target Date*

<b>Percentage of RNs</b>	<b>Target Date Established</b>	
	<b>Yes</b>	<b>No</b>
0-15%	2 (9.1%)	2 (11.8%)
16-30%	0 (0%)	4 (23.5%)
31-45%	4 (18.2%)	4 (23.5%)
46-59%	5 (22.7%)	2 (11.8%)
60-75%	4 (18.2%)	2 (11.8%)
76-90%	7 (31.8%)	3 (17.6%)
91-100%	0 (0%)	0 (0%)

*Note. n = 39, p = .236*

**Table 4.7***Crosstabulation of Percentage of Registered Nurses (RNs) and Magnet Status*

Percentage of RNs	Magnet Status		Post Hoc	
	Yes	No	<i>p</i> -Value	Effect Size Phi Coefficient
0-15%	0 (0%)	23 (33.3%)	.001*	.318
16-30%	0 (0%)	11 (15.9%)	.064	.202
31-45%	2 (10%)	13 (18.8%)	.505	.099
46-59%	3 (15%)	11 (15.9%)	1	.011
60-75%	4 (20%)	5 (7.2%)	.110	-1.77
76-90%	10 (50%)	4 (5.8%)	< .001*	-.507
91-100%	1 (5%)	2 (2.9%)	.539	-.049

*Note.* Fisher exact test (r x 2)  $p < .001$ ; \*Bonferroni correction for seven comparisons was used

for Fisher's exact tests (2 x 2) and established statistical significance at  $p < .007$ .

**Table 4.8***Crosstabulation of Percentage of Registered Nurses (RNs) and System Facility*

<b>Percentage of RNs</b>	<b>Facility Part of a System</b>	
	<b>Yes</b>	<b>No</b>
0-15%	22 (30.6%)	1 (5.9%)
16-30%	8 (11.1%)	3 (17.6%)
31-45%	13 (18.1%)	2 (11.8%)
46-59%	9 (12.5%)	5 (29.4%)
60-75%	6 (8.3%)	3 (17.6%)
76-90%	12 (16.7%)	2 (11.8%)
91-100%	2 (2.8%)	1 (5.9%)

*Note.*  $p = .126$ **Location of the Employer (RQ4)****Place of Employment: Type of facility**

Fisher's exact test ( $r \times 2$ ) was the omnibus test conducted to determine if there was a significant association between the reported percentage of BSN-prepared RNs and the type of facility. There was a statistically significant difference in the multinomial probability distributions between the two groups ( $p < .001$ ). Therefore, we can reject the null hypothesis suggesting that there is an association in the percentage of BSN-prepared RNs based on the type of facility. Observed frequencies and percentages of the estimated percentage of BSN-prepared RNs for the type of facility are presented in Table 4.9. Post hoc analyses were conducted and

involved pairwise comparisons using multiple Fisher's exact tests (2x2) with Bonferroni correction. There were statistically significant differences in the proportion of estimated percentage of BSN-prepared RNs in the hospital setting versus the long-term care setting with a large positive association at the 0-15% range and a medium negative association at the 76-90% range.

**Table 4.9**

*Crosstabulation of Percentage of Registered Nurses (RNs) and Type of Facility*

Percentage of RNs	Type of Facility		Post Hoc	
	Hospital	Long-Term Care	<i>p</i> -Value	Effect Size Phi Coefficient
0-15%	2 (4%)	21 (53.8%)	< .001*	.565
16-30%	4 (8%)	7 (17.9%)	.201	.150
31-45%	10 (20%)	5 (12.8%)	.408	-.095
46-59%	12 (24%)	2 (5.1%)	.019	-.257
60-75%	7 (14%)	2 (5.1%)	.289	-.146
76-90%	13 (26%)	1 (2.6)	.003*	-.319*
91-100%	2 (4%)	1 (2.6)	1	-.039

*Note.* Fisher exact test (r x 2)  $p < .001$ ; \*Bonferroni correction for seven comparisons was used

for Fisher's exact tests (2 x 2) and established statistical significance at  $p < .007$ .

### **Region of the State**

Fisher's exact test (r x 2) was conducted to determine if there was a significant association between the estimated percentage of BSN-prepared RNs and the location of the

facility. The multinomial probability distributions between the two groups were not statistically significantly different ( $p = .892$ ). Therefore, we fail to reject the null hypothesis suggesting that there is no association in the percentage of BSN-prepared RNs based on the location of the facility (see Table 4.10).

**Table 4.10**

*Crosstabulation of Percentage of Registered Nurses (RNs) and Location of Facility*

Percentage of RNs	Location of Facility			
	West	Middle	East	Other
0-15%	6 (24%)	6 (17.6%)	10 (40%)	1 (20%)
16-30%	4 (16%)	5 (14.7%)	2 (8%)	0 (0%)
31-45%	5 (20%)	4 (11.8%)	5 (20%)	1 (20%)
46-59%	4 (16%)	5 (14.7%)	4 (16%)	1 (20%)
60-75%	1 (4%)	5 (14.7%)	2 (8%)	1 (20%)
76-90%	4 (16%)	7 (20.6%)	2 (8%)	1 (20%)
91-100%	1 (4%)	2 (5.9%)	0 (0%)	0 (0%)

*Note.*  $p = .892$ ; Other category included employers who worked throughout the state and in the northeast portion of the state.



