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Relationships of Contextual Supports and Barriers in Choice Behavior for Associate Degree and Diploma Registered Nurses

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RELATIONSHIPS OF CONTEXTUAL SUPPORTS AND BARRIERS IN CHOICE BEHAVIOR FOR ASSOCIATE DEGREE AND DIPLOMA REGISTERED NURSES

by

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ABSTRACT

RELATIONSHIPS OF CONTEXTUAL SUPPORTS AND BARRIERS IN CHOICE BEHAVIOR FOR ASSOCIATE DEGREE AND DIPLOMA REGISTERED NURSES
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Currently, the majority of practicing registered nurses (RN) are associate degree in nursing (ADN) or diploma prepared, and the majority of ADN and diploma RNs do not return to school to get a BSN. Yet, there is increasing evidence that the educational level of a RN makes a difference in patient outcomes; having BSN RNs in a facility improves patient outcomes. Very little is known about effective strategies for ADN and diploma RNs to return to school. The Social Cognitive Career Theory (SCCT) contains a choice behavior model that could explain some of the supports or barriers for a RN to return for a BSN.

The instrument, BSN Choice Behavior, was used to measure the variables that explain some of the relationships of whether or not a RN will go back to school to get a BSN. Based upon the analysis of 343 ADN and diploma RNs, the results showed that some of the variables within the SCCT did correlate with a RN's intent to return to BSN School. Outcome expectations, efficacy, and contextual supports did result as significant predictors of intent to return to school. Additional research is needed to determine the difference between ADN and diploma RN choice behavior beliefs. However, findings from this study could assist with developing appropriate recruitment and supports for ADN and diploma RNs to return to school for a BSN.

Dedicated to my husband,
Benjamin H. Nash

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CHAPTER 1

INTRODUCTION

Background

Hospitalized patients have had increasingly more complex illnesses over the last several years. Patient acuity has continued to climb, adding to the already complex healthcare environment. Patients are hospitalized because they need 24-hour a day nursing care. Only recently have researchers investigated the types of nursing care that make a difference in patient outcomes. Researchers have examined many attributes such as caring and patient-centered care frameworks, all of which influence some patient outcomes. However, one factor where researchers have identified a relationship between patient outcomes and nursing care is related to the type of nursing degree obtained by the nurses caring for patients.

Aiken, Clarke, Cheung, Sloane, and Silber (2003) found that the greater the numbers of baccalaureate prepared nurses in the mix of nursing staff the better the patient outcome. This finding has been replicated in several studies (Estabrooks, Midodzi, Cummings, Ricker, & Giovannetti, 2005; Friese, Lake, Aiken, Silber, & Sochalski, 2008; Tourangeau & Tu, 2003; Tourangeau, Canley, & Jeffs, 2006; Tourangeau & Doran et al., 2006). Despite the growing evidence that Baccalaureate of Science in Nursing (BSN) nurses influence positive patient outcomes, the United States Department of Health and Human Services Health Resources and Services Administration (HRSA) reported that of the estimated 3,063,163 registered nurses (RN)s in the United States (U.S.) only one third begin their careers with a bachelor's degree in nursing (2010). Approximately 20% of the remaining RNs enter nursing with a diploma and the rest have an associate's degree in

nursing (ADN). In another long-term trend, fully 59% of all new graduates eligible to enter the nursing workforce in the year 2006 in the United States were prepared in two-year associate degree programs; slightly over one-third (38%) graduated from baccalaureate nursing programs; and eight percent graduated from diploma programs (National League for Nursing [NLN], 2007). In order to increase the numbers of BSN prepared RNs, the diploma RNs and ADN RNs must return to school. A survey from HRSA (2010) reported only nine to ten percent of ADN nurses return to school to get a BSN or higher degree. In other words, the majority of today's nursing workforce consists of associate degree (ADN) registered nurses (RN), and this is likely to remain the case. Although there are many chances to go back to school, few ADNs return to school.

Diploma schools of nursing are the original form of nursing education and these programs were directly connected to hospitals. However, diploma schools are not the majority of nursing schools today. The National League for Nursing Accrediting Commission (NLN-AC) has accredited 259 BSN RN programs, 617 ADN RN programs, and 59 diploma RN programs (NLN-AC, 2010). Associate degree nursing schools are the majority of the nursing schools in the U.S. To understand why the two-year nursing program, awarding an ADN, came into existence the changes in health care needs and higher education at the end of World War II (WWII) must be understood. After WWII, nurses were in high demand, and the U.S. was facing a huge nursing shortage. This was due to the advancement in management of various diseases, the expansion and upgrading of hospital facilities, and a growing number of U.S. citizens that had private health care insurance and could afford hospital care (Haase, 1990). Health care was changing from being in the home with family taking care of the sick, to more people being cared for

within the growing hospital facilities. However, the post WWII nursing shortage was not the only reason for ADN programs; there was a "reform movement in nursing that was intent on moving nursing education into the general system of American higher education" (Hasse, 1990, p. 3). In other words, there was a desire to make nursing education available to more U.S. Americans. By moving nursing education into an academic setting, both community colleges and four-year colleges and universities, the diploma hospital based programs began to disappear or convert to stand alone colleges of nursing.

The project to start ADN programs in the U.S. had two main purposes: one was to "define a new worker in nursing, the technical nurse," while the other was to "distinguish this nurse from other nurses by the scope of her practice" (Haase, 1990, p. 27). The intent of the ADN nurse was for her to function "somewhere between…the practical nurse and…the traditional professional nurse who was being educated in baccalaureate programs" (Haase, 1990, p.27). The ADN nurse was to fill the role of a technician or a skills nurse, as opposed to a professional, collaborative, critical thinking, baccalaureate level nurse. Registered nursing education originally started with hospital based nursing in the form of diploma nursing. It then dichotomized into an ADN (technical) RN or a BSN (professional) RN with different levels of nursing education. However, they were both licensed using the same licensure exam. Even though the original intent and the current educational emphasis are different for the two educational levels of RNs, most ADN RNs and BSN RNs are used interchangeably in most positions, mainly due to the licensure being the same for both categories of RNs.

In 1952, the National League for Nursing Education's (NLNE) Department of Measurement and Guidance described that the immediacy for a nationalized test came from post WWII shortages of nurses and safeguarding the well-being of the community from those who were not qualified to be nurses (NLNE Department of Measurement & Guidance, 1952). The "outbreak of the World War II immediately brought increased pressure on licensing authorities to license eligible candidates as quickly as possible after they had completed the basic program" (NLNE Department of Measurement and Guidance, 1952, p. 613). Thus, the intent of the licensure exam was to ensure the safety of the community by giving a license to those who had tested to have the knowledge to be called a nurse. In addition, it was a way to give one test for all nurses in the U.S. so that the nurses were held to the same minimal, acceptable standard.

The focus of the committee was starting the test, setting a minimum test score for safe practice, and promoting the ability to compare test scores across state borders for all nurses within the U.S. There was no mention of diversifying the national test or "the State Board Test Pool Examination" (NLNE Department of Measurement and Guidance, 1952, p. 613). The committee was celebrating the accomplishment of nursing as being the pioneers for standardizing testing for nursing within the United States and trying to safeguard the profession for the public (NLNE Department of Measurement and Guidance, 1952, p. 613). The committee did not focus on differentiating between the educational levels of nurses. Licensure was focused on setting a minimally safe competency of RNs. Had the licensure focused on the minimal competency for the various educational levels of RN, and not just safety, there might have been a different license for the different levels of RN education. Therefore, it is this author's opinion that

when ADN programs came about, it was during the time when national licensure was in its infancy and differentiation between the educational backgrounds for RNs was not addressed.

However, in 1965 nurse leaders were making a case for the role that better educated nurses could play in improving the care of patients. The Committee on Nursing Education (CONE) came out with a position paper in 1965 in support of nursing education being in the university setting (Committee on Nursing Education, American Nurses Association [CONE], 1965). Long before the position paper was written, nurses had argued that universities were the settings where the nursing profession could develop a knowledge base and a research agenda (CONE, 1965). The position paper was a statement about the need for nursing science and nursing research. This thrust was consistent with what the authors called … "the ultimate aim of nursing education and nursing service, which is the improvement of nursing care" (CONE, 1965, p. 111). Therefore, nurse leaders in 1965 were laying the framework for the contemporary practice of professional nursing.

Another component of the ADN and BSN RN background has been the cyclic shortage of RNs in the workforce. According to Buerhaus, Staiger, and Auerbach (2008) there are two ways to define the nursing shortage. One definition of the nursing shortage is the overall number of nurses in the workforce to meet the demands of society, while another is the distribution of the number of ADN versus BSN RNs within the workforce. Both of these definitions are affecting the current workforce of nursing. Even though there is some projection of stabilization of the nursing workforce, in terms of numbers of working RNs, the United States is currently in the middle of a nursing shortage that is

expected not only to continue through the next twenty years, but also to intensify each year. According to a report by the American Health Care Association (2008), more than 19,400 RN vacancies existed in long-term care settings and the American Hospital Association (2007) reported 116,000 open positions in hospitals. This brings the total estimated RN vacancies in the U.S. to more than 135,000. The Bureau of Labor Statistics, US Department of Labor (BLS) (2010) project that more than 581,500 new RN position will be created through 2018. This would increase the size of the RN workforce by 22 percent and RN employment is expected to grow much faster than many other professions (Bureau of Labor Statistics [BLS], 2010). This does not take into account the possible number of nurses who may choose to leave the nursing profession or decide to retire.

Buerhaus et al. (2008) found that even though there is an easing of the nursing shortage due to a current economic recession, causing RNs to return to or remain in full time work, the U.S. nursing shortage is projected to grow to 260,000 RNs by 2025. Even though this projection is less than previously reported five years ago, it is still significant. A shortage of this magnitude would be twice as large as any nursing shortage experienced in this country since the mid-1960's. Buerhaus et al. (2005) believe that a rapidly aging workforce is the primary contributor to the projected shortage. This finding is supported by the Bernard Hodes Group (2005) that found, of the nurses surveyed, 55% reported their intention to retire between 2011 and 2020. A survey of nurses in 2008 by HRSA found that nearly 45 percent of RNs were 50 years of age or older, which is a dramatic increase from 33 percent in 2000 and 25 percent in 1980. Auerbach, Buerhaus, and Staiger (2007) noted that this projection "continues to constitute a serious threat to

access and efforts to improve the quality and safety of health care" (p. 184). Buerhaus (2008) noted,

> "over the next 20 years, the average age of the RN will increase and the size of the workforce will plateau as large numbers of RNs retire…Because the demand for RNs is expected to increase during this time, a large and prolonged shortage of nurses is expected to hit the US in the latter half of the next decade" (p. 2423).

Therefore, even though there is a lesser shortage of nurses than previously thought, there is still the potential for a prolonged shortage of nurses as they grow older and are ready for retirement.

In addition to the overall nursing shortage, there is also a shortage of nursing educators. Little is known about nurse educator positions that are vacant. What data there are come from nursing association surveys. The vacancy rate of nurse educators for 2000 in baccalaureate nursing schools (BSN) was 7.4 percent (American Association of Colleges of Nursing [AACN], 2000). Nursing faculty vacancy rates continued to rise in 2006 to 7.9 percent and in 2007 to 8.8 percent (AACN, 2007). The AACN reported in 2009 that from 449 institutions, 814 (or 10.4%) nurse educator positions were vacant (AACN, 2009). This number somewhat decreased in 2010 to 6.8%, but in 2011 the nurse faculty vacancy rate was 6.9% in 2011 (AACN, 2012). Most of these schools pointed to a shortage of faculty as the primary reason for turning away students (AACN, 2012). The Southern Regional Education Board (SREB) (2001), reported a "serious shortage" of nursing faculty in sixteen states and the District of Columbia in 200. Due to the increasing number of new positions necessary for future enrollments, the SREB reported that the expanding need would increase to twelve percent (SREB, 2001). Despite the

lack of data collected about nursing education positions, what is known is that there are vacancies and that the nurse educator vacancies have increased in recent years.

Another aspect in today's profession of nursing is the disproportionate number of BSN to non-BSN prepared RNs. It was not until 2003 that RN educational level was specified in research studies in terms of patient outcomes. Studies have shown that there is a correlation between the number of BSN RNs and improved patient outcomes (Aiken et al., 2003; Estabrooks et al. 2003; Friese et al. 2008; & Tourangeau & Cranley et al., 2006; Tourangeau & Doran et al., 2006). Aiken et al. (2003) found that a 10% increase in the proportion of BSN nurses was associated with a 5% decrease in the likelihood of death (30-day mortality). Estabrooks et al. (2005) concurred with these findings that hospitals with a higher proportion of BSN RNs were associated with lower rates of 30-day patient mortality (95% confidence interval). Tourangeau & Doran et al. (2006) found that hospitals with higher proportions of BSN educated RNs tend to have lower 30-day mortality rates. It was found that a ten percent increase in BSN RNs were associated with nine fewer deaths for every 1000 discharged patients (Friese et al., 2008). Therefore, baccalaureate preparation of nurses may be an important aspect for the profession of nursing and patient mortality rates and outcomes.

There is also support for a correlation between BSN RNs and professional behaviors important to patient care, such as critical thinking (Brown, Alverson, & Pepa, 2001), creativity (Ku, Lo, Wang, Hsieh, & Chen, 2002), and professionalism (Phillips, Palmer, Zimmerman, & Mayfield, 2002). However, only approximately 16 percent of ADN and 24 percent of diploma nurses return to school to complete their BSN (Sprately, Johnson, Sochalski, Fritz, & Spencer, 2002). Of the 2.7 million practicing RNs in the

United States of America, 70.3 percent have an associate degree or diploma in nursing (Spratley et al., 2002). Associate degree RNs comprise 40.3 percent of the current practicing RNs, diploma RNs comprise 30 percent, and baccalaureate RNs comprise the other 29.7 percent of practicing RNs (Spratley et al., 2002). The current entry-level nursing school graduates are comprised of 60 percent ADN graduates, 37 percent BSN graduates, and 3 percent diploma in nursing graduates (AACN, 2009). It is obvious that the majority of the nurses currently practicing and graduating do not have a BSN.

Even though the majority of working RNs are not BSN prepared nurses, patients in today's healthcare system tend to be more complex. As knowledge, understanding, and treatment of diseases improves in the healthcare field, patients tend to live longer with more chronic and complex conditions. Registered nurses are expected to understand, care for, and maintain the health of sicker patients. In addition, higher ratios of BSN RNs have been shown to improve 30-day mortality rates (Aiken et al., 2003; Estabrooks et al. 2005; Friese et al.; 2008; & Tourangeau & Doran et al., 2006). Baccalaureate RNs have also been shown to improve communication, problem solving traits, and professional behaviors (Brown et al., 2001; Ku et al., 2002; & Phillips et al., 2002). All of these traits are needed for today's more complex patient.

As previously described, the original purpose for ADN RNs was not to fulfill the role of the BSN RN, but to be a technical nurse. Yet all RNs are categorized together in practice due to the same licensure. In addition, when there is a lack of baccalaureate prepared nurses, fewer nurses are qualified to move onto higher degrees. The less master's prepared nurses and higher there are, the less nurse educators there are to educate the next generation of nurses. The shortage of overall RNs, BSN RNs, and nurse

educators proposes difficulties in providing enough RNs for the needs of the society and for future generations.

In response to the lowered number of RNs many states have enacted legislation to support students becoming BSN RNs and RNs returning to school for a higher degree to become educators. For instance in 2009, senator Dick Durbin from Illinois introduced the Nurse Education, Expansion and Development Act (NEED Act), which gave grants, scholarships, and loans for nurses choosing to advance their degree in nursing (AACN, 2009). Also in February 2009, academic and healthcare leaders from 47 states gathered at the 2009 Nursing Education Capacity Summit to help identify and advance strategic solutions to the nursing shortage (Robert Wood Foundation, 2009). Many of the ideas have led to recruitment and support for the profession of nursing. Much of the legislation is in the form of financial support or loan repayment for students to become RNs or nurse educators. Examples of states where this legislation can be found include Illinois and Pennsylvania (AACN, 2009). In addition, many hospitals have loan repayment or scholarship incentives for their employees to get nursing degrees (AACN, 2009). Most of these incentives and legislation do not specify reimbursement based on level of education for the RN. Since 2002, Johnson & Johnson has supported the Campaign for Nursing's Future to help promote and support the image of nursing (Johnson & Johnson, 2009). All of the legislation and recruitment campaigns are intended to promote the profession of nursing in general.

One such initiative started in 2008 by The Robert Wood Johnson Foundation (RWJF) and the Institute of Medicine (IOM) for the profession of nursing to respond to the need for more affordable health care. One of the recommendations of this initiative

include that nurses should achieve higher levels of education (Institute of Medicine [IOM], 2010). It is the belief of the RWJF and IOM that nurses must achieve higher levels of education and training to respond to the increasing demands of more critical patients and to the demand for more affordable health care. To ensure nurses meet the demands of a more complex patient, nurses must be able to provide safe competent care that requires higher levels of education and training. Some of the traits that are needed for a higher level of care include "…leadership, health policy, system improvement, research and evidence-based practice, and teamwork and collaboration…"(IOM, 2010, p. 9). Therefore, to ensure the delivery of safe, patient-centered care across all settings, nurses must obtain higher levels of education to meet the demands of a more complex patient and health care system. The IOM recommends that the number of BSN RNs reach eighty percent of the workforce by 2020 from the approximate fifty percent of BSN RNs in the workforce as of 2010 (IOM, 2010). Since there are many ADN programs in the United States and there is a potential long-term shortage of nurses in the future, it makes no sense to eliminate ADN programs. This is why RN to BSN completion programs for ADN nurses can help with the target goal of eighty percent set by the IOM. Associate degree registered nurses can return to school to get a baccalaureate degree.

One area to improve the ratio of baccalaureate prepared RNs is to support and encourage current ADN and diploma RNs to return to school for a BSN. As previously described baccalaureate, prepared RNs have been shown to improve patient outcomes (Aiken et al., 2003; Estabrooks et al. 2005; Friese et al., 2008; & Tourangeau & Doran et al., 2006). Baccalaureate of science in nursing RNs have been shown to have more qualities that are needed for more complex patient care and management such as critical

thinking, communication, and professional behaviors (Brown et al., 2001; Ku et al., 2002; & Phillips et al., 2002). However, there seem to be few incentives for ADN or diploma RNs who return to get a BSN and there is a lack of research of the barriers and incentives for ADN or diploma RNs to return to BSN schooling. Therefore, it is important to understand personal factors that affect ADN and diploma RNs decision to go to BSN schooling. What benefits, barriers, and processes are related to an ADN or diploma RN going back to school for a baccalaureate degree? The research pertaining to BSN completion programs is very limited, and few of the studies have been replicated. In addition, much of that research is of RNs who are already in school or have completed BSN degrees. More studies are needed to identify variables that influence an ADN or diploma RN to return to school for a BSN.

Problem

There is an imbalance in the educational preparation of nurses. Yet there is increasing evidence that the educational level of a RN makes a difference in patient outcomes, and that having BSN RNs improves patient outcomes (Aiken et al., 2003; Estabrooks et al. 2005; Friese et al. 2008; & Tourangeau & Doran et al., 2006). The majority of the current working RNs are ADN and diploma prepared and the majority of ADN and diploma RNs do not return to get a BSN. In other words, there is a shortage of baccalaureate prepared RNs in the workforce. Thus, one aspect of not having enough BSN RNs is that ADNs and diploma prepared nurses do not go back to school to obtain their BSNs. There is a need to understand why ADN and diploma RNs do or do not return to school for a BSN. There are various definitions of shortage and there are even more methods with which to measure a shortage. In nursing, the definition of shortage

tends to be derived from society's overall demand for healthcare. One of the shortages in healthcare is the lack of nurses to meet the overall demand for healthcare and for the advancement of nursing as a profession. Second is the lack of BSN RNs. Since there is such an imbalance of working RNs that are ADN or diploma educated, it is important to study why nurses do or do not go back to school.

Theoretical Framework

One applicable theory to the study of why ADN and diploma RNs return to school for a BSN is Albert Bandura's theory of self-efficacy which is based upon social learning theory (Bandura, 1986). Social Cognitive Career Theory (SCCT) was derived from the theory of self-efficacy. Social Cognitive Career Theory is a framework for studying and understanding the interaction between person, environment, and behavior that influences people's academic and career choices and their performance outcomes (Lent & Brown, 1996; Lent, Brown, & Hackett, 2002). Social Cognitive Career Theory is one theory that can reasonably postulate the factors that influence an ADN and diploma RN's decision to complete a baccalaureate degree.

There are three divisions within the SCCT: career interest, career choice, and career performance. Lent et al. (2002) describe the career interest to be the relationship among the many variables that influence decisions made about possible careers. Career choice is the goal, actions, and performance that will support the choice for a specific career or decision to change a career (Lent et al., 2002). The last division or career performance describes someone who is currently within a specific career (Lent et al., 2002). The main variables to this division are past performances, self-efficacy, outcome expectations, performance goals, and performance attainment (Lent et al., 2002). For the

purposes of this study, career choice behavior is the division that is examined in terms of ADN and diploma RNs returning to schooling for a BSN.

It is emphasized that career choice behavior is a result of learned experiences, which also forms ones self-efficacy. Learning is achieved by a positive experience, called instrumental learning, a neutral emotional experience that is associative, or by watching others, vicarious learning (Bandura, 1986). Sources of self-efficacy include previous experience or accomplishments, accomplishments or the experience of others, positive and negative emotional arousal, and verbal persuasion (Bandura, 1986). It is one's perception of reality that is a greater hindrance to action than the actual reality of the environment. Often people do not take action that they know will help them achieve their goal. Bandura (1986) believes this to be related to one's feelings and belief in their ability to perform or finish the skill or task. His theory includes two components: self-efficacy expectation and outcome expectations, which are beliefs about whether behavior is likely to lead to a particular outcome and whether the outcome is worth pursuing. Even if one has the knowledge to perform a skill, it is their belief that they can do this skill correctly that leads to correct action. It is considered that one's belief about their ability is what spurs a person from knowing they can meet a goal to do an action to meet the goal (Bandura, 1986).

Bandura (1986) postulates that self-efficacy is not simply a belief in one's ability or estimations of future action, but appraisal of detriments or barriers to achieving a goal, behavior patterns to stressful situations, and emotional reactions to taxing situations. The combination of all these factors leads one to take proper action to achieve a goal, improper action to achieve a goal, or no action at all. Daily life is made up of continual

decisions about what course of action to pursue and how long to continue to pursue a goal or skill. Self-efficacy, whether it is accurate or incorrect, influences one's choice of activities and environmental settings (Bandura, 1986). People avoid activities that they believe are beyond their capabilities, but will undertake and strive for those they judge to be difficult but believe themselves to be capable of managing.