## **Chapter V**

### **Conclusions and Recommendations**

As the review of the literature revealed, there is an identified problem in the United States related to the number of bachelor-prepared RNs (Campaign for Action, 2018; IOM, 2010). Research has consistently linked BSN-prepared RNs to lower patient mortality rates and more positive patient outcomes compared to care provided by non-BSN-prepared RNs (Aiken et al., 2003; Aiken et al., 2008; Kutney-Lee et al., 2013). A review of the literature supports the need for a more educated nursing workforce (Aiken et al., 2003; Aiken et al., 2014; Kutney-Lee et al., 2013; RWJF, 2013; Zittel et al., 2016).

Previous studies were conducted across multiple states regarding the pursuit of a more educated nursing workforce (Haverkamp & Ball, 2013; Jones et al., 2019; Schuler et al., 2017). This dissertation study was conducted across Tennessee in an effort to fill a significant gap in the literature by exploring the value of partnerships between nurses and employers of nurses. The purpose of this study was to explore the role of the employer in a more highly educated nursing workforce through the lens of connectivism. A mixed methods convergent study design was used to expand the breadth of the study and enhance the contribution to the corpus of knowledge on this topic (Creswell & Plano Clark, 2018).

This chapter includes a summary of the findings from the study, conclusions and recommendations, implications for practice, identified limitations of the study, and recommendations for future research. Findings and results are compared to previous research and used to answer the research questions for this study. Joint display tables are also provided to support data integration in a mixed methods design (Creswell & Plano Clark, 2018).

The summary of findings is organized by the research questions for the study. The findings were compared to previous literature and viewed through the conceptual framework of connectivism. Findings were synthesized and assessed for patterns, themes, ambiguities, and inconsistencies.

### **Support Versus Opposition (RQ1)**

The open-ended responses from the employers revealed fairly evenly distributed responses in favor of and in opposition to a mandatory BSN requirement. The majority of employers did not report having plans in place to increase the percentage of BSN and higher prepared nurses, with 56.2% ( $n = 50$ ) reporting they did not have plans or goals in place and 43.8% ( $n = 39$ ) reporting that there were plans and goals in place. The majority of employers reported that their facilities did not have, or were not pursuing, magnet status ( $n = 69$ , 77.5%); 22.5% ( $n = 20$ ) reported that their facility currently had, or was pursuing, magnet status. Only 19.1% of employers reported their facility having 76-100% of BSN or higher prepared RNs in their facilities ( $n = 17$ ). Majority reported only having 0-15% ( $n = 23$ ) BSN-prepared or higher RNs in their facility with the other categories having 12.4% in the 16-30% range ( $n = 11$ ), 16.9% in the 31-45% range ( $n = 15$ ), 15.7% in the 46-59% range ( $n = 14$ ), and 10.1% in the 60-75% range ( $n = 9$ ).

When provided a given list of options and asked strategies and incentives used in their facilities to increase the number of BSN and higher prepared nurses, employers reported tuition reimbursement, promotion or clinical ladders, and partnering with an institution or agency to promote educational advancement as the top three strategies used. Four main themes also evolved during the coding of the qualitative data. The four main themes were: 1) the need for

more nurses, 2) the need for more resources, 3) the need for more partnerships, and 4) the ramifications of the pandemic.

In addition to the four main themes that arose, there were also multiple comments provided regarding incentives to promote BSN-level education. The comments regarding incentives included the presence of incentives, such as tuition reimbursement, pay differential, and advancement and promotion. Data integration is a vital component of a mixed methods study (Creswell & Plano Clark, 2018), and a joint display table converging both types of data is found in Table 5.1.

These results align with previous studies that identified some of the main incentives as right timing, tuition reimbursement, and career advancement (Alamri & Sharts-Hopko, 2015; Copenhaver et al., 2018; Harris, 2014; Megginson, 2008; Sarver et al., 2015). Researchers previously recommended that healthcare organizations provide financial assistance through tuition reimbursement or tuition assistance for those returning to school (Harris, 2014; RWJF, 2013), and tuition reimbursement or stipends from employers were also previously noted as strong motivators in the decision to return to school (Alamri & Sharts-Hopko, 2015; IOM, 2010; RWJF, 2013; Sarver et al., 2015).

These findings are also in alignment with the theory of connectivism. Researchers agree that nurturing connections is a necessary component of connectivism (Corbett & Spinello, 2020; Siemens, 2004). Connectivism focuses on the importance of a multidisciplinary approach (Goldie, 2016). The findings from this study support previous literature that suggests the need for increased networking with key stakeholders, such as employers of nurses, in the endeavor for a more highly educated nursing workforce.

**Table 5.1***Joint Display for Research Question (RQ) 1*

<b>Research Question</b>	<b>Quantitative Results</b>	<b>Qualitative Findings</b>	<b>Mixed Method Interpretation</b>
RQ1: How do employers of nurses support or oppose a minimum bachelor's degree requirement for nurses?	<p>56.2% (<math>n = 50</math>) of employers reported they did not have plans or goals in place to increase the percent of BSN or higher prepared nurses in their facility, and 43.8% (<math>n = 39</math>) reported that there were plans and goals in place.</p> <p>Employers reported the top three incentives used to promote BSN education as tuition reimbursement, promotion or clinical ladders, and partnering with an institution or agency to promote educational advancement.</p>	<p>Fairly equally distributed comments in opposition to mandatory BSN and in support of mandatory BSN.</p> <p>Open-ended responses regarding incentives included the presence of incentives such as tuition reimbursement, pay differential, and advancement and promotion.</p> <p>Overall, four main themes evolved: 1) the need for more nurses, 2) the need for more resources, 3) the need for partnerships, and 4) the ramifications of the pandemic.</p>	<p>The quantitative and qualitative findings converge, showing an approximately equal proportion of employers in support and in opposition of a mandatory BSN requirement.</p> <p>The quantitative and qualitative findings were somewhat in alignment revealing similar incentives being used such as tuition reimbursement and promotion. The value of partnerships was also highlighted in both types of data.</p>

### **Supports and Barriers (RQ2)**

When employers were asked about organizational barriers to increasing the number of BSN and higher prepared nurses, they reported nurses not perceiving the value of achieving a higher degree, scheduling/staffing barriers and issues, and insufficient funds for incentives as the top three barriers identified. As previously mentioned, four main themes evolved during the coding of the qualitative data. The four themes were: 1) the need for more nurses, 2) the need for

more resources, 3) the need for partnerships, and 4) the ramifications of the pandemic. Other categories were present regarding barriers in pursuing BSN. These barriers included aging nurses, class schedules, lack of incentives (such as monetary or career advancement), lack of support from leaders, need for more funding for school, time constraints, work-life balance, nursing burnout, and a lack of value placed on BSN attainment. Comments were also provided, such as, “there is no incentive to encourage nurses to earn their BSN such as a clinical ladder at our facility” (participant 75). Predominant barriers were related to the nursing shortage and the pandemic. A joint display table converging both types of data is found in Table 5.2.

This corroborates the findings of other studies that suggest a prominent barrier being found in nurses’ motivation to return to school in relation to the lack of perceived incentive to obtain the BSN degree (Alamri & Sharts-Hopko, 2015; Harris, 2014; IOM, 2010; Megginson, 2008; Zittel et al., 2016). The need for more funding is also supported in the literature, with financial concerns listed as a top barrier for many participants in the desire to return to school (Alamri & Sharts-Hopko, 2015; Harris, 2014; RWJF, 2013; Sarver et al., 2015; Zittel et al., 2016), and researchers recommending for years the need for an increase in public funding to support this initiative (Kutney-Lee et al., 2013; Zittel et al., 2016).

Previous research also identified some of the main incentives to pursuing a BSN as right timing, tuition reimbursement, and career advancement (Alamri & Sharts-Hopko, 2015; Copenhaver et al., 2018; Harris, 2014; Megginson, 2008; Sarver et al., 2015). This aligns with the employers’ current concern over wrong timing related to the ramifications of the pandemic. Employers stated concerns such as these, “In the time of this nursing shortage coupled with the pandemic, I do not believe now is the time to put any limitations on increasing our clinical workforce” (participant 38).

**Table 5.2***Joint Display for Research Question (RQ) 2*

<b>Research Question</b>	<b>Quantitative Results</b>	<b>Qualitative Findings</b>	<b>Mixed Method Interpretation</b>
RQ2: What are the supports and barriers reported by employers of nurses in requiring a more educated nursing workforce?	<p>34.8% of employers reported a lack of sufficient funding for incentives.</p> <p>The top three reported barriers to increasing the number of BSN were reported as nurses not perceiving the value of achieving a higher degree, scheduling/staffing barriers and issues, and insufficient funds for incentives.</p>	<p>There were also open-ended responses regarding the lack of incentives, such as the lack of financial reward, and comments such as, “there is no incentive to encourage nurses to earn their BSN such as a clinical ladder at our facility” (participant 75).</p> <p>Four main themes evolved during the coding of the qualitative data. The four themes were: 1) the need for more nurses, 2) the need for more resources, 3) the need for partnerships, and 4) the ramifications of the pandemic.</p> <p>Other qualitative findings included reported barriers including aging nurses, class schedules, lack of incentives (such as monetary or career advancement), lack of support from leaders, need for more funding for school, time constraints, work-life balance, nursing burnout, and a lack of value placed on BSN attainment.</p>	<p>The quantitative and qualitative findings converge in agreement regarding barriers with lack of incentives and insufficient funding being found in both sets of data.</p>

While this study suggests that the nursing shortage is a barrier to a more highly educated nursing workforce, previous research did address the nursing shortage and stated that a more educated workforce increases nurse retention rates (Aiken et al., 2008) and that organizations with a higher percentage of BSN-prepared nurses have less turnover-related costs, a pipeline of nurses to fill leadership positions, and a more stable work environment (RWJF, 2013). The IOM's (2010) original plan continues to be supported, highlighting the need for more collaboration among stakeholders, financial support for nursing education, and an enhanced culture of education that focused on the importance of lifelong learning.

### **Role of the Employer (RQ3)**

#### **Plans and Goals**

There was a significant association between the reported percentage of BSN-prepared RNs and the presence of plans and goals for the facility ( $p = .010$ ). There were statistically significant differences in the proportion of estimated percentage of BSN-prepared RNs at the 0-15% range for the facilities with plans and goals present versus not present ( $n = 4$ , 10.3% versus  $n = 19$ , 38%,  $p = .003$ ). This suggests that the employers' plans and goals increase the percentage of BSN-prepared RNs in a facility.