Bandura (1976) postulates that judgments of self-efficacy also determine how much effort one will apply to a task or goal. In addition, self-efficacy determines how long one will persist with a task or goal. When difficulties arise, those who have serious doubts about their capabilities will decrease their efforts or give up altogether, whereas those who have a strong sense of efficacy increase their effort to master a challenge. Yet, self-efficacy can affect performance effort and results differently. A little self-doubt stirs some people on to learning, but does not necessarily allow them to apply the action leading to attainment of the goal. Bandura (1986) believes this to be due to one's outcome expectations. If one does not believe they will do well at a goal or skill, or if their expectation is to be average only, that is what they usually will attain. Self-efficacy is not only the belief in one's ability, but it is also one's perceived difficulty of the skill or goal. Bandura (1986) believes that perceived high self-efficacy as a learner is associated with intense investment of cognitive effort and increased learning from material that is considered difficult. However, with material that is considered less difficult, learners use less effort and learn less.

In addition to self-efficacy, general social cognitive career theory includes the proposition that other personal variables, such as outcome expectations and personal goals, play important roles in helping people to guide their own behavior (Bandura, 1986,

1997). Outcome expectations are beliefs about the results of various courses of action, whereas goals involve one's determination or intention to pursue a particular course of action.

Social Cognitive Career Theory (Lent, Brown, & Hackett, 2000) proposes that career choice is influenced by the beliefs the individual develops and refines through four major sources: a) personal performance accomplishments, b) vicarious learning, c) social persuasion and d) physiological states and reactions (Lent et al., 2002). How these aspects work together in career development is through a process in which an individual develops the ability for a particular task and meets that endeavor with success. This process reinforces one's belief in future continued success in the use of this ability. As a result, one is likely to develop goals that involve continuing involvement in that activity. In addition, one narrows the scope to successful endeavors to focus on and form a career choice. What is critical to the success of the process is that the person believes they are successful and are offered valued compensation. The contextual factors influence the individual's perception of the probability of success. If the person perceives that there are few barriers, the likelihood of success reinforces the career choice, but if the barriers are viewed as significant, there is a weaker interest in this career choice.

As previously written, career interest reflects a time when a person is choosing a career field. Career performance is when a person is already in a career and whether or not they decided to advance and stay within that field. Career choice reflects when a person is in a specific career path. The career choice model considers the relationships among factors that may influence one's choice within a field (Lent et al., 2002). Contextual influences proximal to choice behavior reflect a person's environmental

conditions such as financial status or job opportunities that exist at the time that choices related to goals and actions are being made (Lent et al., 2002). In order to encourage RNs to return for their BSN, the best environment for learning is one in which the learner has a strong sense of efficacy to withstand failures along with some difficulties or challenges in order to increase effort of learning. Therefore, the discipline of nursing needs to become cognizant of the factors that support and challenge ADN and diploma RNs to return for a BSN. The SCCT theory, and in particular, the contextual influences proximal to choice behavior might provide information to assist in the encouragement and barriers of ADN and diploma RNs to return for a BSN. Therefore, SCCT is one theory that can postulate some of the variables that influence ADN and diploma RNs returning for a BSN.

Research Purpose

The purpose of this research study is to identify the relationships among variables that influence RNs' decision to obtain a baccalaureate degree in nursing.

Research Significance

Nursing is currently experiencing a shortage of nurses, especially baccalaureate prepared nurses. Baccalaureate preparation of nurses is an important aspect for the profession of nursing. Due to the increasing levels of chronicity and complexity of patients, more BSN RNs are needed. Research indicates that a lack of BSN prepared RNs in a facility are correlated with increased morbidity and mortality for the patients admitted to the facility. There is also indication that baccalaureate educated RNs use skills that are beneficial for the patient, such as critical thinking, creativity, collaboration, and professionalism. Yet, the majority of the RNs practicing in the field are associate

degree educated. With the current shortage of nurses and increasing complexity of the client, it is imperative that the number of RN's with a baccalaureate degree increases.

It is estimated that less than 10 percent of ADN RNs are returning to get their BSN (HRSA, 2010). Understanding what could impede or support an ADN or diploma RNs' decision to return to school would be beneficial for the nursing profession and to the quality of nursing care received by patients. The research pertaining to BSN completion programs is very limited and focuses predominately on ADN or diploma RNs already in school, and many of the studies have not been replicated. Therefore, it is important to understand the contextual supports and barriers that influence an ADN and diploma RNs' choice to return to school for a BSN.

Research Questions

1. What are the nursing academic self-efficacy beliefs, the contextual variables, and outcome expectations of associate degree and diploma registered nurses?
2. What is the relationship in self-efficacy beliefs, contextual supports and barriers, outcome expectations, and intent to return to school based upon demographics of the study participants?
3. What are the relationships among self-efficacy beliefs, contextual supports and barriers, and outcome expectations based upon the intent to return to school?
4. Which of the components of BSN choice behavior (BSN self-efficacy, BSN coping efficacy, BSN outcome expectations, BSN contextual supports and barriers) contribute the most variability of the intent to return to school?

Research Definitions

Choice is the decision to pursue a specific career (Lent & Brown, 2002).

Contextual means the social supports and barriers that pertain to the situation (Lent et al., 2005).

Contextual variables are synonymous with social supports and barriers.

Coping efficacy is one's belief about their ability to negotiate environmental obstacles within a given performance domain (Bandura, 1976).

Goal is a personal commitment to achieving a future action or status (Bandura, 1986).

Nursing academic self-efficacy is a person's belief about their ability to perform within the academic setting of a baccalaureate degree.

Nursing academic outcome expectations are the beliefs that the person holds regarding the outcomes of returning to or completing BSN schooling.

Outcome expectations are the beliefs of a person regarding the outcomes, benefits, and pitfalls that will occur due to academic behavior (Bandura, 1976).

Persistence is the continual action of doing a skill (Lent, Brown, & Larkin, 1984).

Self-efficacy is a person's belief in their ability to perform a task or action (Bandura, 1976).

Summary

This chapter explains the rationale for the ADN or diploma RN to return to school to complete a BSN. Based on the differences in educational levels, the BSN has been

shown to improve patient outcomes. Self-efficacy as defined by Bandura and Social Cognitive Career Theory as defined by Lent (provide a framework to study why ADN and diploma RNs do or do not choose to return to school (Lent Brown, & Hackett, 1994). Based on the information gained from this study, it may be possible to design BSN completion programs to increase ADN and diploma RN participation. Chapter 2 discusses in depth the concepts and ideas presented in this introduction.

CHAPTER 2

REVIEW OF THE LITERATURE

Bachelor of Science in Nursing (BSN) registered nurses (RN) have been shown to improve patient outcomes (Aiken et al., 2003; Estabrooks et al., 2005; Friese et al., 2008; & Tourangeau & Doran et al., 2006). However, most practicing nurses have an associate degree in nursing (ADN). One area that can increase the educational level of RNs is to support ADN and diploma RNs to return to school to complete their BSN. Within this chapter is an in depth explanation of why BSN level of preparation is important and current nursing literature regarding RN-BSN completion. In addition, within this chapter is information pertaining to the lack of BSN prepared nurses. The information about the shortage of baccalaureate nurses furthers the understanding of the issue surrounding RNs obtaining their BSN. There is then an explanation of Social Cognitive Career Theory (SCCT) in the chapter, which provides a framework to study ADN and diploma RNs' career choice to return to school to obtain a BSN. The last part of the chapter provides summarizes the theoretical and nursing considerations for this study.

Educational Preparation

Baccalaureate prepared nurses

Baccalaureate preparation for nurses is an important aspect for the profession of nursing. Studies have shown that there is a correlation between baccalaureate level nurses and improved patient outcomes (Aiken et al., 2002; Aiken et al., 2003; & Friese et al., 2008; & Tourangeau & Doran et al., 2006). There is also support for a relationship between BSN prepared nurses and professional behaviors important to patient care, such as critical thinking (Brown et al., 2001), creativity (Ku et al., 2002), and professionalism

(Phillips et al., 2002). However, in the year 2000 only approximately 16 percent of ADN and 24 percent of diploma nurses complete their BSN (Sprately et al., 2002). In 2001, it was reported of the 2.7 million practicing RN's in the United States of America (USA), 70.3 percent are RNs with an associate degree or diploma in nursing (Spratley et al., 2002). From a survey completed in 2008, it was found of those surveyed that associate degree RNs comprise 36.1 percent of the current practicing RNs, diploma RNs comprise 13.9 percent, and baccalaureate RNs comprise the 36.8 percent of practicing RNs (HRSA, 2010). In addition, it was found 45.4 percent of the nurses surveyed entered nursing at the ADN level and 34.2 percent were at the BSN level (HRSA, 2010). While there are differing reports of how many working RNs have a baccalaureate degree through the years, the limited data concerning the educational level of the nursing workforce would suggest that there is an increase in BSN RNs since 2001; however, from 2008 to 2010 the number has declined. Because the data are limited, there really is no clear picture of educational levels of the RNs working in the United States.

The current entry-level nursing school graduates are comprised of 60 percent ADN graduates, 37 percent BSN graduates, and 3 percent diploma in nursing graduates (American Association of Colleges of Nursing [AACN], 2009). According to another national survey of registered nurses done in 2008, approximately 45.5 percent of registered nurses received ADN as an initial education into the nursing profession (HRSA, 2010). Only 34.2 percent entered the profession with a bachelor's or higher degree (HRSA, 2010). In the same survey of those with an initial ADN education, only 9.4 percent had achieved a higher degree than the original ADN received when first

entering the profession (HRSA, 2010). It is obvious that at the very least one-half of the nurses currently practicing and graduating do not have a BSN.

RN-BSN Completion

Much of the literature pertaining to RN-BSN is neither comparable nor congruent. Most the same variables have not been measured in the various studies and most of the studies have not been replicated. Some studies examine role strain while others study the characteristics that support and inhibit returning to school. However, it is important to examine what has been studied about RN-BSN students in order to understand what is known about this nursing population.

Rendon (1988) examined in a correlational study the degree of congruence between the interpersonal orientation of the RN student in a BSN program and their perceptions of the student role. The theoretical framework for this study examined self-role congruence. Self-role congruence was defined as "the degree of overlap or fit that exists between requirements of a role and the perceived qualities of the self" (Rendon, 1988, p. 172). In essence, role congruence was defined as enjoyment, involvement, and commitment to the student role. The author used Cohen compliant, aggressive, and detached (CAD) Scale that measured interpersonal orientations. This scale was based on the psychoanalytical theory of Karen Horney and measures an individual's self-concept and predominant mode or style of response to others. Findings of this study revealed that RN students with relatively high compliant interpersonal orientations experienced congruence and those students with aggressive or detached orientations experienced incongruence in the student role. In order for BSN completion students to orient to their role the author suggested anticipatory guidance sessions prior to entering the BSN

degree. In other words, RN-BSN students need to be oriented to the changes in their role as a BSN student so that they will be successful completing their BSN degree.

Lengacher (1993) identified individual characteristics that could predict and explain role strain in a RN returning to school for a baccalaureate degree. Personality traits, stage of career development, and marital status were assessed as predictors of role strain. Personality traits were assessed by Comrey Personality Scales, and stage of career development was assessed by the Career Concerns Inventory. No one definition of role strain was given in the finding of this study. However, the author assessed role strain by the Lengacher Role Strain Inventory. The personality traits of distrust, lack of energy and neuroticism and stages of exploration and establishment of career development were shown to be significant predictors of role strain for RN-BSN students. Marital status was not shown to be a significant predictor of role strain in this study. This study is beneficial because it can contribute to an understanding of possible academic behavior for RNs and possible predictive role strain for RNs coming back to school. If these findings are reliable, advising and coping strategies can be developed to entice students to return to BSN School.

Rather (1994) examined the meanings in the lived experience of RNs returning to school for their baccalaureate degree. Interviews were conducted of 15 students from three different schools in this phenomenological study. The theoretical framework resulting from the study was from Paulo Freire (Rather, 1994). Rather (1994) explained that Freire's focus was on what he called pedagogical oppression. Pedagogical oppression is the process of one person's choice being imposed upon another person. This action transforms an individual's consciousness and brings it in line with the

oppressors. Therefore, prescription of thoughts, values, and behavior is the basic element of oppression. The view of the participants in the study was that their experiences were not valued, nor seen as beneficial for BSN schooling. Many participants reported that faculty assumed that they did not understand all of the concepts that were being presented, when in fact they were understood by the participants. The author suggested that faculty should allow students to reflect upon experiences in order to allow students to improve their understanding of becoming a BSN prepared RN.

All of these studies (Rendon, 1988; Lengacher, 1993; & Rather, 1994) give beneficial information about possible experiences, and barriers that can occur for RN students while in BSN schooling. With this information, BSN completion programs can orient, prepare, and advise students coming into a BSN program. The results of these studies can be shared with students and faculty so that they can understand some of the differences between a basic undergraduate BSN student and a BSN completion student. One of the issues within all of the studies is that the sample or participants of the studies consist of students who are already in BSN completion School. The researchers of these studies do not address the driving factors or barriers of the decision making process of RNs coming into a BSN program. Another problematic issue is that three different theoretical frameworks were the basis of the studies. Due to the three very different frameworks for their studies, the researchers examined a variety of factors that are part of the transition of when a RN comes to a BSN program. The final problem is that this author also did not find any confirmation of these findings in later studies. In essence, no other studies were found to support these results.

Therefore, implementing any changes or advising for entering BSN students based on the suggestions of these studies might be premature. Since there is a lack of consistent findings about RN-BSN completion education and the supports or barriers that can influence one's decision to go back to school, there is a great need to understand the supports and barriers that influences one's choices to go back to BSN school.

Other studies examined the experiences, perceptions, and barriers of RN-BSN students while in school. Lillibridge and Fox (2005) examined the impact that degree completion had on the personal and professional lives of RNs enrolled in a baccalaureate program. The researchers identified six themes of change that the participants described. They included having an edge for career advancement, not fitting in with basic students, need for support especially from peers, looking at things differently or seeing the bigger picture, developing new thinking skills, and becoming a change agent. In addition, the growth of knowledge for the RNs, gaining a more global perspective, and finally, having a feeling of personal accomplishment were identified. The authors suggested that while RN-BSN school can be difficult, the participants of this study found it worthwhile and that they gained new knowledge (Lillibridge & Fox, 2005).

Zuzelo (2001) examined the concerns and priorities of RNs seeking a baccalaureate degree as well as the impact that this education had on their nursing practice patterns. Thirty-five RNs students were interviewed. Findings revealed that accurate academic advisement, curriculum flexibility, and computer technology were important to RN-BSN students of this study. RNs were concerned about the demands of the changing health care environment, meeting multiple and competing role demands, and meeting the financial demands of school. Study findings demonstrated that the nurses

believed they were more holistic and aware of cultural diversity. The students better understood the influence of research on practice and described themselves as better communicators. They did not see the changes in their direct relationships with patients. The author suggested that nursing school deans, administrators, and faculty should offer opportunities for RNs to develop skills in assertiveness, problem solving, and communication. In addition, the author suggested that RNs need time to reflect and adjust to their new role as a BSN, and time to incorporate their new knowledge into their practice.

Trainor (2000) examined the work environment as a factor in persistence or non-persistence of RNs in completing their baccalaureate degree. Findings revealed that many students did not continue because of family, work, and financial factors. The study also showed that the students did not continue when work was novel and fresh but remained in school when work was stressful. The author suggests that when RNs wanted change in their life, they persisted in school. However, when RNs were content with their work, they tended to not return to school or persist in school.

Delaney and Piscopo (2007) explored and described in their phenomenological study the experience that ADN and diploma nursing graduates have when transitioning from an ADN/diploma prepared RN to a BSN prepared RN. Twelve nurses were interviewed to describe the lived experience of transitioning from ADN RN to BSN RN. Eight themes were described from the interviews. They included that the RNs had varied expectations coming into school. Some believed that they already knew nursing. Others felt overwhelmed. All were very tentative at the beginning of their BSN completion programs. Many had main courses that changed of their way of thinking. These courses

were usually research or theory development. Most noted an internal change of worldview and a change of actions and perspectives for healthcare team members. As the nurses changed internally, they interacted with others with more leadership and determination. Many described challenges that they faced while in school and that they had to overcome them in order to progress. The challenges included registration and course flexibility issues, and support issues from co-workers and at home support. Almost all of the RN students described that the greatest benefit to returning to BSN schooling was the ability to understand the bigger picture of patient care and of the discipline of nursing. The last theme described by the students was that having a bigger picture of nursing transformed their practice and care of patients. Many described themselves as having been task oriented and now being more patient focused. The authors believed that the most common and changing theme for the students was the ability to see the bigger picture.

In a phenomenological study of six RN-BSN students by Megginson (2008), there were five themes emerged as barriers for RN-BSN students. Issues related to time were cited among all the participants as the main barrier to returning to school. Many students had family commitments, childbearing, and childrearing duties that interfered with obtaining a BSN. Also within the category of time constraints was program and work schedule conflicts. Overall, the lack of time for school was a common response of a barrier to pursuit of a BSN. A second theme found was that fear was a major barrier to returning to school for RN. Three forms of fear were found consisting of the following: "(a) fear of returning to an academic setting; (b) fear related to negative ADN or diploma school experience; and (c) fear of technology" (Megginson, 2008, p. 52). Many of the

participants emphasized the fear of being unable to pass or retain class information. The fear of technology was also a factor that students believed would interfere with the ability to obtain information and do class assignments. Since ADN and diploma schools do not require students to write papers as much as BSN school, many believed they did not have the ability to write a paper. Many of the RNs reported it was not only the fear of reliving ADN/diploma schooling, but also the belief that there would be no support for them, much as it was in their previous schooling. Some of the negative past experiences with RN school delayed many of the RNs from returning to school, for fear that BSN would be like ADN or diploma school. Many had an arduous experience with obtaining their RN and did not want to have to go through that difficult experience again.

Participants relayed another barrier to Megginson (2008) consisting of not receiving credit for educational and life accomplishments. Many did not receive credit for classes that were previously taken. This extended the time to complete a BSN, and financially strained the RNs due to having to retake and repay for classes already taken. Participants also felt that their experience as a RN was not recognized by academic institutions. Therefore, when the academic area of nursing did not recognize the RNs education or clinical accomplishments it delayed the participant's ability to return to school.

The last barrier found by Megginson (2008) was that there was not enough recognition and differentiation in the work place between ADN/diploma RN and BSN RN to warrant going back to school. All of the participants reported that there was little difference in pay, position, and ability to improve their position than that of the RNs without a BSN. Many had very strong feelings that institutions did not support and even

inhibited their ability to go back to school. Most of the participants viewed the equal treatment of ADN/diploma and BSN RNs as a "…warning to not waste time and effort returning for a BSN" (Megginson, 2008, p. 53). Thus, most RNs believed there to be many barriers (lack of finances, lack of support, fear of returning to school, and recognition) to returning to get their BSN.

Another aspect of RN-BSN schooling is the perceptions of RNs who have yet to enter BSN schooling. Very little research has been done pertaining to the incentives and barriers of returning to school for ADN and diploma nurses before entering BSN schooling. However, from the little research that has been completed there seems to be a theme that is consistent with much of the research for students already in school and with the students perceived barriers and incentives not yet in baccalaureate level schooling. Delaney and Piscopo (2004) in an earlier phenomenological study of 101 practicing RN's who graduated from ADN or diploma programs found that many RN's had other priorities that lead them away from returning for their BSN. The greatest barriers identified were multiple role demands. Most described that the demands of work and family interfered with going to school. Although, many of the ADNs and diploma nurses recognize that getting a BSN will improve personal development and professional growth, many did not get a BSN due to lack of support, lack of recognition by employers, difficulty in finding time, little financial resources, and inflexible class schedules. The author's understand that the current nursing shortage and abundance of work for RNs may change RNs perceptions that BSN completion is a priority. However, the authors suggest that BSN completion programs become more flexible to meet the needs of the students. With flexibility, the perceptions of returning RNs could be changed positively

towards BSN completion. Therefore, if RNs attitudes about BSN schooling improved, the percentages of RNs returning to school also could increase.

Summary of the literature

The current literature provides evidence that many of the RN-BSN students had similar barriers and benefits to returning to school. The evidence from the research supports that baccalaureate education improves professionalism (Delaney & Piscopo, 2007) as well as facilitating personal and professional growth (Delaney & Piscopo, 2007; Lillibridge & Fox, 2005; & Phillips et al., 2002). Some results showed an improvement in creativity for BSN completion students (Brown et al., 2001). Many studies have shown that the discipline of nursing needs to address the barriers for an RN to obtain a BSN (Clark et al., 2004; Delaney & Piscopo, 2004; Megginson, 2008; Trainor, 2000; & Zuzelo, 2001). Many of the barriers that were reviewed were tangible such as finances and inflexible class scheduling. However, more of the barriers are intangible such as time, fear, and prior negative experiences with ADN or diploma RN school.

The results of the studies emphasize the importance of developing programs that meet the unique needs of the BSN completion population, and indicates a need for further research to see what interventions actually improve the process for RN-BSN students. Although many ADN/diploma RN programs begin with a "professional nursing" course in which values of nursing are addressed, such entry courses in ADN programs tend to focus more on nursing skills that must be learned rather than on the values and beliefs of the profession. Beginning nursing students in either ADN or diploma schools do not have the emphasis of professionalism to illuminate the professional values of the discipline. This is due to BSN programs dedicating separate classes that specifically examine in

detail the subject areas of transcultural nursing, pathophysiology, management/leadership traits, theory development, research in nursing, and complex medical-surgical nursing. BSN completion schooling is the environment in which these RNs can gain much needed understanding of the professional values of nursing. Evidence supporting the results of gained professionalism, increased knowledge of the discipline, improved communication, and increased personal growth in BSN completion schooling is growing (Clark et al., 2004; Delaney & Piscopo, 2007; Kubsch et al., 2008; Lillibridge & Fox, 2005; Megginson, 2008; Morris & Faulk, 2007; Trainor, 2000; & Zuzelo, 2001).

Workforce Needs

Need for BSNs

Within this section of the literature review there is an explanation of the need for baccalaureate prepared nurses. The relationship between patient safety and nurse educational levels has implications for current and prospective nurses, facilities, nurse educators, and for policy makers. Some of the literature examines other professional qualities of BSN nurses that are needed for more complex patient care. Therefore, this section summarizes findings pertaining to the relationship between nurse educational levels, professional characteristics, and patient safety.

Some researchers examining BSN completion students studied changes in creativity, professionalism, and other benefits to RNs receiving their BSN. Brown et al. (2001) examined the influence of baccalaureate education on critical thinking abilities of traditional, RN-BSN program, and accelerated students. Students completed the Watson-Glaser Critical Thinking Appraisal (WGCTA) at the beginning and at the end of their nursing course sequence. This was an 80-item self-administered instrument and contained

five subsets of inference, recognition of assumptions, deduction, interpretation, and evaluation of arguments. Findings revealed a significant difference in pretest and posttest scores for traditional (p=.007) and RN-BSN program (p=.029) students but not for accelerated students who had already received a bachelor's degree. Although the students came from the same baccalaureate-nursing curriculum, only the students from the traditional and RN-BSN pathways demonstrated a significant increase in critical thinking ability. The researchers concluded that further research was needed to determine the best course mix to facilitate critical thinking. These findings are inconsistent with those of a similar study conducted by White and Gomez (2002), who found no significant difference on two measures of critical thinking with 19 RNs at the beginning and at the end of a baccalaureate degree. Therefore, there is a lack of and inconsistent support that achieving a baccalaureate degree improves critical thinking.