#### **Magnet Status**

There was a significant association between the estimated percentage of BSN-prepared RNs and the magnet status plans of the facility ( $p < .001$ ). There were statistically significant differences in the proportion of estimated percentage of BSN-prepared RNs at the 0-15% range when comparing the presence of magnet status plans versus the lack of magnet status plans at a facility ( $n = 0$ , 0% versus  $n = 23$ , 33.3%,  $p = .001$ ), as well as in the 76-90% range ( $n = 10$ , 50% versus  $n = 4$ , 5.8%,  $p < .001$ ). This suggests that maintaining or pursuing magnet status does

increase the percentage of BSN-prepared RNs in a facility. This finding aligns with research in that an element of magnet status includes the requirement of BSN-prepared or higher RNs in all leadership and management positions, as well as a plan to reach the target of 80% of BSN-prepared RNs (RWJF, 2013; Zittel et al., 2016).

### **Location of the Employer (RQ4)**

#### **Type of Facility**

There was a significant association between the reported percentage of BSN-prepared RNs and the type of facility ( $p < .001$ ). There were statistically significant differences in the proportion of estimated percentage of BSN-prepared RNs at the 0-15% range in the hospital setting versus the long-term care setting ( $n = 2, 4\%$  versus  $n = 21, 58.8\%$ ,  $p < .001$ ), as well as the 76-90% range ( $n = 13, 26\%$  versus  $n = 1, 2.6\%$ ,  $p = 0.003$ ). This suggests that there are more BSN-prepared RNs in the hospital setting than in the long-term care setting.

### **Conclusions**

First, the main finding from this study is revealed through the act of goal setting. While a very simple step in the process, this study found that employers who set goals and made plans to have more BSN-prepared RNs, did indeed have more BSN-prepared RNs. The goal-setting theory was developed in 1968 and focused on the relationship between goals and task performance, stating that specific, challenging goals produce a higher level of performance (Locke, 1968). The goal-setting theory is still supported in current literature. Goal setting was found to increase commitment to a defined goal (Krishna Kumaran, et al., 2021) and has been related to more positive outcomes in diabetes management (Fredrix et al., 2018). Another study also found that goal setting produced more positive behavioral outcomes in a group of employees



(Shoaib & Kohli, 2017). The current recommendation is to encourage and educate employers of nurses to start with setting goals regarding this initiative.

Next, the importance of networking and partnerships was affirmed in this study, as well as in the review of the literature. Using the conceptual theory of connectivism as a guide, it can be concluded that partnerships are a valuable component in the pursuit of a more highly educated nursing workforce. The recommendation is to encourage bigger steps toward networking and forming partnerships to make larger strides toward reaching this goal.

Lastly, the evidence to support a very dire nursing shortage was undeniable. The pandemic seems to have only intensified the issues related to the preexisting nursing shortage. We may need more BSN nurses; however, many of the participants in this study would state that at this time, we simply need more nurses first and foremost. The recommendation is to look for ways to meet both the demand for more nurses and the desire for more BSN-prepared nurses simultaneously.

### **Implications for Practice**

The findings from this study suggest that the employer does play a role in the education level of nurses. The practical implications include educating stakeholders on the research related to BSN-prepared nurses. Since research supports the findings that a more educated nursing workforce decreases patient mortality rates and improves patient outcomes (Aiken et al., 2003; Aiken et al., 2008; Kutney-Lee et al., 2013; Yakusheva et al., 2014), there is cause to raise awareness and increase education with employers of nurses, nurses, educators, professional organizations, and government agencies. This education could include the simple act of developing goals related to increasing the percentage of BSN-prepared and higher RNs in their facilities.

The conceptual framework of connectivism was supported in the findings of this study. Key stakeholders in this endeavor for a more educated nursing workforce are urged to form partnerships to increase the education levels, increase funding opportunities, and address the nursing shortage. The professor-in-residence idea continues to be a viable option for partnerships between universities and facilities (Hinich et al., 2017). This idea was introduced in one hospital to reinforce the importance of the partnership between academic institutions and hospitals. The professor-in-resident was available to answer questions for those interested in returning to school, provide resources, and help with the clinical needs of universities (Hinich et al., 2017). In alignment with the original IOM (2010) initiative, recommendations encouraged the collaboration of leaders, accrediting bodies, healthcare facilities, and academic institutions to work toward the goal of a more highly educated nursing workforce.

### **Limitations of the Study**

There are recognized limitations and delimitations of this study. The participants were selected using a purposive sample. Sample size, location, and sampling could limit the generalizability of the findings. Sampling was isolated to one state in the Southeastern United States. Sampling CNOs from one state limits the study's external validity. Additional research would be needed on a national level to extend the generalizability of findings and results. The researcher delimited the study to nurse leaders from hospitals and long-term care facilities across Tennessee.

The sample was also relatively homogenous, being 93.3% female ( $n = 83$ ) and 93.3% White ( $n = 83$ ). This finding would need to be compared to the population demographics of nurse leaders to establish as a limitation. The findings of this study may also be limited to the discipline of nursing as this is a specific problem focused on professions with different education

levels allowed upon initial licensure. Since the study was a mixed methods design with convergent design data collection, answering the closed-ended questions prior to the open-ended questions could have introduced bias into the data collection (Creswell & Plano Clark, 2018). Member checking was not available since participants submitted survey information electronically and contact information was not collected; therefore, this limited the ability to clarify any ambiguous information.