Many more researchers have examined professionalism or professional values of RNs who have proceeded onto their BSN completion programs. Kubsch et al.(2008), examined the perceptions of professional values of 198 RNs. The authors compared their level of nursing education and other potentially influential factors to affect professional values. The theoretical framework for this study was Hall's Care, Cure, and Core theory . In this theory, there are three circles to nursing. In the care circle, the nurse provides intimate bodily care. In the cure circle, the nurse functions collaboratively with the physician and other health care team members. Both the care and cure circle are emphasized in ADN and diploma programs. However, the core circle that calls attention to the social, emotional, spiritual, and intellectual needs of the family, community, and world and the therapeutic use of self is ignored. In the core circle, the nurse works with

the patient professionally, rather than technically, and it is the essence of professional nursing that is practiced by the educated nurse (Kubsch et al., 2008). The findings of this study supported Hall's Care, Cure, and Core model in that those nurses with higher levels of education scored higher on perceived professional values (Kubsch et al., 2008). The highest level of perceived professional values was found among RN-BSN students.

Phillips et al. (2002) examined professional development as RNs progressed through their program. Students completed the Professional Development Self-Assessment Matrix at the beginning and at the end of the program. This measurement tool addresses the four levels of professional development and competencies within each of these four levels. An analysis of 223 entering and 168 graduating RN students were significantly higher ($p=.001$) on all five professional development dimensions than the pretest scores. The authors emphasized the need for nursing to be at a BSN level so that the RNs understand professional values of the discipline.

Clark et al. (2004), also interested in the concept of professionalism, asked whether RNs who graduated from a degree completion program have the same professional socialization as do graduates of a generic nursing program. Autonomy was noted as a mark of professionalism and was measured by the author on the Nursing Activity Scale developed by Schuteznhofer. Both groups had similar mean scores in the "higher level of professional autonomy" on the tool (Clark et al., 2004, p. 349). Clark et al. (2004) concluded that the socialization of generic baccalaureate students and the resocialization of RNs into the professional role were effective in the participating programs. Thus, baccalaureate nursing is the level at which nursing understands, exemplifies, and promotes professionalism.

Morris and Faulk (2007) examined whether there were resultant behavioral changes in professionalism for returning adult RN-BSN students and identified teaching-learning activities that stimulate transformative learning. The theoretical framework of the study was based upon Meizrow's adult learning theory. Meizrow postulated that adult learning results from transformation of perspective in response to unexpected events. Prior beliefs and old ways of thinking are examined when unexpected events or disorienting dilemmas occur in educational situations. Critical reflection is triggered and leads to insights or alternative ways of thinking. This results in increased self-understanding and frees individuals to change and internalize new ways of thinking. Twenty-six learning activities were identified as creating conflict of values. The researchers found three months after graduation that RN-BSN students had increased collaboration with the health care team, increased patient advocacy, and increased confidence in the role as a teacher of patients and families. In essence, the researchers found that returning to BSN school transformed RNs professional conduct.

Current RN supply

This section of the literature reviews the overall nursing shortage and the impact a shortage of nurses can have on patient safety and outcomes. The section begins with projected changes in the RN supply. The nurse educator shortage is addressed in relation to the ability of colleges and universities to educate the number of nurses needed in the workforce. The final portion of this literature review examines the disproportionate number of BSN RNs to non BSN RNs working in the field.

Nursing understaffing is ranked by the public and physicians as one of the greatest threats to patient safety in US hospitals (Blendon et al., 2002). Aiken et al.

(2002) noted that in a study of 168 Pennsylvania hospitals that each additional patient added to the average workload of staff RNs had increased the risk of death following common surgical procedures by 7%. In addition, Aiken et al. (2002) found that the risk of death was more than 30% higher in hospitals where nurses' mean workloads were eight patients or more each shift than in hospitals where nurses cared for four or fewer patients. These findings are concerning given the current nursing shortage that has been occurring in the U.S. Therefore, it is important to examine the shortage of nurses due to its impact on the health of the public. In addition, it is important to examine the shortage of nurse educators due to an inability to educate the next generation of nurses. When there are not enough nurse educators for the number of viable nursing student candidates, the future of the nursing profession and the ability to keep up with the demand for healthcare is in danger.

The Health Resources and Services Administration (HRSA) released projections in 2006, that the U.S.'s nursing shortage would grow to more than one million nurses by the year 2020. The analysts also projected that all 50 states will experience a shortage of nurses to varying degrees by the year 2015 (HRSA, 2010). However, the current economic downturn in the U.S. has led to a stabilization of the nursing shortage in portions of the country. Buerhaus (2008) suggests many factors have led to the easing of the nursing shortage, which include:

- The poor economy has brought many nurses out of retirement and back into the workforce.
- The nurses who were going to retire have decided to remain in their current positions

- The nurses who were working part-time are now working full-time. Many of these nurses work overtime or extra shifts to provide financial support for their families that are struggling with the current economic downturn.

According to a study done by HRSA in 2008, the number of RNs who were 50 years of age or older increased to nearly 45 percent. This is an increase from 33 percent in 2000 and 25 percent in 1980 (HRSA, 2010).

In addition, the American Hospital Association reported in November 2007 that fewer patients are being treated and admitted to hospitals. The belief is that patients are delaying procedures or not seeking care due to the cost of health care and the loss of health insurance. Due to the loss of patient care, some hospitals are downsizing or having hiring freezes, which could result in more RNs seeking employment in other facilities. Thus stabilizing the number of open vacancies for nurses.

Despite the current easing of the nursing shortage because of the U.S. recession, Buerhaus et al. (2008) also projects that the nursing workforce shortage in the U.S. will plateau in 2015, but will continue through 2025. The nursing shortage in the U.S. is still expected to grow anywhere from 260,000 to 500,000 by the year 2025 (Buerhaus et al., 2008). This could lead up to a 40% RN vacancy rate nationwide and is a shortage that is twice as large as the shortage experienced in this country in the 1960's (Buerhaus, 2008). The overwhelming reason for the plateau of the nursing shortage is due to the aging workforce staying or returning to nursing. However, the aging workforce is also the reason for the shortage because the aging nurses will not be able to continue to work at their current pace and will start needing more health care as they eventually retire and get older.

Even though earlier projections predicted greater shortages, there is still a nursing shortage in the U.S. According to a report by the American Health Care Association (2007), more than 19,400 RN vacancies exist in long-term care settings. In addition, the American Hospital Association (2007) reported 116,000 open RN positions in hospitals, which brings the total RN vacancies in the U.S. to more than 135,000 positions. This translates into a current RN vacancy of 8.1%. According to the projections from the Bureau of Labor Statistics, U.S. Department of Labor (BLS) published, more than one million new and replacement nurses will be needed by 2016 (Bureau of Labor Statistics, U.S. Department of Labor [BLS], 2010). The BLS (2010) also projects that more than 587,000 new nursing positions will be created through 2016, which will make nursing the nation's top profession for projected job growth.

In other words, the U.S. is still in a nursing shortage. However, this shortage is expected to plateau. One study, according to Buerhaus (2008) reveals, "Over the next 20 years, the average age of the RN will increase and the size of workforce will plateau as large numbers of RN's retire. Because the demand for RNs is expected to increase during this time [due to the aging population], a large and prolonged shortage of nurses is expected to hit the U.S. in the latter half of the next decade" (p. 2423).

Nurse Educator Supply

Not only is there a nursing shortage but there is also a nursing educator shortage. According to Buerhaus et al. (2008), there is little data concerning nursing educators. Most of the data comes from nursing association surveys. The American Association of Colleges of Nursing (AACN, 2007) reported that there was in the year 2000, a vacancy rate of nursing faculty in baccalaureate nursing school's (BSN) of 7.4 percent. A study by

the Southern Regional Education Board (SREB, 2002) reported a "serious shortage" of nursing faculty in 16 states and the District of Columbia. When this is combined with the new positions that are needed to accommodate the needed enrollment increases to deal with the nursing demand, the SREB reported that there would be, a 12 percent gap in the number of nursing faculty needed (Southern Regional Education Board [SREB], 2001). The AACN reported in 2006 that vacancy rates increased to 7.9 percent and in 2007, the vacancy rate increased to 8.8 percent (AACN, 2007). AACN (2009) reported data for 2008, which showed that 27,771 qualified applicants were turned away from entry-level baccalaureate nursing programs based on responses from 406 institutions. Most of these schools pointed to a shortage of faculty as the primary reason for turning away students (AACN, 2007). The Carnegie Foundation in 2006 surveyed approximately just over 25 percent of the nation's nurse educators (Kaufman, 2010). It was found that 48 percent of nurse educators were 55 or older (Kaufman, 2010). This finding is alarming as it is assumed that the nursing educator shortage will intensify as the existing nurse educator workforce reaches retirement age.

As previously pointed out, a nurse educator has to have at least a masters in nursing (MSN) and a majority of working nurses do not even have a BSN. This discrepancy between the educational levels would lead one to believe that the nurse educator shortage will be even worse without more nurses getting a BSN and continuing on to a MSN. One way to increase the number of BSN RNs is to have ADN and diploma RNs return to school for a BSN. The data collected about nursing education positions reflects that there are vacancies and that these vacancies have increased in recent years. Other data has suggested that a number of nurse educators will soon be of retirement age.

A way to improve the numbers of nurse educators and improve patient outcomes for patients is to encourage ADN and diploma RNs to further their education, which includes first getting a BSN.

In summary, there is a shortage of BSN prepared nurses working within the field. A lack of BSN prepared nurses leads to a lower number of masters prepared nurses or higher who could potentially become nurse educators. An increase in nursing educators is needed to help with the overall shortage of nurses and with the shortage of BSN nurses needed for the complex care of current patients. Since most graduates and working nurses are ADN prepared, a feasible way to increase the number of BSN prepared nurses is to support and understand the incentives and barriers for a RN-BSN completion student.

Social Cognitive Career Theory

As previously presented, identifying variables related to supports or barriers for ADN and diploma RNs returning for a BSN is an important understudied aspect of increasing the number of BSN RNs in current practice. One focus in nursing is to increase the number of BSN prepared RNs to meet the demands of more complex and chronic states of clients. In addition, receiving a baccalaureate degree is the first step to higher degrees in nursing. Getting a masters or higher degree in nursing allows more nurses to become nurse educators, which are greatly needed to replace the approximately 48 percent of nurse educators who will be retirement age over the next ten years (HRSA, 2010). The intent is to understand and support ADN and diploma RNs in order to complete a BSN. The Social Cognitive Career Theory (SCCT) provides a theoretical framework that might identify the factors that affect ADN and diploma RNs returning to school to get a BSN. In particular, the SCCT's choice behavior model has been tested in

relation to what influences one's choices in one's career. To understand the choice model and the variables within the model, it is important to exam Albert Bandura's Social Learning Theory (Bandura, 1976).

Bandura's Social Learning Theory (Bandura, 1976), which was renamed the Social Cognitive Theory (SCT) (Bandura, 1986, 1997), is a model for studying the influences that the individual, the environment, and cognitive factors have on an individual's decisions and behaviors. Bandura (1986) proposed that self-efficacy was the main variable related to behavior initiation and persistence within one's decisions and behaviors. Outcome expectations, performance, incentives, and environmental support are secondary influencing variables on an individual's decision (Bandura, 1986).

Social Cognitive Theory was used primarily with learning behaviors and one's ability to study and persist in academics. However, Hackett and Betz (1981) proposed that there was a link between career development and SCT. Hackett & Betz (1981) emphasized that career decisions were related to levels of self-efficacy. This initial work lead to the development of what is known as Social Cognitive Career Theory (SCCT).

Of particular interest for this study are the concepts in SCCT that identify variables and relationships that affect academic and career interest development, performance, and choice (Lent & Brown, 1996; Lent et al., 2002). The main variables of SCCT are self-efficacy, outcome expectations, and goals (Lent & Brown, 1996). This core of the framework for SCCT came from Bandura's SCT, and was considered the core of a person's career development and choice of direction in their career (Lent & Brown, 1996).

Self-efficacy is a person's belief about their ability to perform a specific action. Bandura (1976) theorized that self-efficacy is developed through past performance accomplishments, vicarious learning, verbal support, and emotional awakening. This belief is not necessarily dependent upon a person's ability to perform the task. Yet, it can be affected by the person's actual skills or abilities, and is a representation of a person's sense of ability to perform all of the skills needed to perform the action or activity. Self-efficacy is area specific and varies by level of difficulty, generality (meaning limited areas of focus to wide range of focus), and one's strength or weakness in the action. Accuracy of one's belief in their ability can be affected by self-reflection of past experiences. These reflections can result in a biased false negative or positive assessment of one's ability (Bandura, 1986). As a result, self-efficacy changes based on a person's experiences, personal accomplishments, vicarious learning, social persuasion, and physiological and emotional states (Bandura, 1976, 1997; Lent et al. 2002).

Outcome expectations are "personal beliefs about the consequences or outcomes of performing particular behaviors " (Lent et al., 2002, p. 262). An outcome is the result of an action, but is not the action itself (Bandura, 1986). Outcome expectations include "extrinsic reinforcement (tangible rewards), self-directed consequences (pride), and outcomes derived from the process of performing given activity (absorption in the task)" (Lent et al., 2002, p.262). Outcome expectation is like self-efficacy, in that both are derived from learning experiences. In addition to learning experiences, outcome expectation also is influenced by the person's perceived self-efficacy (Lent et al. 2002). However, in outcome expectations one observes and reflects upon the rewards others receive for past performances, the personal understanding of one's own accomplishments

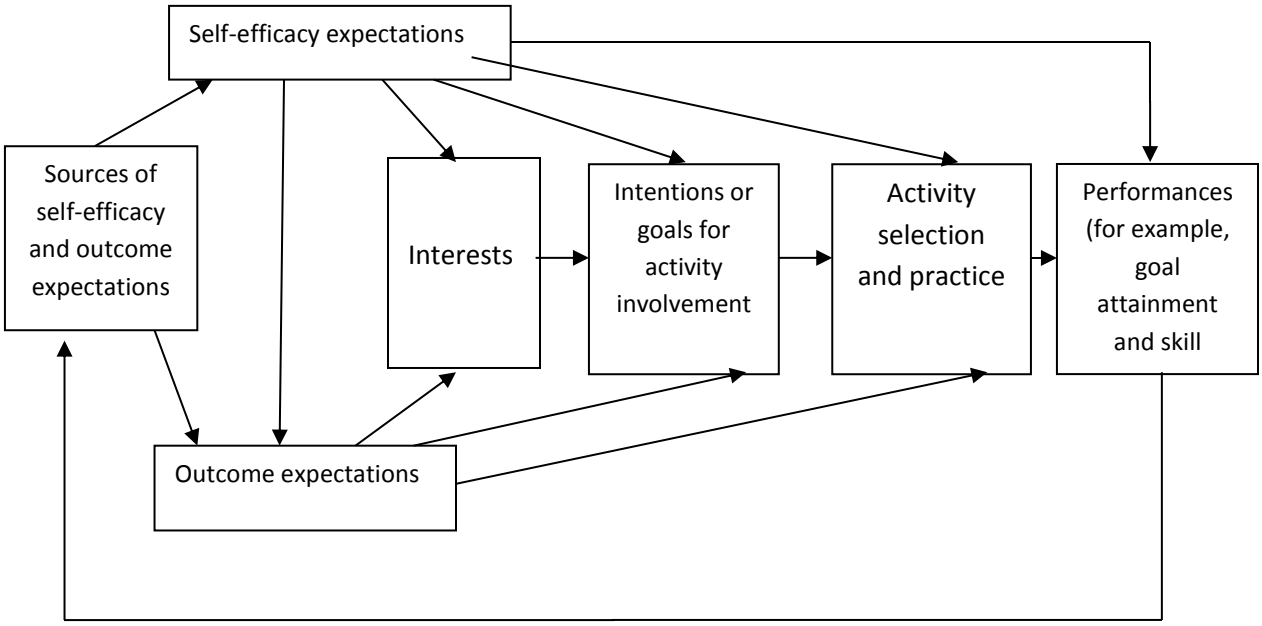
and self-approval, and the awareness of one's own physical response to one's performance (Lent et al., 2002). Therefore, outcome expectations are like self-efficacy in that it is based upon learning experiences, but the focus is the reward from the action.

Goals reflect a person's drive to engage in an activity so that a future outcome can be achieved (Bandura, 1986). Goals help "people to organize, guide and sustain their own behavior, even through overly long intervals, without external reinforcement" and are essential in assisting people to achieve their academic and career intentions (Lent et al., 2002, p. 263). Within the SCCT, the three variables of self-efficacy, outcome expectations, and goals intertwine with each other and results in the action or behavior of the person (Lent et al., 2002). No behavior occurs resulting from one single variable. It is the interaction between the variables and the influences the variables have upon each other, which creates the behavior.

The SCCT framework consists of three models that explain phases of academic and career development. The three phases include interest development, choice behavior, and career behavior. In the first model, interest development (Figure 1), the variables of self-efficacy and outcome expectations directly influence interest selections. Most people identify with interests that are reinforced by positive self-efficacy and outcome expectations (Lent & Brown, 1996) and usually will develop a disinterest in activities that cause self-efficacy doubt and expectations of negative outcomes (Lent & Brown, 2002).

As a result, interests affect goal identification and then goal attainment. Goal attainment influences self-efficacy and outcome expectations. The cycle then repeats with adjustments to self-efficacy and outcome expectations and, eventually, interests based upon the experience of goal attainment (Lent et al., 2002).

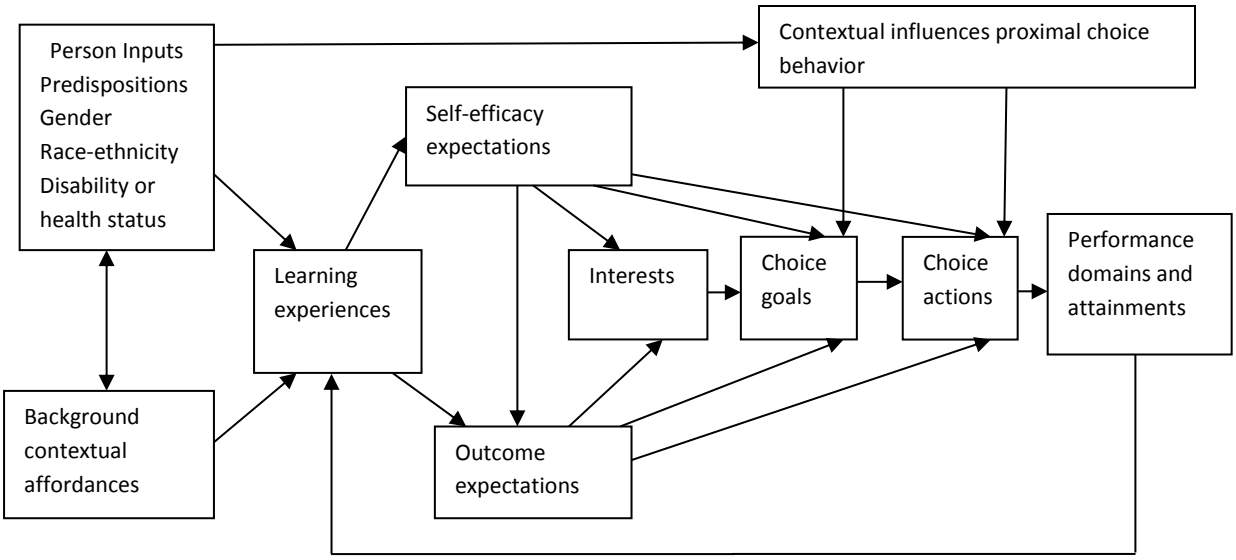
Figure 1. **SCCT Career Interests Model**



Source: Lent, Brown, and Hackett (1994). Reprinted with permission of R. W. Lent.

Choice (Figure 2), the second model, is the most complex model within the framework of SCCT. Additional variables are incorporated in the model, which include person inputs, distal contextual affordances, and contextual influences proximal to choice behavior (Lent, Brown, & Hackett, 1994). Person inputs essentially reflect the person's genetic or health factors, and predispositions. Distal contextual affordances include the person's background, family, culture, and socioeconomic influences. Both person inputs and distal contextual affordances influence a person's learning experiences. These learning experiences are the primary sources of self-efficacy and outcome expectations (Lent et al., 2002).

Figure 2. **SCCT Career Choice Model**



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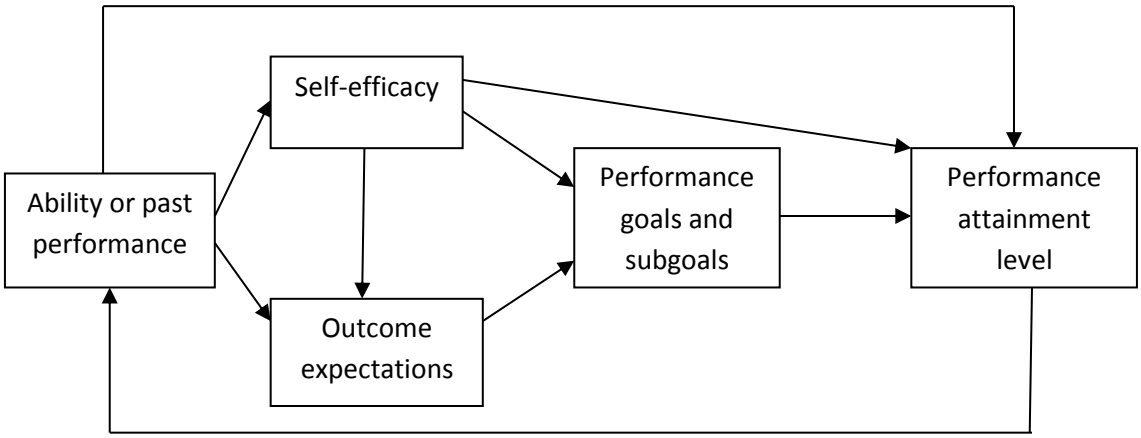
In addition, contextual influences proximal to choice behavior reflect the person's inputs environmental conditions, and financial status or job opportunities that exist at the time that choices related to goals and actions are being made (Lent et al., 2002). Although self-efficacy and outcome expectations continue to be primary variables within this model, choice decision might reflect a compromise between the influence of the primary variables and the affect of the person inputs, contextual affordances, and contextual influences (Lent & Brown, 1996). This interaction between the variables can explain a person's decision to choose an academic or career option that is different from what would be predicted by self-efficacy and outcome expectations alone.

The third model, performance (Figure 3) is a simpler model compared to the other two models. Performance is the "level of accomplishment and the persistence of behavior in career-related pursuits" (Lent et al., 2002, p.277). The performance model represents the active role of being in a career role. The key variables are ability or past

performances, self-efficacy, outcome expectations, performance goals, and performance attainment. Ability or past performance reflects the development and ongoing assessment of self-efficacy and outcome expectations, which then affects performance goals and performance attainment. Performance attainment information loops back to ability and the cycle continues with adaptation based upon the new information (Lent et al., 2002).

Figure 3. **SCCT Career Performance Model**



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Lent (2005) proposes that there could be a fourth model, satisfaction, within the theory. However, there is a lack of research addressing this model. Satisfaction potentially is the variable that is related to long-term, ongoing performance or retention within a career choice. The main variables of self-efficacy, outcome expectations, and goals play the major roles within the three models of SCCT that were previously described. These variables work with other variety of personal, contextual and learning variables that help form ADN and diploma RN's career choices (Lent et al., 2003).

The second model within the SCCT, choice, is the model of this research study. Choice behavior of SCCT is aimed at explaining the processes through which people

"make and revise their educational and vocational plans" (Lent et al., 2003). Potential participants in this research study have identified their interest in nursing. However, their career choice, to work at a baccalaureate level RN or higher, is yet to be determined. Potential participants may or may not choose to change the level with which they practice nursing. Therefore, the contextual support and barriers to choice behavior of ADN and diploma RNs is the focus of this study.

Relevant Theoretical Research: Self-efficacy, Outcome Expectations, and Choice Behavior

The Social Cognitive Career Theory (SCCT) is based upon Bandura's SCT, which was originally known as Social Learning Theory (Lent et al., 1994). Since SCCT emerged in 1994, it is a fairly new theory, with limited research using it as its basis. However, there is a greater volume of work with SCT as the framework of the research. This portion of the review of literature covers both SCT and SCCT research that has the variables of self-efficacy, outcome expectations, goals, and choice behavior within its framework. The focus of this portion of the literature review is to focus on the relationships between the variables of self-efficacy, outcome expectations, and choice behavior.

Much of SCT research was related to students and academic issues (Bandura, 1999). Other research topics using SCT as its framework included psychosocial, health functioning, athletic performance, alterations in self-efficacy beliefs, and group interactions (Bandura & Locke, 2003). Social Cognitive Career Theory also has been used in research with a variety of focuses, but the most common topics were academics and career interest or decision making. Examples of academic research included

assessing relationships between self efficacy, outcome expectations, goals, and academic interests (Diegelman & Subich, 2001; Lent et.al., 2005; Ozyurek, 2005) and academic choices (Ferry, Fouad & Smith, 1999; Flores & O'Brien, 2002; Fouad, Smith & Zao, 2002). Research that is related to the choice behavior model of SCCT will be presented later in the chapter.

Social Cognitive Career Theory (Lent et al., 1994) was conceptualized in 1994 as a derivative of Bandura's (1986) general social cognitive theory in which intrinsic and extrinsic factors influence psychosocial functioning. The theory in which Lent et al. (1994) expanded upon the scope of Bandura's (1986) work to focus mainly on the development of the individual within the context of their career. Lent et al. (1994) also incorporated the work of Hackett and Betz (1981), in which the concept of self-efficacy was first identified as an important factor in career development, specifically the career development of women.

The following literature presented in this chapter pertains to studies that have either SCT or SCCT as its framework and are focused on student's academic performance or choice behaviors of students because these bodies of research were more closely related to the research area of ADN and diploma RNs choice to return to school for a BSN.

Academic Performance

Lent et al. (1984) conducted a study of the relationship between self-efficacy beliefs and students' persistence and success in science and engineering college majors. Participants were 42 students who were in a 10-week career-planning course. Self-efficacy was measured for level, regarding the belief in their ability to complete the

educational requirements and perform job duties within their major field. Self-efficacy was also measured for strength or the degree of confidence in their ability to complete the educational requirements and job duties. Self-efficacy level and strength were measured with a pretest, posttest, and a later final test. Findings indicated that self-efficacy level and strength were related to academic outcomes. Students with high self-efficacy level and high self-efficacy strength persisted in the major longer than those students with low self-efficacy level and low self-efficacy strength. The researchers suggested that the findings indicated that self-efficacy might be a reliable indicator for explaining complex behaviors, such as choice behavior, academic persistence, and performance.

Lent, Brown, and Larkin (1986) conducted a second study to expand upon their initial findings from the Lent et al., (1984) study. They tested for additional relationships between performance (academic success and persistence), perceived career options, self-efficacy, ability, achievement, and interests. One hundred and five students in this study were considering science and engineering majors and careers and were enrolled in a career planning course completed assessments at the beginning and the end of the course for self-efficacy, career indecision, self-esteem, vocational interests, and perceived vocational options. Findings were supported from the first study (Lent et al, 1984). Students with high self-efficacy earned higher grades and remained enrolled longer in the College of Technology compared to students with lower self-efficacy. As for the relationships between the variables of self-efficacy, ability, achievement, vocational interest, and academic performance, hierarchical regression analyses indicated that self-efficacy was a unique variable in predicting performance. When analyzing for relationships between self-efficacy, self-esteem, and career indecision, correlations were

insignificant indicating that self-efficacy was not a measure of self-esteem or career indecision. The findings suggested that self-efficacy might be a significant factor that mediated vocational behavior, in that high self-efficacy was related positively with performance and perceived career options (Lent et al., 1986).

Lent, Brown, and Larkin (1987) also were interested in comparing the use of self-efficacy theory to understand career behaviors to the application of other theoretical frameworks currently in use for explaining career behaviors. The same students were used for this study as were in the previous study (Lent et al., 1986). Data were subjected to multiple regression analyses to investigate the individual contribution that the variables of self-efficacy, interest congruence (match between interests and academic major or career), and consequence (potential outcomes from a decision) had in relation to predicting academic performance, persistence in technical majors, perceived career options, and career indecision. When the analyses were controlled for ability, self-efficacy was found to be the unique factor in relationship to predicting academic performance and persistence. Self-efficacy and interest congruence were predictors for perceived career options, with self-efficacy being the stronger predictor. However, for prediction of career indecision, only interest congruence was found to be significant. Consequence was not a significant predictor for any variable within these analyses. The findings continued to reinforce the potential relationship between self-efficacy and performance and persistence (retention) (Lent et al., 1987).

Multon, Brown, and Lent (1991) conducted a meta-analysis of current literature for studies related to self-efficacy and academic performance and persistence. They identified 68 published and unpublished papers and then reviewed these papers for three

inclusion criteria: measure of self-efficacy, measure of academic performance, or persistence, and information to calculate effect size estimates. Of the retained 39 studies for the meta-analysis, 36 were for performance meta-analysis, and 18 studies were used for the persistence meta-analysis. Their findings supported the relationship between self-efficacy and academic performance and academic persistence with self-efficacy accounting for 14% of the variance in students' academic performance and 12% of the variance in students' academic persistence. The findings also indicated that effect size variance for self-efficacy and performance could be affected by four different conditions. The effect size variance for self-efficacy was higher (a) when self-efficacy was assessed in the post treatment period; (b) with low-achieving students compared to students making normal academic progress; (c) for older students compared to younger students; or (d) when the performance assessment was skills based compared to grades or standardized achievement tests (Multon, Brown, & Lent, 1991). In this study, for persistence, effect size variance was higher for self-efficacy and completed tasks as compared to the time spent on completing a task. Once again, the finding of this meta-analysis supported the relationship between self-efficacy and performance and persistence.

Hackett, Betz, Cass, and Rocha-Singh (1992) tested the relationship between social cognitive variables and academic achievement. Two hundred and eighteen engineering students participated in the measurement of self-efficacy, interests, outcome expectations, stress, strain, coping and support. The findings supported the correlation between self-efficacy and interests and outcome expectations. Data analysis indicated that academic milestones promoting positive self-efficacy was the strongest variable for

predicting performance. Based on these findings and their review of literature, the researchers supported the idea that career self-efficacy was a strong factor in students' academic and career progress.

Bandura, Barbarnelli, Caprara, and Pastorelli (1996) studied the affect of psychosocial variables that influenced students' self-efficacy beliefs and academic achievement. The study enrolled 279 children, ages 11 to 14 years. The intent of the study was to identify the direct and indirect (mediated) factors that influenced academic achievement. Measures included children's perceived self-efficacy for academic achievement, self-regulated learning, leisure, and self-regulatory resistance to peer pressure. Students also were assessed for social and emotional behavior, depression, peer preference, moral disengagement, problem behavior, and academic achievement. Parents were assessed for parental academic efficacy. Both the parents and children were assessed for academic aspirations. Findings related to academic performance indicated that children's self-efficacies for regulating their own learning and for academic achievement contributed to their academic performance.

Nauta and Kahn (2000) and Kahn and Nauta (2001) tested the use of performance model as a predictor for academic persistence and performance. Prior to arriving on campus, 445 incoming undergraduate freshmen completed a questionnaire about their academic self-efficacy, outcome expectations related to their anticipated performance, and academic achievement goals. The same assessment was repeated with 274 of the initial students in the second semester of first year. In fall of their sophomore year, first and second semester freshman grade point averages and second-year enrollment status information was collected for 255 of the 274 students. Hierarchical

logistic regression was used to assess if the social cognitive factors could predict academic persistence. Factors were entered into the regression in the order indicated in the social cognitive career theory. Findings from this longitudinal study indicated that the performance model within the SCCT was consistent and could be studied to predict persistence from freshman to sophomore year of college. In particular, outcome expectations and performance goals measured in the second semester of freshman year were the largest factor in predicting persistence (continuing to sophomore year) and self-efficacy also was related to persistence (Kahn & Nauta, 2001).

Kahn (2001) studied the prediction of scholarly activity. This model was developed based on the SCCT and the Research Training Environment Theory (Kahn, 2001). In this study, Kahn was particularly interested in the effect of mentoring relationships and outcome expectations in the prediction of scholarly activity. One hundred forty-nine doctoral students enrolled in counseling psychology programs completed a survey with measures of investigative interests, perceptions of the research training environment, mentoring relationship, research self-efficacy, research outcome expectations, research interest, and scholarly activity. The students also reported their respective year in their doctoral program. Choice related findings indicated that scholarly activity was directly predicted by research interest, research self-efficacy, and year in the program. Investigative interests, perceptions of the research training environment, and research outcome expectations were indirect predictors of scholarly activity (Kahn, 2001).

Opacic (2003) used the SCT as the study's framework to evaluate the predictive relationship between self-efficacy, achievement expectations, perceived outcome values,

and subsequent clinical performance for second-year students studying to be physicians' assistants (N=290). Pearson product moment correlations were computed between the variables and clinical performance; only self-efficacy was found to have a statistically significant predictive relationship to clinical performance. Using a hierarchical, multiple regression analysis, self-efficacy and grade point average were the only factors that provided unique contributions to predicting clinical performance.

Academic Performance: Nursing Students

Noting significant changes in health care occupations beginning in the 1950's, the National League for Nursing (NLN) identified a need for definitive data about nursing students, as well as characteristics of students who withdrew from nursing programs. The Nurse Career-Pattern Study initiated data collection in 1962 and continued collecting sequential data in 1965 and 1967. In response to an open-ended question about their reasons for choosing nursing, students indicated an interest in health sciences as the only academic related reason for choosing nursing. Other reasons for choosing to study nursing included the desire to help others; that nursing was a rewarding profession; and that nursing provided financial security. The primary reason students gave for withdrawing from their nursing programs was scholastic, followed by no longer interested in nursing, and unsuited for nursing. Remaining reasons for withdrawing from school included family and personal considerations. Approximately 40% of the students who withdrew did resume their nursing studies and graduated (Knopf, 1972). This study did not provide relationships between variables; however, it met its intent of providing descriptive data about nursing students and, in particular, information about student progression and retention in nursing education.

Australian researchers, Harvey and McMurray (1994) developed two self-efficacy instruments for use with undergraduate nursing students with the intent to predict academic persistence. These tools were the Nursing Academic Self-Efficacy Scale (NASES) and the Nursing Clinical Self-Efficacy Scale (NCSES). Items for the NASES were selected from nursing course prescriptions (descriptions) for two tertiary colleges in Australia that provided three-year nursing undergraduate education. Nursing task items for the NCSES were created by psychology students, first-year nursing students, and experienced nurses, which were then clarified by nurse academics. The instruments initially were tested with nursing students in undergraduate programs, then refined, tested, and retested with a new sample of undergraduate programs, Only the NASES was significant in predicting academic withdrawal. Additional findings from this study through principle components factor analysis indicated that the instruments each had three factors. The NASES factors were basic nursing constructs, science base, and microbiology/anatomy. The NCSES factors were technical skills, clinical treatment, and interpersonal skills.

Jeffreys (1998) studied the relationship between self-efficacy and academic and environmental variables on academic achievement and retention for non-traditional nursing students enrolled in an associate degree program. Non-traditional students were students who met at least one of six criteria: 25 years old or older, male, English as a second language, minority, dependent children, and/or had a general equivalency diploma. The researcher developed the self-efficacy instrument specifically for use with students in their first-semester nursing course. The self-efficacy instrument had two subscales-nursing skills (NSS) and education requirements (ERS). The NSS measured

students' perception of what skills they would be able to learn in the clinical setting within their first semester. The ERS measured students' confidence for achieving specific educational tasks within their first semester. A third tool, the Student Perception Appraisal (SPA) measured students' perception of environmental factors that either supported or restricted students' success; two variables were contained within this tool – the academic variable strength (AVST) and the environmental variable strength (EVS). Multiple regression analysis indicated that only the AVST was statistically significant to predicting academic achievement and retention. The lack of self-efficacy impact on a prediction of retention raised concerns for the researcher. In particular, 45 students of the target population (N=151) did not return complete surveys; the incomplete surveys were not included in the analysis (Jeffreys, 1998). A majority of the excluded surveys were from minority students. The researcher raised a concern that the resulting decreased diversity in the final sample might have a limiting affect on the results.

In another study conducted in Australia, Andrew (1998) developed the Self-Efficacy for Science (SEFS) instrument. In this study, the SEFS was used to measure first-year undergraduate nursing students' science self-efficacy. Students completed the SEFS and granted permission for the researcher to access their grades at the end of the year for two bioscience courses. Correlation analysis with SEFS scores as the predictor variable and academic performance in the two courses as the criterion indicated that the SEFS could be used to predict science performance.

Expanding the research related to the relationship between self-efficacy and academic performance, Andrew and Vialle (1998) studied nursing student's self-efficacy, self-regulated learning, and science academic performance. The study instruments

measuring self-efficacy included the NASES, the SEFS, and the Motivated Strategies for Learning Questionnaire (MSLQ), which included the self-efficacy for learning and performance scale (SELAP). Students completed the instruments and provided consent for researchers' access to their academic records. Correlation analysis indicated that all three self-efficacy measures were significantly and positively related to students' science academic performance. Overall results indicated that students who performed best academically scored high in self-efficacy, high in learning strategies, and high in their value for science.

Nursing Self-efficacy of Nursing Students

Most of the nursing research assessing students' ability to perform, generally did not measure performance or SCCT. Rather, the studies measured students' self-efficacy related to a specific nursing action or practice and then projected that students' performance might reflect the self-efficacy measures. Jeffreys and Smodlaka (1999) who evaluated changes in students' perceived transcultural self-efficacy over four semesters conducted one example of this type of study. Students who were enrolled in an associate degree program completed the Transcultural Self-Efficacy Tool in both their first and fourth semesters. The study did not include measures of transcultural competency to assess if there was a relationship between performance and self-efficacy, nor did the study assess what factors affected students' perceived transcultural self-efficacy.

Associate and baccalaureate degree nursing students in their final semester of their programs completed perceived self-efficacy measures related to community health nursing as the focus of a study by Rosen (2000). Results indicated that associate degree students had lower perceived community health nursing self-efficacy levels compared to

baccalaureate students. Stepwise regression analysis was conducted to identify which of the self-efficacy variables (performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal) accounted for the variance in self-efficacy. Only performance accomplishments and vicarious experience contributed to the variance.

Baccalaureate nursing students' perceived self-efficacy and perceived value for specific competencies related to case management of patients with chronic illness was measured through the Self-Efficacy for Clinical Evaluation (SECE) scale. The SECE items were developed from the course objectives. Faculty assessed students' performance in the care of patients with chronic illness, in a separate evaluation. Analysis indicated that the faculty's perception of students' abilities was higher than the students' perceived self-efficacy for those abilities. Students' perceived value for the competencies was high, except for those related to cost of care, the effect of managed care, nurse management skills, functional assessment, and education preparation of the health care team members. Low self-efficacy scores matched the low value scores, however, self-efficacy scores also were low for required clinical competencies, but their rated values for the clinical competencies were high. Based on these findings, faculty would be able to identify how to adjust curriculum to meet both course objectives and students' needs (Rosen, 2000).

Assessment of self-efficacy for health teaching was the focus of a study conducted in a university setting with baccalaureate nursing students. Students enrolled in Professional Issues II: Teaching and Learning participated in class discussions about teaching strategies and teaching simulations. At the end of the course, students completed the Baccalaureate Nursing Student Teaching-Learning Self-Efficacy Questionnaire. Part I of the questionnaire asked students to assess their teaching self-efficacy as it was at the

beginning of the course and then in Part two they assessed their current self-efficacy for teaching. Results indicated that students' teaching self-efficacy increased, but the findings' limitations included a small sample size (N=22) and the use of recall assessment for the initial self-efficacy measure (Rosen, 2000). Students' actual health teaching abilities were not assessed in this study.

Social Cognitive Career and Engineering

Lent et al., (2003) tested predictions of model variations from previous studies of social cognitive career theory (SCCT) (Lent et. al., 1994; Bandura 1999, 2000). Engineering students in an introductory engineering course were the focus of this study. The participants completed measures of SCCT's personal and contextual variables as they related to students pursuit of engineering majors. Personal variables included self-efficacy, coping efficacy, outcome expectations, interests, and academic goals. Contextual variables were measured as environmental support and barriers to pursuing an engineering degree. When testing the two alternative models of the paths by which environmental supports and barriers relate to choice behavior, findings indicated better support for Bandura's (1999, 2000) mediated model than for SCCT's direct paths model. It was also noted that the support and barrier variables produced significant paths only to self-efficacy in this analysis. This finding is consistent with the view that students may estimate their capabilities based partly on the nature of the supports and barriers they expect to encounter.

Lent et al., (2005) furthered studies in engineering by examining the utility of social cognitive career theory in predicting engineering interests and major choice goals among women and men and among students at historically Black and predominantly

White universities. Four hundred and eighty seven students in introductory engineering courses at three universities completed measures of academic interests, goals, self-efficacy, outcome expectations, and environmental supports and barriers in relation to engineering majors. It was found that SCCT variables are strongly predictive of academic interests and goals of engineering and non-engineering students. Thus, the authors found that the SCCT variables may help explain the engineering-related interest and major choice goals of women as well as men, and of students at historically black universities and predominately white universities.

In another study Byars-Winston, Estrada, Howard, & Zalapa (2010) investigated the academic interests and goals of African American, Latino, Southeast Asian, and Native American undergraduate students in biological science and engineering majors. The researchers examined the relationships of SCCT variables as well as the influence of ethnic variables and perceptions of campus climate, to students' math/science interests, and goal commitment to earning a biological or engineering degree. The path analysis revealed that the model provided good overall fit to the data. There were significant relationships between outcome expectations and interests and between outcome expectations and goals. Overall, the study's findings suggest that for the sample studied, academic self-efficacy and outcome expectations contributed to students' self-regulation toward goal attainment.

Summary of literature

In summary, components of social cognitive career theory measures have shown good model fit of overall academic performance, academic performance in nursing students, and for persistence in beginning engineering students. In addition, these studies

have indicated a positive correlation between self-efficacy and academic nursing performance, as well as outcome expectations. Although these findings support the use of SCCT for this study, the researcher is aware that no studies have been conducted in relation to the choice behavior model within the SCCT of ADN and diploma RNs. Thus, the researcher acknowledges that it is a limitation having a lack of research in the understanding of supports and barriers that may influence an ADN or a diploma RN to return to school for a BSN.

Summary

This chapter provided information that addressed the background and progression of the education in nursing. In addition, the workforce needs of nursing, including the need for increased number of BSN RNs, overall nurses, and for nursing educators was examined. Then, the theoretical framework, the SCCT was explained. Research related to the SCCT and applicable studies was presented. Finally, the chapter included information from academic performance, nursing academic literature, undergraduate nursing students' self-efficacy, and engineering students' choice behavior.

CHAPTER 3

METHODS and PROCEDURES

The purpose of this research study was to identify the relationships among variables that influence registered nurse (RN's) decision to return to obtain a baccalaureate degree in nursing (BSN). The study was designed to answer four research questions, which are:

1. What are the nursing academic self-efficacy beliefs, the contextual variables, and outcome expectations of associate degree and diploma registered nurses?
2. What is the relationship in self-efficacy beliefs contextual supports and barriers, outcome expectations, and intent to return to school based upon demographics of the study participants?
3. What are the relationships among self-efficacy beliefs, contextual supports and barriers, and outcome expectations based upon the intent to return to school?
4. Which of the components of BSN choice behavior (BSN self-efficacy, BSN coping efficacy, BSN outcome expectations, and BSN contextual supports and barriers) contribute the most variability of the intent to return to school?

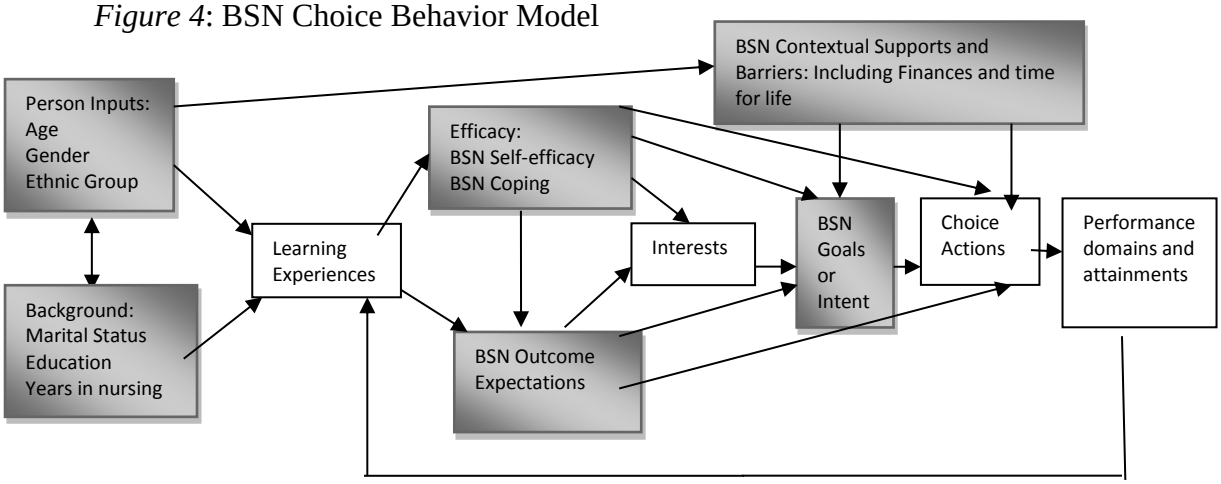
Within this chapter is a description of the research design. Also included in this chapter is the reasoning for the choice of instrumentation used for this study and a description of a pre-testing of the instrument. In addition, an evaluation of the reliability and validity of the tool BSN Choice Behavior is included. A description of the sample, setting, and human subjects' protection is included. Finally, the chapter presents the data analysis methods implemented for evaluating the research questions for this study.