Conducting the study during the COVID-19 pandemic could have influenced how participants responded. While this may be our new normal for several more years, that fact remains unknown. While limitations exist, this study could potentially be replicated in other states or even nationwide to extend implications for the nursing profession (Squires & Dorsen, 2018). This study possesses interpretive rigor and synthesizability.

### **Recommendations for Future Research**

As previously mentioned, additional research is needed on a larger scale to extend the generalizability/transferability of findings and results. This could be achieved through continued state-by-state progression studies or a larger nationwide research project. Other states are encouraged to conduct similar research to further add to this body of knowledge.

Attempts to increase the diversity of the sample are also recommended. According to The 2017 National Nursing Workforce Survey, 19.2% of RNs are from minority backgrounds (Smiley et al., 2018), which is not reflected in this study. Additional research is recommended to better reflect the diversity of the population.

More research is recommended related to the need for BSN-prepared RNs across various types of facilities. Researching the benefits of BSN-prepared RNs in non-hospital settings would

also be valuable. This information will serve to answer the question of BSN-prepared nurses being needed in all care settings.

The research related to the benefits of care provided by BSN-prepared RNs could also be enhanced by going further into the pathway to which the nurse received the BSN degree. Is there a difference in the nurse who initially attained a BSN versus the nurse who pursued the RN-to-BSN pathway? Are the benefits of a RN-to-BSN nurse similar to the outcomes of a traditional BSN nurse?

Additional research is also recommended related to the financial impact of increasing the percentage of BSN-prepared RNs. The study could compare the possible savings of better patient outcomes and decreased mortality rates to the money spent through tuition reimbursement and flexible scheduling. Providing possible monetary savings to facilities may provide additional motivation to pursue more BSN-prepared RNs. Additional research is needed to explore ways to increase resources to support and promote the education of nurses.

This study and previous studies also highlight the finding that suggests nurses may not perceive the value of pursuing a BSN. The question could be asked if this is because they do not know the current research related to a BSN and better patient outcomes or if there is not a value to them financially and professionally from the employers. Further research could be conducted to assess the reasons behind a nurses' lack of perceived value in attaining a BSN degree.

Lastly, while the nursing shortage is not a new problem, continued research is recommended on innovative ways to overcome this problem. Does increasing the number of BSN-prepared nurses have an impact on the nursing shortage, or are more nurses needed regardless of education level? Do more BSN and better outcomes equal less workload and less turnover? Does having more BSN-prepare nurses create better working environments and fewer

problems with retention? The issue of the nursing shortage was a message that cannot be ignored.

The findings of this study suggest that many employers recognize the value of a more highly educated nursing workforce stating, “Literature supports better patient outcomes with BSN prepared nurses” (participant 9), “Evidence has shown fewer errors and patient harm events by BSN prepared nurses. I support mandatory BSN prepared nurses at the bedside in 24/7 care areas” (participant 2). But, those statements must be leveraged against the hard truths regarding the need for more BSN-prepared RNs in the workforce that said, “Nurses are tired” (participant 71) and “With the mass exodus of nursing from the bedside, now is not the time” (participant 56).

The problem with the number of BSN-prepared RNs in the workforce remains. The research supporting the benefits of a more educated nursing workforce also remains. Employers of nurses play a vital role in bridging this gap. While the message may have been clearly communicated by many that “now is not the time” (participant 56), the alternative idea must not be lost in the pursuit of decreased mortality rates and improved patient outcomes. Perhaps, the COVID pandemic is not the time, or perhaps it is the perfect time to pursue goals as significant as these.

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## Appendix A

### Survey Permission

**From:** Schuler, Mary E  
**To:** Clark, Terri A.  
**Subject:** Re: [External] Re: Survey Permission  
**Date:** Monday, August 16, 2021 7:50:26 PM

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Terri, I give my permission. Best of luck tomorrow. Mary Sent from my iPad  
 On Aug 16, 2021, at 6:18 PM, Clark, Terri A. <clarkt@apsu.edu> wrote: Dr. Schuler,  
 Hope you are doing good. I have my dissertation proposal presentation tomorrow. I wanted to make sure that it was ok if I added three qualitative questions to the CNO survey. I decided to do a mixed method study but wanted to make sure that was ok with you. I created it but realized I asked your permission to use but not to add to it. Apologies. I'm not changing anything just adding 3 qualitative.

Thanks so much. Terri Clark

On Jun 29, 2021, at 1:53 PM, Schuler, Mary E <meschule@email.unc.edu> wrote:

Good Afternoon Terri,

The best I can tell you is that the instrument was developed and reviewed by content experts. It was developed by a core group of NCFuture of Nursing participants. We then had it reviewed from other experts throughout the state of North Carolina over a period of six months. Researchers, educators, administrators, and students were involved. It was developed either on survey monkey or Qualtrics. I don't remember, then the executive committee of the NC future of nursing took the survey to determine reliability. After review by this group, the executive gave the go ahead to distribute to CNOs. I hope this helps.

Mary

Jun 29, 2021, at 2:24 PM, Clark, Terri A. <clarkt@apsu.edu> wrote:

Dr. Schuler, Hope you are doing well. I just wanted to let you know that I am using your CNO Survey for my dissertation. A few of the reviewers are somewhat questioning the validity and reliability of the survey. Do you have any recommendations on how I could provide that? One reviewer recommended I use the psychometrics. I will look back through your article to see if I can provide more validity but I wanted to go ahead and reach out to you to see if you had advice on this issue.