Research Design

This study was a cross-sectional, descriptive research design. The purpose of the study was to identify the relationships among the variables that influence RNs' decision to return for a BSN. This non-experimental study design was selected because there is an absence of knowledge reflected in the literature about what influences ADN and diploma RNs' career choices to achieve a BSN, as well as the relationships between these variables and students' background, experiences, and professional goals (Polit & Beck, 2012).

Baseline or descriptive data are needed in this area of research before more involved studies can occur, such as intervention or experimental studies. A higher level of research is needed of this data with a vast population to determine what to control and manipulate for the desired outcome. A quantitative study design was selected to test the Social Cognitive Career Theory (SCCT) theoretical framework and to provide baseline data that are needed for future studies (Polit & Beck, 2012). The measurement tool is named BSN Choice Behavior. The attributes that are being researched in this study of BSN Choice Behavior are listed in the shaded boxes in figure 4.

Figure 4: BSN Choice Behavior Model



Concept definitions: Theoretical and operational. The instruments that were used in this study are consistent with the conceptual framework of the Social Cognitive Career Theory (SCCT). The theoretical definitions of self-efficacy and outcome expectations are from Bandura's (1986, 1997) Social Cognitive Theory (SCT), which is the foundational theory for the contextual proximal influences of SCCT (Lent & Brown, 1996). The measurement tool, BSN Choice Behavior, has the subscales of BSN self-efficacy and BSN coping efficacy, which was a combined measure of the concept "Efficacy", BSN outcome expectations, BSN contextual supports and barriers, BSN goals or intent. (See table one).

Self-efficacy is defined as the belief that one has regarding the ability to perform an action (Bandura, 1986). In this study, "Efficacy" is a person's belief about the ability to perform within the academic setting of a baccalaureate degree. It includes both BSN self-efficacy and BSN coping efficacy. BSN self-efficacy is the associate degree (ADN) or diploma registered nurses' belief of the ability to successfully complete the courses that specifically differentiate a baccalaureate RN (BSN) from an ADN or diploma RN. BSN coping efficacy is the ADN or diploma nurses' belief of their ability to cope with barriers or problems that might be faced while in BSN school.

Outcome expectations are defined as the anticipated benefits a person receives resulting from performing a given action (Bandura, 1986). BSN outcome expectations are the beliefs that the person holds regarding the outcomes of returning to or completing BSN schooling. Expectations are based from an ADN and diploma RN who has yet to return to school for a BSN.

Table 1: Theoretical and Operational comparison for BSN Choice Behavior

Theoretical	Operational: BSN Choice Behavior
Self-efficacy	Efficacy: • BSN self-efficacy • BSN coping efficacy
Outcome expectations	BSN outcome expectations
Contextual influences proximal to choice behavior	BSN contextual supports and barriers
Choice goals	BSN goals or intent

Contextual influences proximal to choice behavior are defined as the inputs that reflect the environmental conditions that exist at the time of the choice of the goal or action being made (Lent & Brown, 1996). BSN supports and barriers are the factors that either hinder or support the ADN or diploma nurse's plan to return to school. These reflect the RN's beliefs about the social, environmental, and financial environment that can influence their choice to return to school.

Goals reflect a personal commitment to achieving a future action or status (Bandura, 1986). BSN goals or intent are projected commitments held by ADN and diploma RNs as to whether or not they intend to return to nursing school for a BSN.

Instrumentation

A tool to measure choice behavior of engineering students was modified to capture an associate degree (ADN) and diploma RN's social and cognitive influences for returning to school for a baccalaureate degree in nursing (BSN). The revised tool, BSN Choice Behavior, used in this study was derived from an instrument that was used by Lent et al. (2003) when studying the relationship of contextual supports and barriers of choice behavior in engineering majors. The original work by Robert Lent was to study

African American women in the field of engineering. Permission was given to use and revise the original tool by Robert Lent (personal communication, February 20, 2011).

When conducting the literature review for this dissertation, the author found many similar issues between the field of engineering and nursing. Both can have similar career paths, in that both can work in the profession with an associate degree. Both have to meet challenging requirements in academics and in application of the knowledge gained in classes. Both can also return to school, to get a baccalaureate degree or graduate level degree within the field. Members of both professions can have similar barriers and supports that can influence the choice to return to school to get a baccalaureate degree. Therefore, the author believed that the measurement tool used previously for engineering students had sufficient congruency to be modified for a study with ADN and diploma RNs.

The findings of the study by Lent et al. (2003) indicated good support for a model portraying contextual supports and barriers for SCCT. The modified tool for this study (BSN Choice Behavior) includes the subcategories of BSN self-efficacy, BSN coping efficacy, BSN outcome expectations, BSN contextual supports and barriers, and BSN intent. The study also evaluates the reliability and validity of BSN Choice Behavior. Included within the measurement tool are various demographic questions, which may pertain to an RN's decision to return to school.

Item identification reflects multiple sources including relevant literature and expert opinion (Burns & Groves, 2009). The researcher, with input from faculty experts, conducted item selection for a portion of the BSN self-efficacy subscale. The items for BSN coping efficacy, BSN outcome expectations, BSN contextual supports and barriers,

and BSN intent were adapted to reflect nursing. As previously stated, wording was changed from engineering to nursing. The following begins a description of the measures for this study. A description of any additional modifications made to the original tool that was used by Lent et al. (2003) is also included.

BSN Self-efficacy is an 11-item measure that asks ADN and diploma RNs to indicate their confidence in their ability to successfully complete the educational requirements for a BSN in nursing. BSN Self-efficacy reflects an attitudinal measurement with the use of a ten-point rating scale ranging from "0-no confidence at all" to "9-complete confidence". The first eight items describe specific content that an ADN or diploma RN has to complete in order to receive a BSN. The content of these areas are traditionally either not taught, barely reviewed, or in an abbreviated version in an ADN or diploma program of nursing as compared to a BSN program.

Thus, this section was modified to reflect BSN specific content. The content includes research or evidence based practice, community health nursing, legal/ethical issues in nursing, health/physical assessment, nursing theory, nursing management, pathophysiology, and leadership for professional nursing. The other three items were directly taken from the original survey by Lent et al. (2003). The original version of this scale yielded adequate internal consistency reliability estimates (coefficient alpha = .89) and 8-week test retest correlations (r = .89) (Lent et al., 1984, 1986). The version of the measure for the study of engineering students yielded an internal consistency reliability coefficient alpha = .94 and .91 (Lent et al., 2003, 2005).

BSN Coping efficacy is a 7-item measure that indicates the ADN or diploma RN's confidence in one's ability to cope with a variety of barriers or problems they might

encounter while trying to study for a BSN. BSN Coping efficacy reflected attitudinal measurement with the use of a ten-point rating scale ranging from "0-no confidence at all" to "9-complete confidence". The only modifications in this subscale was the change in wording from engineering to nursing. Lent et al., (2003) reported a coefficient alpha of .94 for their measure. The coping efficacy measure for the study of engineering students yielded a coefficient alpha of .89 (Lent et al., 2005).

BSN Outcome expectations is a 10-item measurement tool of positive outcomes that could occur from earning a baccalaureate degree in nursing. BSN Outcome expectations is an attitudinal measure using a ten-point scale ranging from "0-strongly disagree" to "9-strongly agree". One item was modified. The item "go into a field with high employment demand" was deleted because nursing, whether it be ADN, diploma, or BSN, is a field of high demand. This was replaced with the item "advance in the area of my choice in nursing." Lent, Lopez, and Biescke (1991) reported a coefficient alpha of .90 and a 2 week test-retest correlation of .91. The coefficient alpha was .91 for the outcome expectations scale for the Lent et al. (2003) study and .89 for the study by Lent et al. (2005).

BSN Contextual supports and barriers were measured by 15 items of supports to returning to nursing school and 23 barriers that may occur when returning to school for a BSN. BSN Contextual supports and barriers survey measured attitudinal beliefs on a five-point scale using "1-not at all likely" to "5-extremely likely". The coefficient alpha was .92 and .94 for the version that was used for this study (Lent et al., 2003). The coefficient alpha scores were .90 and .84 for the subscales in study by Lent et al., (2005).

BSN Intent to return to school is a five item measure that asks participants to indicate their intentions to return to school for a BSN. BSN intent uses a five-point scale to measure attitudinal beliefs ranging from "1-strongly disagree" to "5-strongly agree". This tool was modified from four to five items with the addition of an item, which is "I have begun the process of earning my baccalaureate degree (ex. Turned in an application, started taking pre-requisite courses)." The coefficient alpha of the educational goals from the original sample was .95 (Lent et al., 2003) and then .93 in the study by Lent et al., (2005).

If participants reply with a 1 "strongly disagree" or 2 "disagree" on the first question for BSN intent (I intend to obtain a baccalaureate degree in nursing), a subset of questions was given to this group of participants. These questions were based on interview responses from three ADN RNs and one diploma RN who stated they did not have any intention of returning to school. The following were the reasons for not returning to school that were stated to the researcher by the RNs interviewed:

- I am content with my current position/level of nursing and do not want to change what I am doing.
- At my age I do not want to go back to school.
- I have other obligations that take priority (family, business, etc.)
- I already have a bachelor degree in another subject.
- I do not see a bachelor degree improving my ability to be a nurse.
- Other (A blank spot allowed for an individual response)

The group that did not intend to return to school was given this list and asked to indicate the reasons, which applied as to why the nurse would not return to school.

Neither an exploratory factor analysis nor a confirmatory factor analysis was done in the Lent et al. (2003) study. However, many of the same measures were used in another study of engineering students (Lent et al., 2005). The tests used in the latter study for a confirmatory factor analysis were comparative fit index (CFI), standardized root-mean-square residual (SRMR), and root-mean-square error of approximation (RMSEA). Comparative fit index values close to .95, SRMR values close to .08, and RMSEA values close to .06 may be taken as indicators of good model fit (Hu & Bentler, 1999). A confirmatory factor analysis or measurement model test in the latter study showed good support for a correlated six-factor model CFI = .99, SRMR = .03, RMSEA = .04 (Lent et al., 2005).

Demographic data that were collected for this study includes:

- educational level (ADN or diploma),
- age,
- gender,
- marital status,
- race/ethnic groups of White, Hispanic, black or African American, American Indian or Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, some other ethnicity, two or more ethnicities,
- years of work in the nursing field as an RN,
- area of nursing that the RN works in, which includes medical-surgical, long-term care, rehabilitation, maternity, pediatrics, intensive care, surgery, emergency department, other,
- what year did the RN get their education,

- is this the RN's first career? If not, list which career this is: 2nd, 3rd, 4th or more,
- years at the current facility, and
- how much time during the week does the RN take care of others (i.e. family members, kids, parents etc.) list in minutes.

The educational level demographic question was asked at the beginning of the online survey. If the participant answered other than ADN or diploma, the survey did not continue or was not loaded into the database, only allowing ADN or diploma RNs to take the survey.

Instrument Reliability and Validity

Content validity and construct validity provide a means of assessing the strength of the measurement assumption. Content validity is the assessment of an instrument for adequate representation of the construct being measured. Construct validity is the assessment of an instrument for its ability to measure the construct being studied (Polit & Beck, 2012).

It is assumed that the operational definitions are consistent with the theoretical definitions and that the instruments developed in this study provided measurements that are consistent with both the theoretical and operational definitions. With this study the validity and reliability of BSN choice behavior was evaluated with a new sample population of nurses. A power analysis was used for evaluation of the BSN Choice Behavior survey. The pre-testing included 28 participants from one facility. Based upon the results, no changes were made to the instrument tool, BSN Choice Behavior, before it was sent to the entire sample and the results of the participants included in the pre – testing were used in the final study.

Reliability.

Internal consistency is the degree to which the subparts of an instrument are all measuring the same attribute or dimension. This is used as a measure of an instrument's reliability (Polit & Beck, 2012). The most widely used method for evaluation of internal consistency is coefficient alpha or Crohnbach's alpha (Polit & Beck, 2012). A Crohnbach's alpha test for reliability and internal consistency of BSN choice behavior was conducted.

Pre-test of the Instrument. The survey was sent to a small number of ADN and diploma RNs (N=28) at one facility to analyze the reliability of the measurement tool, BSN Choice Behavior. The following is a summary of the reliability findings for the pre-test study:

Reliability for the BSN self-efficacy subscale was high (α=.94). The items correlated strongly with one another (average inter-item correlation =.65). Reliability would not increase by removing any of the items.

Reliability for the BSN coping-efficacy subscale was also high (α=.96). The BSN coping efficacy subscale items correlated strongly with one another (average inter-item correlation= .77). Reliability would improve very slightly (an increase of .008 in α) by removing the question "Complete a baccalaureate degree or higher in nursing despite financial pressures". No changes were made to the subscale since there was only a slight improvement with the removal of the question.

Reliability for the BSN outcome expectations subscale was high (α=.97). BSN outcome expectation items correlated strongly with one another (average inter-item correlation=.79). Reliability would improve very slightly (an increase of .002 in α) by

removing the question: “have the right type and amount of contact with other people (i.e., “right” for me)”. No changes were made to the subscale since there was only a slight improvement with the removal of the question.

The BSN contextual support subscale had high reliability (α=.93), with moderate average inter-item correlation (r=.49). Reliability would improve slightly (an increase in α of .001) by removing the question: “Have access to a “role model” in this field (i.e., someone you can look up to and learn from by observing)”. Since there was only a slight increase with the exclusion of the question, it was determined to leave the subscale in the original form.

The BSN contextual barriers subscale had high reliability (α=.90). The average inter-item correlation was somewhat low (r=.28). Items that are of concern are items regarding gender & ethnic barriers (items # 24, #25, #31, #34). The variances of these items were very low. Therefore, correlations between these items with the others on the scale were small, and in some cases, virtually zero. The reliability analysis was rerun excluding these items. Although Crohnbach’s alpha remained at .90, average inter-item correlation increased only to .36. Since there was no difference in the reliability and a minimal increase in the inter-item correlation, no change occurred to this subscale.

The BSN goals subscale had high reliability (α=.97), with high average inter-item correlation (r=.87). Reliability would only have improved slightly (by an increase in α by .016) by removing the question: “I have begun the process of earning my baccalaureate degree (ex. Turned in an application, started taking pre-requisite courses)”. Therefore, the BSN goals subscale was unchanged since there was only a slight improvement with removing the question.

In conclusion, the subscales of BSN choice behavior showed excellent reliability in the pre-testing sample. The only items that were difficult to assess were those regarding gender and ethnic barriers (BSN Contextual barriers subscale). However, these items had a minimal impact on reliability and the lack of variance was likely due to the homogeneity of this pre-testing sample (i.e., 100% white females). Since the reliability was good, these 28 surveys of the pre-test were included in the final study.

Internal Reliability. Internal reliability analyses revealed adequate reliability (alpha>.70) for each of the subscales (see Table 2). Included in the table 2 are the reliability scores for this study BSN choice behavior, and the previous studies by Lent et al. (2003) and Lent et al. (2005). The subscales Efficacy that comprised of BSN Self-efficacy and BSN Coping Efficacy, BSN Outcome Expectations, BSN Contextual Support, and BSN Goals/Intent to return to school had excellent reliability with alpha scores of 0.9 or better. The subscale of BSN Contextual Barriers also had good reliability with an alpha score of 0.88.

Table 2. *Reliability Scores: BSN choice behavior, Pre-test, Lent et al. (2005), Lent et al. (2003)*

Reliability (α)	BSN	Pre-test	2005 study	2003 study
Self-Efficacy	0.96*	0.94	0.91	0.94
Coping Efficacy	0.96*	0.96	0.89	0.89
Outcome Expectations	0.95	0.97	0.89	0.91
Contextual Support	0.9	0.93	0.90	0.92
Contextual Barriers	0.88	0.90	0.84	0.94
Goals/Intent to return to school	0.95	0.97	0.93	0.95

*Overall Efficacy

Validity

Content Validity. The draft of the survey was reviewed by four nurse educators and one nursing dean; three RN-BSN completion students assisted with the assessment of survey nursing self-efficacy to assure that the instrument reflected the respective content area. The four nurse educators and one dean have over 80 years of combined nursing education experience in baccalaureate nursing education. The BSN self-efficacy, BSN coping efficacy, BSN outcome expectations, BSN contextual supports and barriers, and BSN intent, along with demographic questions were examined for content relevancy and comprehensiveness in relation to the constructs, along with an estimation of the time to take the survey. No new items or changes were suggested for the tool.

Construct validity. Factor analysis is a statistical analysis method used to determine construct validity by assessing which items cluster into which factors and if the clustering occurred as the researcher would have predicted (Froman, 2001; Mishel, 1998). In particular, construct validity assesses how a "measure performs in accordance with theoretical expectations" (Carmines & Zellar, 1979, p.27). When conducting factor analysis, substitution for missing values should be avoided as substitution can affect adversely the correlational analysis.

Factor analysis steps include factor extraction, rotation, interpretation, labeling, and assessment for independence and reliability (Polit & Beck, 2012; Waltz, Strickland, & Lenz, 1991). Item loading decisions in the factor extraction and rotation steps of this study were guided by the general rule that items that load heavily on a factor are kept in the instrument; low loading items are deleted (Mischel, 1998). A minimum loading value of 0.4 will be needed to determine an item as "high loading" and if that item loaded on

more than one factor, then that item needed at least 0.2 difference from that item's loading on any other factor to be retained within the factor (Sapanas & Zellar, 2002). An exploratory factor analysis was done as a part of this study to evaluate the construct validity of the tool and the areas represented in each subscale within the measurement tool, BSN Choice Behavior. The exploratory factor analysis was done since this instrument had not previously been used and was modified from a different population of engineering.

Factor Analysis. A Maximum Likelihood factor analysis with an Oblimin rotation with Kaiser Normalization of 66 Likert scale questions from this survey questionnaire was conducted on data gathered from 343 participants. An examination of the Kaiser-Meyer Oblim (KMO) measure of sampling adequacy suggested that the sample was factorable (KMO=.904). This analysis was conducted to verify that the scale items would appropriately load into the different concepts Social Cognitive Career Theory that were measured. After reviewing the scree plot, the analysis was restricted to a fixed number of 6 factors. The factor loadings are presented in table 3.

The 18 items that loaded onto factor 1 represent the "Efficacy" related items. Rather than analyzing coping efficacy and self-efficacy separately, these items were grouped together as a single "Efficacy" scale for further analysis. The 5 items that load onto factor 2 are the "Intent and Goals to Return to School". This scale was maintained with the original items. The 10 items that load onto factor 3 are part of the "Outcome Expectation" factor. This scale was maintained with the original items.

Table 3. *Factor Analysis (N=343)*

	1	2	3	4	5	6
Research and Evidence Based Practice	.823					
Community Health Nursing	.817					
Legal/Ethical Issues in Nursing	.844					
Health/Physical Assessment	.850					
Nursing Theory	.820					
Nursing Management	.895					
Pathophysiology	.917					
Leadership for Professional Nursing	.894					
Complete all of the basic "Science"	.684					
Excel in your nursing degree	.725					
Complete upper level required courses	.795					
Cope with lack of support from prof.	.691					
Complete a bacc. despite financial pressure	.382					.449
Continue on in nursing even if not well liked	.599					
Find ways to overcome communication problems	.683					
Balance pressures	.572					
Continue on in nurses even if not welcoming	.619					
Find ways to study effectively	.499					
Receive a good job offer			.795			
Earn an attractive salary			.729			
Get respect from other people			.631			
Do work I would find satisfying			.883			
Increase my sense of self-worth			.735			
Have a career that is valued			.905			
Do work that can make a difference			.923			
Advance in an area of my choice			.569			
Do exciting work			.867			
Have the right amount of contact with others			.777			
Feel accepted by your classmates				-.442		
Have access to a role model				-.325 †		
Be able to afford extra cost of adv. training						.698
Feel support for this decision				-.724		
Feel that there are people like you in this field				-.706		
Get helpful assistance from a tutor				-.641		
Get encouragement from your friends				-.855		
Get helpful assistance from advisor				-.541		
Be able to receive enough money through financial aid						.528
Feel that your family members support this decisions				-.742		
Have friends or family to help you with math or science				-.441		
Have enough money saved up to complete education						.713
Feel that close friends or relatives would be proud				-.746		

Table 3. *Factor Analyses Cont. (N=343)*

	1	2	3	4	5	6
Have access to a mentor				-.527		
Have enough financial support from family				-.467		.570
Receive negative comments of discouragement from family					.363 †	
Worry that it would require too much time or schooling						-.479
Feel that you don't fit in socially					.432	
Receive unfair treatment because of race					.622	
Have professors or TA's that are difficult to understand					.273 †	
Feel the social environment is not friend to people of my gender					.541	
Not have enough time for social activities						-.409
Feel pressure from family to get out of college					.360 †	
Receive unfair treatment because of your gender					.738	
Feel the social environment is not friendly to your race					.762	
Have trouble getting assistance from teachers					.382 †	
Feel that the demands would get in the way of family responsibilities						-.466
Experience financial strain						-.781
Receive negative comments or discouragement					.533	
Feel lack of support from advisors					.472	
Feel that you are different from others because of your race					.669	
Have too many other demands						-.661
Have poor quality teachers					.328 †	
Feel that you are different from others because of your gender					.607	
Have to little money to afford things						-.726
Be concerned about competition					.427	
Feel that your career options are limited						-.742
Feel pressure from parents to change field					.573	
I intend to obtain a bacc. in nursing		-.933				
I plan to enroll in a school of nursing		-.887				
I think that earning a BS in nursing is a realistic goal for me		-.858				
I am fully committed to getting my BS		-.911				
I have begun the process of earning my bacc. degree		-.683				
Eiganvalues	18.19	6.88	5.6	4.58	3.94	2.44
Percentage of total variance	25.61	9.69	7.88	6.45	5.55	3.43
Number of test measures	18	5	10	15	16	7

*Loadings =>.40 † Indicates item was removed from the scale

The items that loaded onto factor 4 consist of the "Contextual Support" factor. One item, "Have access to a role model", was removed from the scale due to having a loading less than 0.4. The items loading onto factor 5 consist of the "Contextual Barriers" factor. Five items were removed from this scale due to having loadings less than 0.4 (as indicated in the Table 3). Factor 6 contains some items from the "Contextual Support" scale and some from the "Contextual Barriers" scale. The particular items that load onto this factor appear to be related to financial support and barriers, suggesting that finances contexts may be particularly noteworthy.

After removing the 6 indicated items for weak loadings, the scale scores were calculated by averaging items scores for each subscale. Alpha reliability analyses revealed adequate reliability (alpha >.85) for each of the subscales (see Table 2). The revised scales were used for the analyses of the research question.

Sample and Setting

Population consists of all individuals who met sample criteria for inclusion in the study (Polit & Beck, 2012). The population for this study was associate degree registered nurses (ADN RNs) and diploma RNs who had yet to take a nursing class for a baccalaureate nursing degree (BSN) in the United States.

A convenience sample was used in this study. Burns and Grove (2009) define convenience sample as subjects included in a study because they are "in the right place at the right time" (p.353). Convenience sampling is a nonprobability sampling method; its limitations include lack of control of biases. Convenience sampling was selected as the sampling method due to the ease for determining which ADN and diploma RNs and hospitals could participate in the study. Adequate sample size is needed for factor

analysis accuracy; however, the delineation of what adequate sample size is varies from five participants per item to 10 participants per item. Inadequate sample size could result in an uninterpretable factor structure (Froman, 2001). The measurement tool used contained 66 combined items for each of the variables. Therefore, 330 surveys needed to be completed in order to perform an exploratory factor analysis (Froman, 2001). The number of surveys returned was 343.

Setting and Data Collection Process

The intended setting for distribution and completion of surveys was via SurveyMonkey[tm] in an online survey. SurveyMonkey[tm] requires users to create a unique user name and password that must be entered each time a user logs on. SurveyMonkey[tm] issues a session "cookie" only to record encrypted authentication information for the duration of a specific session. The session cookie does not include either the username or password of the user. In addition, SurveyMonkey[tm] offers an online security through their site from viruses and data encryption with a firewall. The site that stores the data is stored in a warehouse that is watched 24 hours a day and is monitored by surveillance and the data server is kept in a locked cage with a security camera (SurveyMonkey, n.d.). As sites were contacted about participation in the study it was found that not all sites had the ability to send information to nurses via email and several sites requested that nurses be provided with paper surveys. As a result some surveys were completed via paper-pencil method due to facility requests to have a paper copy of the survey sent to the nurses. Those surveys were manually loaded into the SurveyMonkey[tm] database.

Due to the design of this study it was determined that to achieve the sample size needed, sites with high numbers of registered nurses would be used. As a result the

sample included nurses only from hospital settings. Employment patterns in nursing find that hospitals have the greatest numbers of registered nurses as employees. Long term care settings were not used for this study because of the long-term care facilities tend to be smaller and hire more licensed practical nurses (LPN) than registered nurses. Community and ambulatory care setting were also not included because of the small number of nurses in many of these settings.

The survey was sent originally to six hospitals and after six weeks at these facilities, only 198 surveys were returned. The researcher then called over a three-month span 28 more facilities to recruit for participation in the survey. These additional 28 facilities were in the same Midwestern area of the United States. The researcher found the facilities through looking on the internet for different hospitals in west central Illinois and in Iowa.

Of the 28 additional facilities contacted on the second round of surveys sent out, 3 of the facilities declined to participate and 15 facilities did not return the researcher's emails and phone calls after several attempts. The ten remaining hospitals had surveys sent to the site representatives. Of these ten facilities, seven sites returned completed surveys. The other three did not return any completed surveys.

In total, 34 facilities were contacted about the study over a six-month period. Three declined to participate. Fifteen sites did not respond to any emails or phone messages that were left by the researcher. The survey was sent to 16 facilities in all, but only thirteen facilities returned any completed surveys. The survey was sent to west central Illinois hospital settings via site representatives who then sent the online survey link or paper form to all registered nurses within the facility.

If surveys were sent to a facility, reminder emails were sent out to all of the representatives at two and four weeks. Instructions and exclusion questions were presented at the beginning of the survey. Those RNs, who had begun a bachelor's degree or completed a BSN or higher degree in nursing, were excluded out of the survey. With participation of the survey, the assumption was made that the participant was consenting to take the survey. The survey responses were sent directly to the researcher via online results. When the survey was done in paper format, the researcher went to the facility to pick up the completed surveys from the site representative. No names or identification was on any of the completed paper surveys. The benefits of having the participants reply via online survey was one of convenience for the ADN and diploma RNs, anonymity for the respondents, and the researcher's ability receive the survey at any time of day for each individual's convenience.

The response rate for online surveys varies greatly between studies. The lowest online response rate noted for online surveys was by Sorenson & Reiner (2003) with percentage return rate of 23 percent. The highest response rate for an online survey was by Ballantyne (2003) at 47 percent. Most of the research for online survey response rates ranged from 30 percent to 43 percent (Baruch, 1999; Dommeyer, Baum, Hanna, & Chapman, 2004; Nair, Wayland, & Soediro, 2005; Ogier, 2005; & Watt, Simpson, McKillop, & Nunn, 2002).

Nulty (2008) suggests that the most prevalent methods for increasing online survey response rates are to send reminder emails to participants and to the representatives of the facility. The researcher sent reminder emails two weeks and four

weeks after the original survey was sent to each facility representative. The total time for participants to respond for each survey was six weeks.

Table 4: Number of Estimated Responses per Facility

Facility	Est. ADN or Diploma RNs	Number of actual responses
A.	145	28
B.	205	19
C.	145	19
D.	600	97
E.	150	24
F.	168	11
G.	9	6
H.	11	9
I.	85	22
J.	225	34
K.	182	29
L.	125	17
M.	190	28
Total	2240	343

Only two of the facilities told the researcher exactly how many surveys were sent out and returned. The other facilities gave the researcher an estimated number of surveys sent out to ADN or diploma nurses. Most facilities knew how many nurses were employed, but did not know how many of the RNs were ADN or diploma. Therefore, the number of

surveys sent out to the ADN or diploma RNs is an estimated number in most cases. Since the total ADN or diploma RNs is an estimation, the response rate percentage may be too low or high and thus, may be estimated incorrectly. In total, thirteen hospitals agreed to participate in the study and returned completed surveys (Table 4). The estimated response rate for the thirteen hospitals was approximately 15 percent.

Human Subjects' Protection

Ethical research is guided by the principles of respect, beneficence, and justice as evidenced by protecting the rights of human subjects, balancing benefits and risks, obtaining informed consent from participants, and receiving permission from institutional review board to conduct the research project (Burns & Grove, 2009). Ethical standards require the protection of human rights for individuals who are subjects in a research study. These rights include self-determination, privacy, anonymity and confidentiality, fair treatment, and protection from discomfort and harm.

Human rights of the participants were protected in the conduction of this study. Participants were informed of their rights by the researcher through an informational form that was presented with the email that has the link of the survey for the registered nurse to take (Appendix A). Participation was voluntary and consent was assumed by participation in the study. Those who chose not to participate did not suffer any adverse effects, as participation was not an employee requirement.

Participants' rights to privacy was maintained. Surveys were completed on an individual basis. To maintain anonymity, participants were not required to submit any identifying information, such as their names, on the surveys. Completed surveys were reviewed by the researcher and were available to the researcher's advisors. Participants

and the facilities in which they work did not review completed surveys. The researcher continued to maintain the participants' anonymity and confidentiality. Data were reported in aggregates and participating facilities were not identified in any of the data reports. The researcher will keep the results of the surveys in a secure environment and raw data will be destroyed after five years.

There are no anticipated risks with this research. Individual written consent forms were not used for this research study. Nurses received an informational form via the email with the survey link explaining the purpose of the study, options for participating in the study, and that consent was indicated through the completion the survey (Appendix A).

To assure the ethical standards of this study, the research proposal was approved by the University of Wisconsin-Milwaukee's (UWM) Institutional Review Board (Appendix B). No facilities indicated that an internal IRB was needed for the study. All facilities indicated that IRB approval from UWM was sufficient to meet their requirements.

Data Analysis

The SPSS Graduate Pack 20.0 for Windows statistical analysis software was used for data analyses in this study. Although Likert-type responses are discrete and not continuous responses, these responses can be treated as continuous (Polit & Beck, 2012; Tabachnick & Fidell, 2006). All of the variables within the BSN self-efficacy, BSN coping efficacy, BSN outcome expectations, BSN contextual supports and barriers, and BSN goals were treated as interval level (continuous) data, instead of ordinal level (discrete) data.

Descriptive statistics were calculated to describe the sample. Nominal and ordinal level data were described by frequency and percent. The description of the interval and ratio level data included mean, standard deviation, and range.

This study was designed to answer four key research questions. The first question of the study is **"***What are the nursing academic self-efficacy beliefs, the contextual variables, and outcome expectations of associate degree and diploma registered nurses?"* The variables are BSN self-efficacy, BSN coping efficacy, BSN outcome expectations, BSN contextual support and barriers and BSN goals/intent to return to school. Descriptive statistics were used for this question with a reporting of mean, median, standard deviation, maximum, and minimum level of responses.

To explore the second question "*What is the relationship in self-efficacy beliefs contextual supports and barriers, outcome expectations, and intent to return to school based upon demographics of the study participants?"* Pearson's product-moment correlation was used to test the relationship between the variables of BSN self-efficacy, BSN coping efficacy, BSN outcome expectations, BSN contextual supports and barriers, and demographics. Frequency percentage was performed for the demographics of age, sex, marital status, ethnicity, educational level, and area of work in nursing. T-test analysis was used to determine any differences in the variables of marital status and educational level.

The third question of the study is "*What are the relationships among self-efficacy beliefs, contextual supports and barriers, and outcome expectations based upon the intent to return to school?".* Pearson's product-moment correlation was used to test the relationship between the variables of BSN self-efficacy, BSN coping efficacy, BSN

outcome expectations, BSN contextual supports and barriers, and BSN goals or intent to return to school.

The fourth question of the study is "*Which of the components of BSN choice behavior (BSN self-efficacy, BSN coping efficacy, BSN outcome expectations, BSN contextual supports and barriers) contribute the most variability of the intent to return to school?"* Binary logistic regression was used to test which component contributes the most variability of whether a student would or would not return to school. Multiple linear regression was used for the participants who intended to return to school to test which component contributes the most to the variability to the predictor intent to return to school.

Summary

This research study was designed to identify the relationships of the variables influence the ADN and diploma RN to return to school. It was also designed to evaluate the reliability and validity of the BSN self-efficacy, BSN coping efficacy, BSN outcome expectations, BSN contextual supports and barriers, and BSN intent measurement tools. Finally, this study answered the four research questions that were previously listed. The research methods and procedures used in his study were explained in this chapter. A description of the measurement tools and the subcategories was described. The data analysis plan was also presented in this chapter.

CHAPTER 4

Results

Introduction

The purpose of this research study was to identify the relationships among variables that influence registered nurses (RNs) decision to return to obtain a baccalaureate degree in nursing (BSN). The study was designed to answer four research questions, which are:

1. What are the nursing academic self-efficacy beliefs, the contextual variables, and outcome expectations of associate degree and diploma registered nurses?
2. What is the relationship in self-efficacy beliefs contextual supports and barriers, outcome expectations, and intent to return to school based upon demographics of the study participants?
3. What are the relationships among self-efficacy beliefs, contextual supports and barriers, and outcome expectations based upon the intent to return to school?
4. Which of the components of BSN choice behavior (BSN self-efficacy, BSN coping efficacy, BSN outcome expectations, BSN contextual supports and barriers) contribute the most variability of the intent to return to school?

Within this chapter, there is a description of the statistical results of the study. A description of the demographic data of the sample and a summary of the factor analysis of the tool is included. Finally, the chapter presents the data analysis implemented for evaluating the research questions for this study.

Study Results

Demographic Characteristics of the Study Participants

The present study explored the components of Social Cognitive Career Theory in the context of nurses considering returning to school for a bachelor's degree. Data were collected via SurveyMonkey[tm] database and via paper form and were entered into a database. Participants were asked to complete measures of BSN self-efficacy, BSN coping-efficacy, BSN outcome expectation, BSN contextual support and barriers, and BSN goals/intent to return to school.

Table 5. *Demographic Characteristics of Participants (N=343)*

	Mean	SD	Range
Age	46.89	11.12	22-66
Years Nursing	18.4	11.77	.5-44
	N	%	
Sex			
Male	13	3.8	
Female	330	96.2	
Marital Status			
Married	268	78.1	
Divorced	39	11.4	
Single	36	10.5	
Ethnicity			
Black	4	1.2	
Hispanic	4	1.2	
White	334	97.4	
Asian	0	0	
Two or More Ethnicities	1	.3	
Education level			
Associated Degree	251	73.2	
Diploma Degree	92	26.8	
Area of Nursing			
Medical-Surgical	148	43.15	
Long-Term Care	10	2.92	
Rehabilitation	13	3.79	
Maternity	51	14.87	
Pediatrics	41	11.95	
Intensive Care	44	12.83	
Surgery	53	15.45	
Emergency Dept.	47	13.7	
Other	89	25.95	

Additionally, participants were asked to complete a demographic questionnaire. The demographic data of the sample is summarized in table 5. Participants were 343 registered nurses with a mean of 18.4 years nursing. The mean age was 46.86 with 96.2% of the sample being female. Nurses with associate level degrees made up 73.2% of the sample while 26.8% were diploma degree nurses. The vast majority (97.4%) of the sample identified themselves as ethnically "white". The data gathered from their responses were analyzed using the Statistical Package for the Social Sciences, version 20.0.

Descriptive Data Analysis

Preliminary analyses were performed to examine the distributional properties of each of the study variables and to assess statistical assumptions. Descriptive statistics are shown in table 6. Assumptions of linear correlation/regression (linearity, normality, homoscedascity) were tested by plotting residuals values and charting the distributions of the variables. No problematic residual patterns or significant skew were detected. No significant outliers were found among the variables. For logistic regression (table 12), model fit was tested via plotting observed versus predicted probabilities and was found to have acceptable fit. There were no missing data among the scales or demographic questions.

Tests of Primary Research Questions

This study was conducted to answer four questions concerning the components of Social Cognitive Career Theory in the context of registered nurses. Results for questions 1-4 are summarized in the following Tables.

Research Question 1. What are the nursing academic self-efficacy beliefs, the contextual variables, and outcome expectations of associate degree and diploma registered nurses? The mean of the scores of the subscale were used to answer what the beliefs were of the sample of the study.

Generally, registered nurses of this study are relatively high in reported efficacy, reporting a mean of 6.07 and median of 6.28 on a 0-9 point scale (higher scores meaning greater reported efficacy). The average outcome expectation score was 5.39 and a median of 5.6 on a scale of 0-9 (higher scores meaning expectations of better degree outcomes). Reported contextual support had an average score of 3.18 and a median of 3.21 on a 1-5 scale (higher scores meaning more support). Contextual barriers were relatively low with an average score of 1.98 and a median of 0.53 on a 1-5 scale (higher scores meaning more barriers). The average score for Goals/Intent to return to school was 2.47 with a median of 1.25 on a scale of 1-5 (higher scores meaning greater intent and goals to return to school). (See table 6).

Table 6. Research Question 1: Descriptive Statistics *(N=343)*

	M	SD	Median	Range	Skewness	Kurtosis
Efficacy	6.07	1.62	6.28	2-9	-0.41	-0.35
Outcome Expectations	5.39	1.81	5.6	0-9	-0.49	0.00
Contextual Support	3.18	0.72	3.21	2-5	0.03	-0.43
Contextual Barriers	1.98	0.53	1.89	1-4	0.46	-0.05
Goals/Intent to return to school	2.47	1.25	2.4	1-5	0.45	-0.86

Therefore, ADN and diploma RNs in this study have high self-efficacy beliefs, moderate coping efficacy, outcome expectations, and contextual supports, and low

contextual barriers. Approximately half of the sample did intend to go to school and half of the sample did not intend to go to school.

Research Question 2. What is the relationship in self-efficacy beliefs contextual supports and barriers, outcome expectations, and intent to return to school based upon demographics of the study participants?

A series of bivariate Pearson correlations were run to investigate the relationship between the scale variables and sample demographics. A series of t-tests were used to examine possible differences in the scale by gender, marital status (married or single/divorced), and education level (ADN or diploma). The results are summarized in tables 7-10.

Age was negatively correlated with efficacy ($r=-.15$, $p<.01$), outcome expectations ($r=-.22$, $p<.001$), and contextual support ($r=-.19$, $p<.001$) such that older nurses reported lower values on these scales. A strong inverse relationship was found between age and intent/goals to return to school, $r=-.61$, $p<.001$). Thus, older nurses also reported lower intent /goals to return to school. The number of years nursing was negatively correlated with efficacy ($r=-.18$, $p<.001$), outcome expectations ($r=-.16$, $p<.01$), contextual support ($r=-.14$, $p<.01$), such that as the number of years nurses work in the field of nursing increase, they report lower values on these scales. There was also a negative correlation between number of years nursing and intent/goals to return to school, $r=-.48$, $p<.001$. However, this could also be explained by age, as age and number of years nursing had an expected strong positive correlation, $r=.78$, $p<.001$.

Table 7. *Research Question 2: Variable Inter-Correlations (N=343)*

Subscales	1	2	3	4	5	6	7
1. Efficacy	1.00						
2. Outcome Expectations	.32**	1.00					
3. Contextual Support	.47**	.40**	1.00				
4. Contextual Barriers	-.39**	-.24**	-.38**	1.00			
5. Goals/Intent	.31**	.45**	.37**	-.09	1.00		
6. Age	-.15*	-.22**	-.19**	-.06	-.61**	1.00	
7. Years Nursing	-.18**	-.16*	-.14*	-.08	-.48**	.78**	1.00

Note: *indicates that the correlation is significant at the 0.01 level. ** indicates significance at the 0.001 level.

A series of t-test were used to examine possible differences in the scale by marital status (married

or single/divorced), education level (associates or diploma level), or gender (male or female). To account for family-wise error rate, the alpha level was set at p=.001. Results are summarized in Tables 8-10. No significant differences were found between marital status groups on the other scales. The education groups (associates degree or diploma degree) were significantly different on the reported goals/intent to return to school. Associate level nurses (M=2.67) reported significantly more goals and higher intent to return to school than diploma level nurses (M=1.94), t(341)=4.89, p<.001. Associate level nurses (M=44.71*)* were significantly younger than diploma degree nurses (M=52.82), t(341)=-6.30, p<.001. Associate level nurses (M=14.74*)* also reported significantly fewer years nursing than diploma nurses. (M=23.38), t(341)=-11.08, p<.001. No other

significant differences between the education groups were found for the SCT scales. No significant differences between males and females were found for the SCT scales.

Table 8. Research Question 2: Independent-samples T tests by marital status (N=343)

	Marital Status				
	Married	Single/ Divorced	*t*	*df*	*p*
Efficacy	6.02 (1.54)	6.25 (1.91)	-1.10	341	.273
Outcome Expectations	5.54 (1.78)	4.87 (1.84)	2.82	341	.005
Contextual Support	3.19 (0.72)	3.16 (0.75)	0.34	341	.731
Contextual Barriers	1.99 (0.51)	1.94 (0.59)	0.76	341	.450
Goals/Intent to return to school	2.49 (1.24)	2.42 (1.30)	0.39	341	.694
Age	46.93 (10.56)	46.72 (13.05)	0.15	341	.884
Years Nursing	18.51 (11.36)	18.00 (13.21)	0.33	341	.744

Table 9. Research Question 2: Independent-samples T tests by education level (N=343)

	Education Level				
	Associates	Diploma	*t*	*df*	*p*
Efficacy	6.13 (1.64)	5.90 (1.57)	1.16	341	.246
Outcome Expectations	5.46 (1.78)	5.20 (1.90)	1.17	341	.243
Contextual Support	3.20 (0.71)	3.13 (0.74)	0.90	341	.371
Contextual Barriers	1.98 (0.52)	1.96 (0.55)	0.38	341	.703
Goals/Intent to return to school	2.67 (1.27)	1.94 (1.04)	4.89	341	.000
Age	44.71 (10.66)	52.82 (10.23)	-6.30	341	.000
Years Nursing	14.74 (9.55)	28.38 (11.51)	-11.08	341	.000

Table 10. Research Question 2: Independent-samples T tests by gender (N=343)

	Gender				
	Male	Female	*t*	*df*	*p*
Efficacy	6.23 (2.35)	6.06 (1.59)	0.37	341	.715
Outcome Expectations	5.68 (2.13)	5.38 (1.80)	0.58	341	.563
Contextual Support	3.32 (0.61)	3.18 (0.73)	0.69	341	.492
Contextual Barriers	2.22 (0.42)	1.97 (0.53)	1.71	341	.087
Goals/Intent to return to school	2.43 (1.27)	2.47 (1.04)	-0.12	341	.904
Age	44.00 (10.61)	47.00 (11.15)	-0.95	341	.341
Years Nursing	13.00 (6.63)	18.61 (11.88)	-1.69	341	.092

Therefore, age of the nurses was negatively correlated with efficacy, outcome expectations, contextual support, and intent to return to school. Years in nursing was also negatively correlated with efficacy, outcome expectations, contextual support, and intent to return to school. Age and years in nursing were positively correlated. There were no differences in the subscales for gender or marital status. Finally, diploma nurses had less intent to return to school than the ADN nurses did, and there was a significant difference in age and years in nursing of diploma and ADN RNs. Diploma nurses were older and had more years in nursing.

Research Question 3. What are the relationships among self-efficacy beliefs, contextual supports and barriers, outcome expectations and the intent to return to school?

A series of bivariate Pearson correlations were run to investigate the relationship among the BSN choice behavior subscale variables. The results for this question are summarized in table 11.

Intent and goals to return to school was significantly correlated with several of the other scales. More efficacious nurses appear to also be motivated to advance their education. Reports of efficacy were moderately correlated with intent/goals to return to school, r=.34, p<.001. Nurses who expected a bachelor's degree to have positive outcomes appear to also be motivated to obtain the degree. There was a moderate positive correlation between intent/goals to return to school and outcome expectations, r=.45, p<.001. Support may be more important than barriers for motivation to return to school. Intent and goals to return to school was positively correlated with contextual support (r=.37, p<.001) but not contextual barriers, r=-.09, p=.11.

Table 11. *Research Question3: Variable Inter-correlations (N=343)*

Subscales	1	2	3	4	5	6	7
1. Efficacy	1.00						
2. Outcome Expectations	.32**	1.00					
3. Contextual Support	.47**	.40**	1.00				
4. Contextual Barriers	-.39**	-.24**	-.38**	1.00			
5. Goals/Intent	.31**	.45**	.37**	-.09	1.00		

Note: **indicates that the correlation is significant at the 0.001 level.

Research Question 4. Which of the components of BSN choice behavior (BSN self-efficacy, BSN coping efficacy, BSN outcome expectations, BSN contextual supports and barriers) explain the most variability in the intent to return to school?

This question was answered in a two-stage analysis process. First, a binary logistic regression was used to find the best predictors of whether nurses intend to return

to school or not. This first model was run because a large portion of the sample (47.2%) reported that they do not intend to return to school and thus their answers to the rest of the scale did not apply. Second, for nurses who intended to return to school, a multiple linear regression was conducted predicting their intent/goals to return to school scores from the BSN choice behavior variables.

Answers to the first question on the Intent/Goals scale, "I intend to obtain a baccalaureate degree in Nursing" were coded into binary as either no intention to return to school (47.2% of the sample) or at least considering returning to school (52.8%). Next, a binary logistic regression was conducted with the BSN choice behavior variables as predictors. The results are summarized in table 12.

Table 12. *Logistic Regression: The Effects of Scale Variables on the Intent to Return to school. (N = 343)*

Model	Variable	B	SE B	Odds ratio
	Efficacy	0.14	0.09	1.15
	Outcome expectations	0.57	0.09	1.76**
	Contextual support	0.26	0.20	1.31
	Contextual barriers	0.47	0.27	1.60
	Constant	-5.56	1.13	0.00
	χ^2		80.51	
	df		4	

Note: ** $p < .001$

Outcome expectation scores were a significant predictor of whether nurses intended to return to school or not. For each 1 unit increase in the outcome expectations scale participants were 1.76 times more likely to intend to return to school. In other words, for every one level higher increase in the outcome expectation response, the

participant is 76% more likely to intend to return to school. Neither efficacy nor contextual support or barriers scores were significant predictors in the model.