Thanks so much!

*Terri Clark, MSN, RN Assistant Professor RN-to-BSN Program School of Nursing*

**From:** Schuler, Mary E <meschule@email.unc.edu> **Sent:** Saturday, January 23, 2021 4:17 PM **To:** Clark, Terri A.

<clarkt@apsu.edu> **Subject:** [External] Re: Survey Permission

Dear Terri, You have my permission, best of luck with this. I would love to see your results. Hope you are staying healthy. Sincerely, Mary Schuler

Sent from my iPad

On Jan 23, 2021, at 4:16 PM, Clark, Terri A.

<clarkt@apsu.edu> wrote:

Dr. Schuler, Hope you are having a nice weekend.

I teach in the RN-to-BSN Program here at Austin Peay State University in Clarksville, TN. I am also enrolled in our Doctorate of Education Program. I am hoping to do my dissertation study on ways to increase RN-to-BSN enrollment through partnerships with local facilities. While doing my literature review, I discovered the *Chief Nursing Officer Survey* you used in North Carolina. I wanted to humbly ask permission to use it in my study. I greatly appreciate your time and consideration.

*Terri Clark, MSN, RN*

Assistant Professor RN-to-BSN Program

## **Appendix B**

### **Informed Consent Statement**

#### **INTRODUCTION**

The School of Nursing at Austin Peay State University (APSU) supports the practice of protection for human subjects participating in research. The following information is provided to help you decide whether you wish to participate in the present study. You retain the right to refuse to sign this form and not participate in this study. You should be aware that even if you consent to participate in this study, you may withdraw from this study at any time without consequence. If you choose to withdraw from this study, it will not affect your relationship with this department, the services it may provide to you, or APSU.

#### **PURPOSE**

The purpose of this study is to explore the role of employers of nurses in the Southeastern United States in a more educated nursing workforce through a mixed-method research study.

#### **PROCEDURES**

Participants will be asked eight demographic questions, eight multiple-choice questions, and three open-ended questions. The approximate time required for completion is 10 minutes.

#### **RISKS**

The risks associated with participation in this study are no greater than those encountered in daily life (e.g., time management, workload, multiple tasking).

#### **BENEFITS**

This study may benefit nurses, employers of nurses, and nursing regulatory boards regarding the pursuit of quality care for patients. The study may also inform the medical and academic communities on barriers faced by employers of nurses in providing a more educated nursing workforce.

#### **COMPENSATION**

Participants will not receive compensation for this survey.

#### **PARTICIPANT CONFIDENTIALITY**

Participants' data will be stored on a secure drive and destroyed one year after completion of the study.

#### **REFUSAL TO SIGN CONSENT**

You are not required to sign this Consent form, and you may refuse to do so without affecting your right to participate in any programs or events of Austin Peay State University or any services you are receiving or may receive from Austin Peay State University. However, if you refuse to sign, you cannot participate in this study.

## **CANCELLING THIS CONSENT**

You may withdraw your consent to participate in this study at any time. If you choose to withdraw from the study before data collection is completed, any collected data will be destroyed and not used.

## **QUESTIONS ABOUT PARTICIPATION**

If you have any questions about the procedures, you may direct them to the principal investigator, Terri Clark.

## **CONSENT**

I have read the above information and received a copy of this form. I have had the opportunity to ask questions regarding my participation in this study. I agree to take part in this study as a research participant.

By my signature, I affirm that I am at least 18 years old and a student at Austin Peay State University.

Participant's Name \_\_\_\_\_ Date \_\_\_\_\_

Participant's Signature \_\_\_\_\_ Date \_\_\_\_\_

## **RESEARCHER CONTACT INFORMATION:**

Terri Clark, Assistant Professor APSU School of Nursing

Email: [clarkt@apsu.edu](mailto:clarkt@apsu.edu)

Phone: (931) 494-4322

## **IRB Contact Information:**

Dr. Harold Young, Chair

Email: [irb@apsu.edu](mailto:irb@apsu.edu)

Phone: (931) 221-7881

## **Alternate Option for Electronic Consent:**

Entering your name below and continuing in this electronic survey will indicate your consent to participate in the study.

Participant Name: \_\_\_\_\_ (Press Continue Arrow)

## Appendix C

### Survey Demographics

**Gender:**

- ☐ Male
- ☐ Female
- ☐ Other \_\_\_\_\_

**Race:**

- ☐ White
- ☐ Black
- ☐ Asian
- ☐ Native Hawaiian or Pacific Islander
- ☐ American Indian or Alaska Native
- ☐ Hispanic Origin

**Enter Your Age** (as of April 1, 2021): \_\_\_\_\_

**Place of employment – Type of facility:**

- ☐ Hospital
- ☐ Long-Term Care
- ☐ Other \_\_\_\_\_

**Location of facility - Region of state:**

- ☐ West
- ☐ Middle
- ☐ East
- ☐ Other: \_\_\_\_\_

**Enter Years of Experience as a Nurse:** \_\_\_\_\_

**Highest Level of Education:**

- ☐ Diploma Degree
- ☐ Associate's Degree
- ☐ Bachelor's Degree
- ☐ Master's Degree
- ☐ Doctoral Degree

**Employment Title/Role:**

- ☐ Chief Nursing Officer (CNO)
- ☐ Nurse Manager
- ☐ Director of Nursing (DON)
- ☐ Vice President of Nursing (VP)
- ☐ Chief Nursing Executive (CNE)
- ☐ Other \_\_\_\_\_

## Appendix D

### Chief Nursing Officer Survey

**Distribution:** Qualtrics Link via email

**Qualtrics Link:** [Chief Nursing Officer Survey Link](#) (Mobile Friendly)

Numbering continued following informed consent and demographic information.

Q9 Is your facility part of a system?

☐ Yes

☐ No

Q10 Estimate the percentage of RNs currently prepared at the BSN or higher level at your facility/agency:

☐ 0-15%

☐ 16-30%

☐ 31-45%

☐ 46-59%

☐ 60-75%

☐ 76-90%

☐ 91-100%

Q11 Does your facility have goals or plans in place to increase the percentage of BSN and higher prepared nurses? (IF NO, SKIP TO QUESTION 7.)

☐ Yes

☐ No

*Skip To: Q7 If Q3 = No*

Q12 Does your goal include a specific percentage and target date?

☐ Yes

☐ No

Q13 Are your efforts targeted at specific group(s) of nurses? Choose all that apply.

☐

Managers

☐

Educators

☐

Clinical Experts

☐

Staff Nurses

Q14 Which of the following strategies is your facility/agency using to increase the number of BSN and higher prepared nurses? Choose all that apply.

☐

Require for initial hire

☐

Require completion of BSN within a defined time period from date of hire

☐

Limit promotions to RN with BSN or higher degrees

☐

Partner with an institution or agency to promote educational advancement (e.g., university, RIBN, AHEC)

☐

Require for current employees within a defined period

(continued Q14)

Indicate current incentives used to increase number of BSN and higher prepared nurses. Choose all that apply.

- ☐ Pay differential
- ☐ Tuition reimbursement
- ☐ Bonus at completion of BSN or higher degree
- ☐ Promotion or clinical ladders

Q15 Indicate organizational barriers to increasing number of BSN and higher prepared nurses. Choose all that apply.

- ☐ Insufficient funds for tuition reimbursement
- ☐ Insufficient funds for incentives
- ☐ Insufficient senior leadership support
- ☐ Scheduling/staffing barriers and issues
- ☐ Cap on tuition reimbursement
- ☐ Nurses do not perceive the value of achieving a higher degree
- ☐ Other

Q16 Does your facility or system currently have or is it pursuing Magnet® status?

☐ Yes

☐ No

**Please answer the following open-ended questions:**

Q17: How would you describe your facilities perspective regarding the educational requirements for nurses?

Q18: What barriers, if any, does your facility experience in supporting a more educated nursing workforce?

Q19: What recommendations, if any, would you provide to the National Council for the State Boards of Nursing (NCSBN) in support or opposition of a mandatory minimum bachelor's degree requirement for nurses?

**Custom End of Survey Message:**

100%

Thank you for completing this survey.

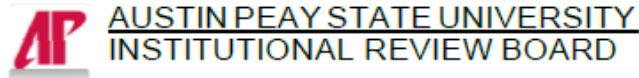
Your participation is greatly appreciated.

Any questions or concerns, please contact Terri Clark at [clarkt@apsu.edu](mailto:clarkt@apsu.edu).



## Appendix E

### Institutional Review Board (IRB) Approval



Date: 08/19/2021

**IRB 21-013**

Dear Dr. McConnell and Ms. Clark,

We appreciate your cooperation with the human research review process. This letter is to inform you that the study 21-013 was reviewed on an expedited level. It is my pleasure to inform you that your application to amend has been approved.

This approval is subject to APSU Policies and Procedures governing human subject research. The IRB reserves the right to withdraw approval if unresolved issues are raised during the review period. Any changes or deviations from the approved protocol must be submitted in writing to the IRB for further review and approval before continuing.

The approval remains for one calendar year and a closed study report or request for continuing review is required on or before the original expiration date of 03/03/2022. If you have any questions or require further information, you can contact me by phone (931-221-7059) or email ([youngh@apsu.edu](mailto:youngh@apsu.edu)).

Sincerely,



H.A. Young  
Harold 'Harry' Young

Chair, APIRB

## Appendix F

### Recruitment Emails and Scripts

#### Phase I Recruitment Email:

Dear Chief Nursing Officer,

Chief Nursing Officers serve a vital role in supporting RNs across our state. I am a Tennessee nurse, nursing faculty member, and doctoral student. I am asking for participation in my study to explore the role of the employer in a more educated nursing workforce. The information obtained in this study will be used to help inform employers of nurses, nurse regulatory bodies, and nurses on the perceptions of employers, including possible barriers, regarding a more educated nursing workforce in our state.

The entire survey should take approximately 10 minutes to complete. Your individual responses will be confidential. Results of this study will also be made available to research participants.

Instructions for participation in this study:

- When you click on the Qualtrics link below, you will be taken to the survey.
- Review the informed consent component within the link.
- Enter demographic information.
- Answer eight multiple-choice questions and three open-ended questions.
- If you have any questions regarding this study, please contact me, Terri Clark, [clarkt@apsu.edu](mailto:clarkt@apsu.edu), 931-494-4322.