Of the nurses that indicated that they intend to return to school (181 respondents), a multiple linear regression analysis was done predicting their intent/goals to return to school scale scores from the BSN choice behavior variables. The goal of this analysis was to see which BSN choice behavior variables best predicted how close nurses who intended to return to school were to actually obtaining their degree. The results are summarized in table 13.

Overall, the model accounted for 20% of the variance in how close nurses were to obtaining their bachelor's degree. Efficacy was a significant predictor in the model. Nurses who reported higher efficacy (a combined scale score of self-efficacy and coping efficacy) reported being significantly closer to obtaining a bachelor's degree, $\beta = 0\ .26$, $t = 3.25$, $p = .001$. Differing from the logistic regression analysis on whether to return to school or not, outcome expectations was not a significant predictor for how close nurses intending to go to school were to obtaining the degree. Instead, contextual support was a significant predictor such that nurses who reported greater support reported being closer to obtaining the degree, $\beta = 0.44$, $t = 4.16$, $p < .001$. Contextual barrier scores were not a significant predictor in the model.

Table 13. *Multiple Regression: The Effects of Scale Variances on Intent and Goals to return to school (N = 181)*

	Variable	B	SE B	β	R^2	F
Model					0.20	11.11 (4, 176)**
	Efficacy	0.18	0.07	0.26**		
	Outcome expectations	-0.04	0.05	-0.06		
	Contextual support	0.44	0.11	0.33**		
	Contextual barriers	0.20	0.13	0.11		

Note: ** $p \leq .001$

Therefore, outcome expectations show some relationship to whether or not a RN intends to return to school. In addition, if a RN is planning on returning to school, efficacy and contextual supports seem to be a significant predictor of how close a nurse is to obtaining the goal of returning to school.

Summary

This research study was designed to describe the study sample and to evaluate the reliability and validity of the BSN self-efficacy, BSN coping efficacy, BSN outcome expectations, BSN contextual supports and barriers, and BSN intent subscales. This study was designed to also answer the four research questions that were previously listed. The results of this study found all of the subscales of the BSN choice behavior to be reliable in the study. Finally, within this chapter, a description of the statistical analysis to answer the four research questions was described.

CHAPTER 5

DISCUSSION AND CONCLUSIONS

The purpose of this study was to identify the relationships of possible supports or barriers that could influence associate degree (ADN) or diploma registered nurses' (RN) choice to return to school to obtain a baccalaureate degree (BSN). To achieve this goal an instrument originally used in a study for engineering students (Lent et al., 2003; Lent et al., 2005) was modified for ADN and diploma RNs. The instrument was pre tested with a small group of nurses and then used for the study. The responses provided the data needed to reply to the four research questions of the study. The data also provided new information about the decisions of RNs to return to school for a BSN.

Summary of Findings

Instrument development

Lent's Social Cognitive Career Theory (SCCT) provided a framework for this study. A survey tool that was used by Lent et al. (2003) for engineering students was modified for this study. The five subscales of the instrument BSN Choice Behavior that were revised for this study included BSN Self-efficacy, BSN Coping efficacy, BSN Outcome expectations, BSN Contextual supports and barriers, and BSN Intent. The measurement was pre-tested with 28 ADN and diploma RNs for reliability. The instrument demonstrated good reliability and validity in the sample for both the pre-test and the final study.

Study demographic results and study reliability

Like the pre-test, the final study revealed that the subscale had good reliability of 0.88 or greater for each subscale. The reliability of the Efficacy scale was α=0.96,

Outcome expectations α=0.95, Contextual supports α=0.9, Contextual barriers, α=0.88, and goals/Intent was α=0.95. Three hundred and forty three ADN and diploma RNs from 13 facilities located in the midwestern United States participated in this study. Records from 251 ADN (73.2%) and 92 diploma (26.8%) RNs were included in the final analysis. Participants were predominately female (96.2%) and a vast majority reported themselves as White (97.4%). Only 2.6% of the participants indicated an ethnicity other than White and only 3.8% of the participants were male. The mean age of the participants was 46.89 with a range of 22-66 years. The mean of the years in nursing was 18.4 with a range of 0.5-44 years. The largest group of nurses that participated in the study came from a medical-surgical background and composed almost half of the participants (N=148, 43.15%).

Research Questions

Research Question 1. What are the nursing academic self-efficacy beliefs, the contextual variables, and outcome expectations of associate degree and diploma registered nurses? The 66 item BSN Choice Behavior contained five subcategories that were consistent with SCCT. The five subscales include BSN self-efficacy (Efficacy), BSN coping efficacy (Efficacy), BSN outcome expectations, BSN contextual supports and barriers, and BSN intent or goals to return to school.

The BSN self-efficacy items reflects nurses' confidence in their ability to finish with a B or better average in courses that are specific to a baccalaureate education versus a diploma or associate degree education. The mean score of 6.07 and median of 6.28 out of 9 on the scale indicates that nurses of this sample have fairly high self-efficacy and coping efficacy beliefs about BSN schooling.

The nurses of this study had an average score of 5.39 and median of 5.6 out of 9 in outcome expectations. This reflects that the nurses of this study had a mediocre belief that there would be a benefit from getting a BSN. The average score for contextual supports was 3.18 with a median of 3.21 out of 5 and an average score of 1.98 with a median of 1.89 out of 5 total score. Thus, the nurses of this study believe that they have some support for going back to school and a relatively low belief that there are barriers to returning to school. The average score was 2.47 with a median of 2.4 on a scale of 1-5 for intent to return to school. The sample had a middling intent to return to school. Almost half of the sample had little intent to return to school (47.2%), while the rest of the sample had some intent to return to school.

Previous studies have reported that RN-BSN completion students have had some of the same supports and concerns that were reported in this study. Delaney and Piscopo (2004) found that lack of support and recognition, lack of time, and little financial resources were issues for students who were in BSN completion classes. Megginson (2008) reported that students found not receiving credit for educational and life accomplishments to be a barrier to completing a BSN. However, there is lack of research pertaining specifically to SCCT and ADN/diploma RN. What studies there are pertaining to SCCT have supported the findings of this research that the variables of choice behavior have an influence on career choices.

Research Question 2. What is the relationship in self-efficacy beliefs contextual supports and barriers, outcome expectations, and intent to return to school based upon demographics of the study participants? This question was answered in a two-step process. The relationships between these variables were

investigated by a series of bivariate Pearson correlations between the responses to the subcategories of SCCT and the demographics of the sample. The demographic questions that were included in this question were gender, marital status of either married or not married (single/divorced), and education of diploma or ADN. The demographic data were analyzed with t-tests.

The relationship between age and efficacy ($r=-.15$, $p=.005$), outcome expectations ($r=-.22$, $p<.001$), and contextual support ($r=-.19$, $p<.001$) reveals that the older the nurse is, the lower the belief in the ability to excel in school, the less likely to believe that getting a BSN will be beneficial, and the feeling there is less support to go back to school. Finally, the older the nurse is, the less likely the nurse will return to school. There was a strong inverse relationship between age and the intent to return to school ($r=.-61$, $p<.001$). These findings are supported in literature that older nurses are less likely to go back to school with many of them reporting that they feel there would be little benefit for them to get a BSN at their age (Delaney & Piscopo, 2007; & Trainor 2000).

There was no significant finding that being male or female made any difference in the components of SCCT. In addition, there was no significant relationship in a nurse's ethnicity and components of SCCT. However, this is probably due to a lack of male responses in the study and that most of nurses reported being ethnically "white" (97.4%). There was also no significant difference for those who were married or not married (divorced or single). Therefore, no conclusions can be made in terms of the relationship of SCCT components, ethnicity, marital status, and gender.

The number of years working in nursing did have an inverse relationship with efficacy ($r=-.18$, $p<.001$), outcome expectations ($r=-.16$, $p=.002$), and contextual support

(r=-.14, p=.008). Thus, nurses who worked longer in nursing had lower beliefs in their ability to complete a BSN education. The nurses who were in nursing longer also reported lower ability to deal with problems that could occur while in school, and believed they would have less support to return school. In addition, there was a negative correlation between the number of years in nursing and the reported intent to return to school (r=-.48, p<.001). This shows that nurses who were in nursing longer reported being less likely to return to school. However, the nurses who were in nursing longer tended to be older and there was a strong positive relationship between age and the number of years in nursing (r=.78, p<.001). These findings are consistent with other literature that point towards supports and expectations as possible reasons whether or not to return to school for a BSN (Delaney & Piscopo, 2004; Megginson, 2008).

Diploma RNs (*M*=1.94), *t*(341)=4.89, p<.001 reported significantly less intent to return to school than ADN RNs (M=2.67). In addition, diploma nurses (*M*=52.82), *t*(341)=-6.30, p<.001 were older than the ADN RNs (*M*=44.71), and had been working significantly more years in nursing (*M*=23.38), *t*(341)=-11.08, p<.001) than ADN RNs (*M*=44.71) in the sample. This does support the fact that there were more diploma schools in the past than there are now and its graduates would tend to be older and have worked longer in nursing (NLN-AC, 2010).

The literature supports that person inputs, such as age, and background, such as type of education, and years in nursing do influence one's learning experiences that lead to self-efficacy beliefs, outcome expectations, and eventually intent to return to school (Lent et al., 1986; Lent et al., 1987; Lent et al., 2003; Lent et al., 2005). Consistent with SCCT, if one believes that barriers are too great or supports too small, that person will

not pursue the goal to return to school. In the case of this sample, the older the nurse and the longer that nurse had worked in the profession, the less belief the nurse had in the ability to complete school, that school is beneficial, and that there is enough support to go back to school.

Research Question 3. What are the relationships among self-efficacy beliefs, contextual supports and barriers, outcome expectations and the intent to return to school? The relationships of these variables were analyzed with bivariate Pearson correlations. Many of the subscales of SCCT significantly correlated with nurses' intent to return to school to obtain a BSN.

Efficacy or a nurse's belief that they can successfully complete BSN education is positively correlated to the intent to return to school ($r=.34$, $p<.001$). Thus, the stronger the belief that they can succeed in school, the more likely the nurse will return to school. Nurses who also expect to have positive results from returning to school also seem to be more likely to intend to get a BSN ($r=.45$, $p<.001$). Contextual supports seem to be more important to the sample of nurses than the barriers in their lives. Support was positively correlated with the nurses' intent to return to school ($r=.37$, $p<.001$). However, contextual barriers did not show a significant correlation to intent to return to school ($r=-.09$, $p=.11$).

With the exception of contextual barriers, these findings are consistent with choice behavior of SCCT theoretical framework. As Bandura (1986) indicated, nurses seem to be more willing to go back to school if their perception of their ability to finish is higher and if they believe it is worth it to go to school. Just as Bandura (1986) and Lent et al. (2003) postulate, it is nurses' confidence that they can accomplish this goal; that they

can cope with the issues that occur with nursing school; that BSN nursing school is worth it; and that they have the support to go back to nursing school, which positively influences nurses' decisions to go back to school.

Research Question 4. Which of the components of social cognitive career theory (self-efficacy, coping efficacy, outcome expectations, contextual supports and barriers) explain the most variability in the intent to return to school? The nurses of this sample were asked about their intent to return to school. If the participant answered, "strongly disagree" or "disagree" to the questions "I intend to obtain a baccalaureate degree in Nursing" and "I plan to enroll in a school of nursing within the next year", they were categorized as not going back to school. Almost half of the sample (47.2%) reported that they were not going to go back to school. Then they were asked in the survey to answer why they were not going to return to school. Further, if participants answered undecided, agree, or strongly agree, they were categorized as possibly intending to go to school and were not asked why they were not going back to school.

Since the nurses were put into two categories of going back to school and not going back to school, the question was analyzed in a two stage process. A binary logistic regression was used to predict whether or not nurses intended to return to school. Outcome expectations were significant predictors of whether nurses intended to return to school or not. It seems that if nurses expect positive outcomes from obtaining a BSN then they are more likely to return to school. For each one unit increase the participants had in the outcome expectation scale, the participants were 76% more likely to return to school. However, efficacy and contextual support and barriers were not significant predictors in this model for intent to return to school.

One hundred and eighty one nurses were categorized as at least considering going back to school. Of those that intended to return to school, a multiple linear regression was run to predict their intent to return to school based from the SCCT variables. The aim of this portion of the study was to see which SCCT variable best predicts the intent nurses have in returning to school, and who were to actually going to get their BSN degree. SCCT model accounted for 20% of the variance in how close nurses were to getting their degree.

Efficacy was a significant indicator of how close the subject was to getting a BSN. The nurses who reported a higher efficacy also indicated that they were closer to getting a BSN (β = 0 .26, $t = 3.25$, p =.001). Different from the previous results, outcome expectations were not a predictor for how close nurses were to going to school. However, contextual support was a significant predictor for those who reported they were going to go back to school (β = 0 .33, $t = 4.25$, p <.001). Contextual barriers and outcome expectations were not a significant predictor in this model for nurses to go back to school.

Some of these findings are consistent with the SCCT model, in that outcome expectations predicted if the nurses were going to go to school or not. Also, for those nurses who did indicate they were at least thinking of going back to school, efficacy and contextual supports were predictors of those more likely to go back to school. Like other studies, this finding is consistent with the view that students may decide to go back to school based partly on self-efficacy and outcome expectations (Lent et al., 2003; & Lent et al., 2005).

Limitations

When reviewing research outcomes, it is important to understand the multiple influences that could have affected those research outcomes. The identification of the influences, as study limitations, assists with appropriate interpretation of the results of this study.

Instrument development. The researcher modified a previous instrument for engineering students to measure the choice behavior of ADN and diploma RNs. Item selection of the BSN self-efficacy was based upon review of literature and input from experts in nursing BSN education. Content validity was established in the initial phase of the instrument development through the review of the experts, but there was no formal content validity process applied to this portion of the measurement tool. In addition, there is very little research in the literature on the subject of choice behavior for those RNs returning to school to get a baccalaureate degree in nursing. Therefore, potentially key concepts that should have been included in the instrument were not included simply due to the lack of information about choice behavior of ADN and diploma RNs. There are no existing instruments specifically available for nursing to establish criterion validity for the new instrument. Therefore, reliability results were from previous engineering studies.

Sample. ADN and diploma RNs were selected using the convenience sampling method. Each participating facility had a site representative through which the online survey or paper survey was distributed and returned. The researcher gave verbal guidelines and the informational sheet to every site representative, but the representative determined the distribution method and retrieval of the responses. The end result was an overall estimated response rate of only approximately 15% to the survey. It is also

unknown if the variety of survey distribution and low response rate affected the quality of the data collected or the representation of the subjects who participated.

In addition, the facilities that participated in this study are from midwestern United States. The demographics of the study were mainly white (97.4%) females (96.2%). Since there was a lack of representation of males and ethnicity other than white, the findings of this study may not be applied to males or anyone of another ethnicity than white. Therefore, the findings of this study may not be directly applicable to any other ADN or diploma RNs than those who responded to this survey.

Ethical conduct. ADN or diploma participation in this study was voluntary, however some of the surveys were distributed and collected via paper method and not via an online survey. Nurses may have felt pressured to participate in the study if their site representative was a direct supervisor. Nurses' confidentiality regarding the participation of the study could have been compromised via the paper method if the representative kept an account of who participated in the study and read their responses to the survey.

Data analysis. Data were collected through the convenience sampling method, which is a non-random sampling method. Regression methods of analysis are intended to be used with data generated through random sampling methods. Results from logistic and multiple regression computed from non-random samples need to be carefully reviewed and recommendations based on these findings should be made with caution.

Factor analysis is both an objective and subjective process. Factor determination and item inclusion within a factor is based on both statistical results and the researcher's determination of item consistency with the factor's content. For example, the items of factor 1-3 loaded well onto the corresponding subscales for SCCT. However, factor four

"Contextual supports" had one item and factor 5 "Contextual barriers" had five items that had low loadings on the respective factors (less than 0.40).

Decisions about the factor analysis were guided by results from the statistical analyses, but also by viewing the omitted items in relation to the remaining items with the factor to decide if the items should be included within the factor regardless of the statistical results. Item inclusion decision matched the SCCT theory for the most part, but due to some of the items loading low in two of the factors, it is possible that additional items should have been included or omitted to provide more stability. Factor 6 seemed to represent financial issues or enough time for life. In SCCT, these concerns are a portion of "Contextual supports and barriers", but in nursing (at least for this sample) there may be a factor that is significant apart from the normal "contextual supports and barriers" of SCCT. However, since most of the items followed the SCCT theory all items that were included were kept within the corresponding subscales.

Conclusions

The items of this measurement tool did load onto the unique subscales that were consistent with the components of choice behavior of SCCT. The sixth factor captured some variance, which pertained to finances and time for schooling that crossed several different scales. This may suggest that there is something about finances that is more important for ADN/diploma RNs than other supports and barriers. This information could be used as a basis for expanding this scale. However, since the factor structure was very close to what would be expected on the scales and the reliability of the subscales were very good, all but six of the items of the measurement tool were used for analysis of the study.

Consistent with the SCCT model, the measures for this study of efficacy, outcome expectation, and contextual supports were positively related to goals or intent to return to BSN-completion school. In addition, contextual barriers were correlated negatively to efficacy, outcome expectations, and contextual supports. However, in this study there was no relationship between contextual barriers and goals or intent to return to school.

Outcome expectations, efficacy, and contextual supports were significant predictors of whether an ADN RN or diploma RN of this sample was intending to return for a BSN. Therefore, if nurses believe that positive results occur from getting a BSN, they will return to school. If they also believe they have the ability to succeed in BSN school, they reported that they were more likely to return to school. In addition, ADN/diploma RNs who had higher efficacy scores reported they were closer to actually going back to school. Finally, for those nurses that reported they had any intention of returning to school, it seems that if nurses believe they have the support to return to school and if they believe they have the capability, they were more likely to return to school.

Not surprising is the finding that the older the nurse was and the longer they worked in nursing, the less likely they were to return to school. The older nurse also tended to be a diploma nurse. This is due to the fact that there are fewer diploma schools than there used to be and this degree tends to be a degree of older nurses. These same nurses tend to have lower self-efficacy and outcome expectations of returning to BSN schooling. It does make sense that if a nurse is out of a formal academic setting, that nurse may have less coping and confidence in their ability to finish a BSN successfully.

According to SCCT, efficacy directly influences both outcome expectations and goal development. In addition, contextual supports influence goals or intent (Lent et al., 2003; Lent et al. 2005). This is also true for the findings of this study and compared to the theoretical literature, Self-efficacy was a predictor of academic performance (Lent et al., 1986; Lent et al., 1987; Brown et al., 1989; Multon et al., 1991; Hackett et al., 1992) and clinical performance (Opacic, 2003). Self-efficacy and outcome expectations were also predictors for academic performance and/or activity (Siegel, Galassi, & Ware, 1985; Kahn & Nauta, 2001: Kahn, 2001). The findings of this study are consistent with the SCCT choice model in which person inputs and background influence learning experiences and ultimately, influence efficacy and outcome expectations (Lent et al., 1994). In addition, contextual influences proximal to choice behavior, such as finances and time for school, have an influence for the ADN/diploma RN on the intent to return to BSN school. Despite the lack of significance for contextual barriers, the findings of this study are consistent with the expectation of the SCCT choice model.

Implications for Nursing Education and RN-BSN Education

The problem that was the impetus for this study was that there is an imbalance of ADN and diploma RNs versus BSN RNs. Even though most patients in the hospitalized setting have multi-system complex issues, there are less BSN educated nurses to take care of them. One possible area for improving the number of BSN educated nurses is to support and encourage ADN and diploma nurses to go back to school. There is little literature on RNs choices as to why or why not they would choose to go back to school.

The SCT (Bandura 1986, 1997) and the SCCT (Lent et al., 2002) indicate that learning experiences are foundational to the development of self-efficacy. Learning

experiences and self-efficacy influence the development of outcome expectations. Both self-efficacy and outcome expectations influence the development of goals. Finally, goal attainment loops back to learning experiences and self-efficacy and outcome expectations are adjusted. If goals are attained, then persistence within the goal is anticipated to continue. If goals are not met, then persistence decreases. Adjustments in learning experiences can enhance the ability to increase self-efficacy and outcome expectations that are consistent with the goal, which then increase the potential of the goal being met and increase the likelihood of persistence or choice to make a career change.

Bandura (1986, 1997) indicates that self-efficacy is developed through four phenomena that occur with learning experiences: vicarious experiences, verbal persuasion, performance experiences, and emotional arousal. If the experiences are positive, then self-efficacy grows and is strengthened. Similar to self-efficacy, outcome expectations are developed from learning experiences, but the emphasis is on observing the rewards others receive for past performances; personal appraisal of one's own accomplishments and self-approval; and awareness of one's physical response to one's performance. In addition to learning experiences, outcome expectations are also influenced by the person's perceived self-efficacy (Lent et al., 2002). The development and support of self-efficacies and outcome expectations is important as these two variables are significantly related to goal development and persistence.

Based on the findings of this study, nurses have identified that outcome expectations determine if they might or might not go back to school, and if the nurse has decided to go back to school, efficacy and contextual supports can be predictors of how close that nurse is to returning to school. Given the strengths of these components of

SCCT by the regression scores, educators and facilities should pay close attention to factors, (such as positive attitude, verbal support, and financial support) that can influence nurses' efficacy and expectations.

Attention should be paid to RN's perceived self-efficacy, especially in relation to their previous experience with school and their perception of the benefits of going back to school. Nursing education and facilities should intervene to increase nurses' self-efficacies and expectations. When ADN and diploma nurses are transitioning into a possible different role as a BSN nurse, Bandura's (1986, 1997) four components of self-efficacy development also can be useful in assisting new nurses' self-efficacy growth and development. For example, ADN and diploma nurses who observe what other BSN nurses are doing, would be an example of vicarious experiences. How these nurses hear and perceive others from their facility, talk about BSN nursing, and talk about BSN schooling is an example of verbal persuasion. How efficiently BSN nurses implement their roles is an example of performance. Finally, ADN and diploma nurses will have emotional responses to vicarious experiences, verbal persuasion, and their own performances. Positive experiences and positive emotional responses will strengthen their self-efficacy and outcome expectations.

Similar to self-efficacy, outcome expectations are developed through experiencing how others perform and the benefits that occur from those performances. Lent et al., (2002) describes outcome expectations as an awareness of individuals' own performance and self-appraisal, and individuals' emotional responses to the performances of themselves and of others. ADN and diploma nurses reported that expecting positive outcomes from getting a BSN would influence their decision to go back to school.

Employers, nursing education, and institutions of higher learning can support and stabilize efficacy and outcome expectations through appropriate experiences during BSN education and supporting and rewarding those who chose to go to nursing school. Since the subscale "outcome expectations" was a significant predictor of whether or not an ADN or diploma RN intends to return to school, employers and facilities should place those with BSNs in positions of increasing responsibility. In addition, those who get BSNs should receive financial incentives, such as increased pay through clinical ladders, managerial positions, and increased raises.