To participate in the study click here:

[Chief Nursing Officer Survey Link](#) (Link is also mobile-friendly)

Sincerely,

Terri Clark, MSN, RN  
Assistant Professor  
RN-to-BSN Program  
Austin Peay State University  
[clarkt@apsu.edu](mailto:clarkt@apsu.edu)  
931-494-4322

**Phase II Phone Call Script:**

Hello, my name is Terri Clark. You may have received an email from me regarding participation in a research study. I am a Tennessee nurse, nursing faculty member, and doctoral student. I am asking for participation in my study. The entire survey should take approximately 10 minutes to complete. Could I have about 10 minutes of your time today?

The information obtained in this study will be used to help inform employers of nurses, nurse regulatory bodies, and nurses on the perceptions of employers, including possible barriers, regarding a more educated nursing workforce in our state.

Your individual responses will be confidential. Results of this study will also be made available to research participants.

If you have about 10 minutes, I can email you the link again now and then when you complete the survey. The survey includes the informed consent information, demographic questions, eight multiple-choice questions, and three open-ended questions.

I will email the again now. Can you confirm that I have the correct email for you?

Thank you so much for agreeing to participate in my study.

**Phase III Face-to-Face Visit Script:**

Hello, my name is Terri Clark. I am a Tennessee nurse, nursing faculty member, and doctoral student. I am looking for CNO's, like yourself, who would be willing to participate in my study. The entire survey should take approximately 10 minutes. Could I have about 10 minutes of your time today?

The information obtained in this study will be used to help inform employers of nurses, nurse regulatory bodies, and nurses on the perceptions of employers, including possible barriers, regarding a more educated nursing workforce in our state.

Your individual responses will be confidential. Results of this study will also be made available to research participants.

The survey includes the informed consent information, demographic questions, eight multiple-choice questions, and three open-ended questions. If I email you the link to complete the survey could you complete it now?

Thank you so much for agreeing to participate in my study.

## Appendix G

### Qualitative Findings

#### Transcripts of Qualitative Open-Ended Questions

Note: Selected examples provided below.

#### **Q17 - How would you describe your facilities perspective regarding the educational requirements for nurses?**

Because of the nursing shortage, we have moved to hiring any RN degree. Especially those with experience.

Advanced education is promoted and supported.

Our facility focuses more so on the leadership qualities and capabilities of our nurses as opposed to academic degree that is earned. Each nurse works within their respective scope, but leadership is attained by being a team player, experience, willingness to learn, and willingness to lead.

Our facility has a goal of achieving Magnet status one day. I am not within the walls of the hospital but am in an outpatient facility that is part of the hospital system. I don't feel I have been kept abreast of the plans/goals but I do know the hospital has been promoting continuing education by regularly advertising opportunities for on-line programs and other options to achieve your BSN. I have had several nurses in my unit obtain their BSN over the past 2 to 3 years and have been able to do so through the tuition reimbursement program. I do not think nurses are rewarded enough financially for achieving further education or certifications in their specialty. Several of my nurses have studied and taken the national exam for certification in their specialty. There is no financial reward for this at our facility.

#### **Q19 - What recommendations, if any, would you provide to the National Council for the State Boards of Nursing (NCSBN) in support or opposition of a mandatory minimum bachelor's degree requirement for nurses?**

I am not opposed to it but am concerned about the reduction in workforce this could cause. With so many community colleges offering the Associates degree in nursing at a reasonable price, I think it would have a negative impact on the # of nurses being produced each year if those programs were eliminated. The government needs to help make nursing school more affordable at the BSN level if people are going to be required to go that route to become RNs.

I support higher education for any nurse. I believe any nurse should be trained and educated to best provide care and services needed with a wholistic approach to residents(patients). I believe this to be beneficial especially for long term care/skilled nursing facilities where the patients released from hospitals to us are more acutely ill than ever before. They require more skills, monitoring and assessments than the typical little old ladies people think of when you say nursing home. Higher educated nurses could potentially identify and intervene more timely, avoiding hospital readmissions. However, with all of the constraints and mandates, and current staffing levels across the long term care setting, this would be nearly impossible for some smaller facilities due to the difference in RN level and LPN level pay requirements.

## Appendix H

### Coding in NVivo Report

Note: Selected examples provided below.

Name	Coded Text	Number Of Coding References
Advertise Education Opportunities	I do know the hospital has been promoting continuing education by regularly advertising opportunities for on-line programs	3
Advertise Education Opportunities	The company does assist with LPN transition to RN but is not widely advertised.	3
Affected by Pandemic	. Currently I believe with the pandemic, the push for this is on hold.	7
Affected by Pandemic	Because of covid there appears to be a nursing shortage and NHC Chattanooga is receiving record low nurses that are actually applying for jobs. Most hospitals and nursing facilities alike are using agency nurses to some capacity	7
Affected by Pandemic	Currently all new hires are required to have a BSN. However, this can be very limiting and pose a barrier to other demographics and hinder diversity in the workplace as all students do not have the same opportunities. With the current state of affairs with COVID we need to evaluate ways to	7
Affected by Pandemic	Educational requirements at this time is not a priority.	7
Affected by Pandemic	Entry level is acceptable because of the (national) nursing shortage, the pandemic, and the dismal state of nursing salaries in Tennessee	7
Affected by Pandemic	Right now with pandemic & COVID rising numbers, warm body is acceptable. Prior to COVID education for orientation, BLS ACLS.	7
Affected by Pandemic	We are finding that staff are not as interested during the past year in pursuing.	7