Finally, age and years of experience in nursing also seem to be indicative as to whether a nurse is willing to go back to school. According to the results of this study, it seems that the profession needs to be proactive early on in ADN or diploma nurses' careers to encourage them to go back to school.

Recommendations for Further Research

This study was conducted with a convenience sample; one immediate recommendation would be to replicate the study with a randomly selected sample to determine if the findings are consistent and reliable. In particular, testing for stability of correlations that were evident of the subscales of SCCT would be most beneficial for further understanding of choice behavior.

Another area of further study could include the differences that may occur between ADN and diploma RNs. The findings of this study revealed that there were significant differences in age, years in nursing, and intent to return to school for ADN and diploma RNs. It would be beneficial to expand the number of diploma nurses in the sample to compare the supports and barriers of ADN and diploma RNs to reveal any

differences between the two. In addition, the sample of this study was participants from a hospital setting. It would be beneficial to study non-BSN prepared nurses from other settings such as long-term care facilities to reveal the supports and barriers from a variety of settings.

Another area of focus for further study could include facilities with various organizational structures. Would there be a difference in the beliefs of ADN/diploma RNs if the facility supported returning to school? For instance, would outcome expectations increase if facilities supported non-BSN prepared RNs financially, or gave them the time needed in their work schedule for schooling? It would be valuable to know if certain organizational structures influenced choice behavior.

This study focused on ADN and diploma nurses going back to school. However, there are very few studies on the choice behavior for any educational level in nursing. Since there is also a nursing educator shortage, it would be beneficial for the profession to also have a greater understanding of the supports and barriers for nurses who might go back to school for Masters, DNP, or PhD degrees.

Policy Recommendations

The Institute of Medicine is recommending the number of BSN RNs reach eighty percent of the workforce by 2020, it is imperative that ADN/diploma RNs return to school to get a BSN (IOM, 2010). This study reveals some of the factors that influence the decision to return to school. The results of this study can help administration of facilities support ADN/diploma RNs to return to school.

Finances and enough time for school were found to be specifically important to the participants, organizations should take note which incentives, especially financial

incentives, should be put in place to influence nurses to go back to school. Improving supports, such as positive talk about BSN preparation and financial reimbursement, and decreasing barriers, such as allowing flexible schedules to allow for time for school, could improve RNs' intent to return to school.

In addition, funding for school is under attack at the federal level. According to the findings of this study, finances are very important to the intent to return to school and would be an issue for ADN and diploma RNs to return to school. Thus, funding at the federal level should at the very least be maintained if not increased in order to meet the recommendation from the IOM report that 80% of practicing nurses should be BSN prepared by the year 2020.

Summary

The purpose of the research study was to identify the relationships among variables that influence RNs' decision to return to school for a BSN. The results of this study support that choice behavior does show some of the variability for the reasons why ADN or diploma nurses return to school. In addition, age and years in nursing also show a relationship if a RN will or will not go back to school. Knowledge about these results could be helpful with developing future support for nurses to go back to school to get a BSN.

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APPENDIX A

INFORMATIONAL SHEET

University of Wisconsin – Milwaukee
Consent to Participate in Online Research

This survey is to be filled out for Registered Nurses who have an associate degree or diploma degree and do not have a BSN or higher.

Study Title: Relationships of Contextual Supports and Barriers in Choice Behavior for Associate Degree Registered Nurses

Person Responsible for Research: Sandra Nash (SPI), Dr. Sue Dean-Baar (PI)

Study Description: The purpose of this research study is to identify the relationships among variables that influence RNs' decision to return to obtain a baccalaureate degree in nursing. Approximately 330 subjects will participate in this study. If you agree to participate, you will be asked to complete a survey that will take approximately 10-15 minutes to complete. The questions will ask for your opinion about different aspects of returning to school to further your nursing degree.

Risks / Benefits: Risks to participants are considered minimal. There will be no costs for participating, nor will you benefit from participating other than to further research.

Confidentiality: Your responses are completely confidential and no individual participant will ever be identified with his/her answers. Data from this study will be saved on a password protected computer for one year. Only the researcher, Sandra Nash will have access to the information.

Voluntary Participation: Your participation in this study is voluntary. You may choose to not answer any of the questions or withdraw from this study at any time without penalty. Your decision will not change any present or future relationship with the University of Wisconsin Milwaukee.

Who do I contact for questions about the study: For more information about the study or study procedures, contact Sandra Nash at SLNash@uwm.edu or at (309) 331-4584.

Who do I contact for questions about my rights or complaints towards my treatment as a research subject? Contact the UWM IRB at 414-229-3173 or irbinfo@uwm.edu

Research Subject's Consent to Participate in Research:
By completing and submitting the attached survey, you are voluntarily agreeing to take part in this study. Completing the survey indicates that you have read this consent form and have had all of your questions answered, and that you are 18 years of age or older.

Thank you!

APPENDIX B

PROTECTION OF HUMAN SUBJECT

INSTITUTIONAL REVIEW BOARD APPROVAL

UNIVERSITY of WISCONSIN
UWMILWAUKEE
Department of University Safety & Assurances

Melissa Spadanuda IRB Administrator Institutional Review Board Engelmann 270
P. O. Box 413
Milwaukee, WI 53201-0413
(414) 229-3173 phone
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http://www.irb.uwm.edu
spadanud@uwm.edu

NewStudy -NoticeofIRBExempt Status

Date: March 20, 2012

To: Susan Dean-Baar, PhD
Dept: College of Nursing

Cc: Sandra Nash

IRB#: 12.292
Title: Relationships of Contextual Supports and Barriers in Choice Behavior for Associate Degree Registered Nurses

After review of your research protocol by the University of Wisconsin – Milwaukee Institutional Review Board, your protocol has been granted Exempt Status under Category 2 as governed by 45 CFR 46.101(b).

Unless specifically where the change is necessary to eliminate apparent immediate hazards to the subjects, any proposed changes to the protocol must be reviewed by the IRB before implementation. It is the principal investigator's responsibility to adhere to the policies and guidelines set forth by the UWM IRB and maintain proper documentation of its records and promptly report to the IRB any adverse events which require reporting.

It is the principal investigator's responsibility to adhere to UWM and UW System Policies, and any applicable state and federal laws governing activities the principal investigator may seek to employ (e.g., FERPA, Radiation Safety, UWM Data Security, UW System policy on Prizes, Awards and Gifts, state gambling laws, etc.) which are independent of IRB review/approval.

Contact the IRB office if you have any further questions. Thank you for your cooperation and best wishes for a successful project

Respectfully,

Melissa C. Spadanuda
IRB Administrator

APPENDIX C

QUESTIONNAIRE

Part I: **Self-efficacy**

Instructions: The following is a list of baccalaureate nursing courses. Please indicate how much confidence you have that you could complete each major with an overall grade point average of B or better. Use the 0-9 scale below to indicate your degree of confidence.

How much confidence do you have in your ability to complete the following courses with a GPA of B or better:	No Confidence at all 0	1	2	3	4	Some Confidence 5	6	7	8	Complete Confidence 9
1. Research and Evidence Based Practice										
2. Community Health Nursing										
3. Legal/Ethical Issues in Nursing										
4. Health/Physical Assessment										
5. Nursing Theory										
6. Nursing Management										
7. Pathophysiology										
8. Leadership for Professional Nursing										

Part I (Cont.) Instructions: The following is a list of major steps or tasks along the way to completing a baccalaureate degree or higher in nursing. Please indicate how much confidence you have in your ability to complete each one.
Use the 0-9 scale below to indicate your degree of confidence.

How much confidence do you have in your ability to:	No Confidence at all 0	1	2	3	4	Some Confidence 5	6	7	8	Complete Confidence 9
1. Complete all of the "basic science" (i.e., Statistics, physics, chemistry) requirements for your nursing degree with grades of B or better										
2. Excel in your nursing degree										
3. Complete the upper level required courses in your nursing degree with an overall grade point average of B or better										

Part II. Coping Efficacy

Instructions: Here we are interested in knowing how well you believe you could cope with each of the following barriers, or problems, that students could possibly face in pursuing a baccalaureate degree in nursing. Please indicate your confidence in your ability to cope with, or solve, each of the following problem situations.

	No Confidence at all				Some Confidence					Complete Confidence
How confident are you that you could:	0	1	2	3	4	5	6	7	8	9
1. Cope with a lack of support from professors or your advisor.										
2. Complete a baccalaureate degree or higher in nursing despite financial pressures.										
3. Continue on in nursing even if you did not feel well-liked by your classmates or professors.										
4. Find ways to overcome communication problems with professors or teaching assistants in nursing courses.										
5. Balance the pressures of studying for nursing courses with the desire to have free time for fun and other activities.										
6. Continue on in nursing even if you felt that, socially, the environment in these classes was not very welcoming to you.										
7. Find ways to study effectively for nursing courses despite having competing demands for your time.										

Part III. Outcome Expectations

Instructions: Using the scale below, please indicate the extent to which you agree or disagree with each of the following statements.

Graduating with a BS degree in nursing will likely allow me to:	Strongly Disagree 0	1	Disagree 2	3	Unsure 4	5	Agree 6	7	Strongly Agree 8	9
1. ... receive a good job offer										
2. ... earn an attractive salary										
3. ... get respect from other people										
4. ... do work that I would find satisfying										
5. ... increase my sense of self-worth										
6. ... have a career that is valued by my family										
7. ... do work that can “make a difference” in people’s lives										
8. ... advance in the area of my choice in nursing										
9. ... do exciting work										
10. ... have the right type and amount of contact with other people (i.e., “right” for me)										

(OVER PLEASE)

Part IV. Contextual Supports and Barriers

Instructions: Many factors can either support or hinder students' college and career plans. We are interested in learning about the types of situations that could help or hinder your plans if you were to continue on for a baccalaureate degree in Nursing. For the questions below, assume that you wanted to pursue a baccalaureate degree in nursing. Using the 1-5 scale, show how likely you believe you would be to experience each of the following situations.

If you were to complete a baccalaureate in nursing, how likely would you be to ...	Not at All Likely 1	A Little Likely 2	Moderately Likely 3	Quite Likely 4	Extremely Likely 5
1. Feel accepted by your classmates	☐	☐	◄	►	▲
2. Have access to a "role model" in this field (i.e., someone you can look up to and learn from by observing)	☐	☐	◄	►	▲
3. Be able to afford the extra cost of advanced training in this field	☐	☐	◄	►	▲
4. Feel support for this decision from important people in your life (e.g., teachers)	☐	☐	◄	►	▲
5. Feel that there are people "like you" in this field	☐	☐	◄	►	▲
6. Get helpful assistance from a tutor, if you felt you needed such help	☐	☐	◄	►	▲
7. Get encouragement from your friends for pursuing this major	☐	☐	◄	►	▲
8. Get helpful assistance from your advisor	☐	☐	◄	►	▲
9. Be able to receive enough money through financial aid or other sources to allow you to pursue this major	☐	☐	◄	►	▲
10. Feel that your family members support this decision	☐	☐	◄	►	▲
11. Have friends or family members who would help you with math or science problems	☐	☐	◄	►	▲
12. Have enough money saved up to be able to complete your education in this field	☐	☐	◄	►	▲
13. Feel that close friends or relatives would be proud of you for making this decision	☐	☐	◄	►	▲
14. Have access to a "mentor" who could offer you advice and encouragement	☐	☐	◄	►	▲
15. Have enough financial support from your family to pursue this academic major	☐	☐	◄	►	▲
16. Receive negative comments or discouragement about your major from family members	☐	☐	◄	►	▲
17. Worry that such a career path would require too much time or schooling	☐	☐	◄	►	▲
18. Feel that you don't fit in socially with other students in this major	☐	☐	◄	►	▲
19. Receive unfair treatment because of your racial or ethnic group	☐	☐	◄	►	▲

(OVER PLEASE)

Part IV. continued

If you were to pursue a baccalaureate degree in Nursing, how likely would you be to ...	Not at All Likely	A Little Likely	Moderately Likely	Quite Likely	Extremely Likely
20. Have professors or teaching assistants who are difficult to understand	☐	☐	◂	▸	▲
21. Feel the social environment is not friendly to people of my gender	☐	☐	◂	▸	▲
22. Not have enough time for social or leisure activities	☐	☐	◂	▸	▲
23. Feel pressure from your family to get out of college and begin making money	☐	☐	◂	▸	▲
24. Receive unfair treatment because of your gender	☐	☐	◂	▸	▲
25. Feel the social environment is not friendly to people of my racial or ethnic group	☐	☐	◂	▸	▲
26. Have trouble getting assistance from teachers and teaching assistants	☐	☐	◂	▸	▲
27. Feel that the demands of pursuing such a field would get in the way of family responsibilities	☐	☐	◂	▸	▲
28. Experience financial strain, especially if this career path required additional training	☐	☐	◂	▸	▲
29. Receive negative comments or discouragement about your major from friends	☐	☐	◂	▸	▲
30. Feel a lack of support from professors or your advisor	☐	☐	◂	▸	▲
31. Feel that you are different from others in this major because of your racial or ethnic group	☐	☐	◂	▸	▲
32. Have too many other demands on your time to allow the study time required for this field	☐	☐	◂	▸	▲
33. Have poor-quality teachers in your math and science-related courses	☐	☐	◂	▸	▲
34. Feel that you are different from others in this major because of your gender	☐	☐	◂	▸	▲
35. Have too little money to afford things (like computer software or tutoring) that you might need to do well in your coursework	☐	☐	◂	▸	▲
36. Be concerned about the amount of competition among students in this field	☐	☐	◂	▸	▲
37. Feel that your educational/career options are limited by financial concerns	☐	☐	◂	▸	▲
38. Feel pressure from parents or other important people to change your major to some other field	☐	☐	◂	▸	▲

Part V. Goals-Intent to return to school

Instructions: Using the scale below, indicate your level of agreement with each of the following statements about your educational goals.

How much do you agree or disagree with the following statements about your educational goals:	Strongly Disagree 1	Disagree 2	Undecided 3	Agree 4	Strongly Agree 5
1. I intend to obtain a baccalaureate degree in Nursing	☐	☐	◄	►	▲
2. I plan to enroll in a school of nursing within the next year.	☐	☐	◄	►	▲
3. I think that earning a BS in nursing is a realistic goal for me	☐	☐	◄	►	▲
4. I am fully committed to getting my baccalaureate degree in nursing	☐	☐	◄	►	▲
5. I have begun the process of earning my baccalaureate degree (ex. Turned in an application, started taking pre-requisite courses)	☐	☐	◄	►	▲

If the participant answers 1 or 2 on the first question these questions will be asked them instead of questions 2-5 above.

Click which of the following are reasons that you are not going to return to school:

1. I am content with my current position/level of nursing and do not want to change what I am doing.
2. At my age I do not want to go back to school.
3. I have other obligations that take priority (family, business, etc.)
4. I already have a bachelor degree in another subject.
5. I do not see a bachelor degree improving my ability to be a nurse.
6. Other (A blank spot will be allowed for an individual response)

Part VI: Demographics :

Age:
List in years of age

Sex:

Male

Female

Marital Status:

Married,

Divorced

Single

Ethnic Group
White

Hispanic

Black or African American

American Indian or Alaska Native

Asian

Native Hawaiian/Other Pacific Islander

Some other ethnicity

Two or more ethnicities

Educational Level in Nursing: This is the first in the excel file and in Online version

Associate Degree
Diploma Degree
Baccalaureate Degree
Higher than Baccalaureate Degree

Years of work in the Nursing field as a registered nurse:

List in Years

What year did you get your education?

List the year

Is this your 1st career? If not, list which it is (2nd, 3rd, etc.)

How long have you been at this agency? List in years

Area of nursing in which you work:

Medical-Surgical

Long-term care

Rehabilitation

Maternity

Pediatrics

Intensive Care

Surgery

Emergency Department

Other

How much of the time during the week do you care for others? (i.e. kids, family members, parents, etc.)

APPENDIX D

SUPPLEMENTARY TABLE FACTOR MATRIX

Factor Analysis, All loadings (N=343)

	1	2	3	4	5	6
Research and Evidence Based Practice	.823	-.051	.031	.067	-.016	-.022
Community Health Nursing	.817	-.071	.060	.100	.026	-.063
Legal/Ethical Issues in Nursing	.844	-.111	-.036	.100	.022	-.024
Health/Physical Assessment	.850	-.022	-.012	-.024	-.037	-.191
Nursing Theory	.820	-.075	-.026	-.056	-.015	-.155
Nursing Management	.895	-.103	.005	.069	.049	-.105
Pathophysiology	.917	-.020	-.012	-.002	.038	-.149
Leadership for Professional Nursing	.894	-.023	.029	.108	.054	-.013
Complete all of the basic “Science”	.684	-.014	.052	-.068	.002	.095
Excel in your nursing degree	.725	-.080	.069	-.074	-.064	.015
Complete upper level required courses	.795	.011	.098	-.078	-.010	.042
Cope with lack of support from prof.	.691	.162	.067	-.186	-.001	.090
Complete a bacc. despite financial pressure	.382	.083	.108	-.054	-.003	.449
Continue on in nursing even if not well liked	.599	.044	.008	-.191	-.098	.095
Find ways to overcome communication problems	.683	.075	-.002	-.205	-.024	.121
Balance pressures	.572	.020	.090	-.021	-.080	.302
Continue on in nurses even if not welcoming	.619	.055	.062	-.166	-.054	.140
Find ways to study effectively	.499	.011	.051	-.098	-.029	.335
Receive a good job offer	.050	.030	.795	.110	.016	.097
Earn an attractive salary	.042	.083	.729	.077	.130	.206
Get respect from other people	.060	-.026	.631	-.157	.069	.037
Do work I would find satisfying	.048	.028	.883	-.016	.009	-.041
Increase my sense of self-worth	-.032	-.156	.735	-.083	.000	.009
Have a career that is valued	-.083	-.048	.905	-.058	-.070	-.059
Do work that can make a difference	.005	-.012	.923	-.012	-.029	-.128
Advance in an area of my choice	.017	-.263	.569	-.022	-.034	.039
Do exciting work	.074	.007	.867	-.038	-.013	-.055
Have the right amount of contact with others	.044	-.062	.777	-.083	.020	.049
Feel accepted by your classmates	.269	-.026	-.063	-.442	-.121	.011
Have access to a role model	.104	-.185	-.034	-.325	-.064	.079
Be able to afford extra cost of adv. training	.130	-.091	.029	-.210	.242	.698
Feel support for this decision	.035	-.080	.070	-.724	-.030	-.007
Feel that there are people like you in this field	.020	-.110	.109	-.706	-.077	-.131
Get helpful assistance from a tutor	.084	.006	-.009	-.641	-.075	.089
Get encouragement from your friends	-.011	.017	.090	-.855	-.012	-.045
Get helpful assistance from advisor	-.007	-.054	.046	-.541	-.003	.070
Be able to receive enough money through financial aid	.086	.032	.091	-.291	.139	.528
Feel that your family members support this decisions	-.029	-.016	.087	-.742	-.062	-.036
Have friends or family to help you with math or science	.144	.008	-.082	-.441	.100	.092
Have enough money saved up to complete education	-.014	-.063	.000	-.234	.271	.713
Feel that close friends or relatives would be proud	-.065	-.115	.161	-.746	-.118	-.158

Table 7. *Factor Analyses Cont. (N=343)*

	1	2	3	4	5	6
Have access to a mentor	.044	-.122	.035	-.527	-.034	.051
Have enough financial support from family	-.074	-.090	.072	-.267	.201	.570
Receive negative comments of discouragement from family	-.033	-.046	.067	.174	.393	-.036
Worry that it would require too much time or schooling	.077	.096	-.084	.004	.193	-.479
Feel that you don't fit in socially	-.047	.064	-.103	.049	.432	.006
Receive unfair treatment because of race	.079	.070	.006	-.011	.622	.092
Have professors or TA's that are difficult to understand	-.213	.055	.086	-.110	.273	-.185
Feel the social environment is not friend to people of my gender	-.127	.018	.017	.046	.541	.013
Not have enough time for social activities	-.057	-.038	-.151	-.162	.139	-.409
Feel pressure from family to get out of college	-.037	-.115	.032	.169	.390	-.297
Receive unfair treatment because of your gender	.073	-.078	.029	.039	.738	.132
Feel the social environment is not friendly to your race	-.018	.026	-.132	-.115	.762	.077
Have trouble getting assistance from teachers	-.099	-.033	.073	.066	.382	-.130
Feel that the demands would get in the way of family responsibilities	-.049	-.052	-.102	-.073	.192	-.466
Experience financial strain	.117	-.024	-.046	-.079	-.018	-.781
Receive negative comments or discouragement	-.036	-.091	-.011	.236	.533	-.101
Feel lack of support from advisors	.005	.053	-.046	.021	.472	-.257
Feel that you are different from others because of your race	.038	.007	.011	-.007	.669	.065
Have too many other demands	-.011	-.018	-.060	-.056	.162	-.661
Have poor quality teachers	.023	-.085	.028	.148	.328	-.205
Feel that you are different from others because of your gender	.018	.090	.072	-.092	.607	.004
Have to little money to afford things	.003	-.036	.020	.007	.127	-.726
Be concerned about competition	-.193	-.012	-.056	-.066	.427	-.244
Feel that your career options are limited	-.074	.027	.009	-.069	.015	-.742
Feel pressure from parents to change field	-.021	.003	.027	.065	.573	.011
I intend to obtain a bacc. in nursing	.022	-.933	.041	-.049	-.047	.010
I plan to enroll in a school of nursing	.014	-.887	.045	-.044	-.006	.057
I think that earning a BS in nursing is a realistic goal for me	-.020	-.858	.087	-.075	-.018	.017
I am fully committed to getting my BS	.017	-.911	.035	-.032	-.054	.052
I have begun the process of earning my bacc. degree	.117	-.683	-.018	-.028	.047	.014
Eiganvalues	18.19	6.88	5.6	4.58	3.94	2.44
Percentage of total variance	25.61	9.69	7.88	6.45	5.55	3.43
Number of test measures	18	5	10	15	16	7

Curriculum Vitae
Sandra L. Nash

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Masters of Science in Nursing, Adult Critical Care, Vanderbilt University School of Nursing, Nashville, TN
August 1995.

Bachelor of Science in Liberal Arts and Nursing, Wheaton College**,** Wheaton, IL
August 1994.

LICENSURE: Illinois RN license. May 1997.

CERTIFICATION: Acute Care Nurse Practitioner. September 1998.
Advanced cardiac life support. July 1995.
Pediatric advanced life support. June 1995.
Basic cardiac life support. July 1995.

WORK EXPERIENCE:

Western Illinois University; Macomb, IL, August 2008-Present, Nursing Instructor.
Development of a portion and submission to Illinois Division of Professional Regulation of pre-licensure curriculum.
Development of a portion of the RN-BSN completion curriculum.
Teaching Theory of RN-BSN Completion students, (Computer assisted):
- Theoretical and Conceptual Foundations of Professional Nursing
- Health Assessment and Lab
- Transcultural Nursing
- Nursing Research
- Socialization into Professional Nursing
- Pathophysiology
- Fundamentals of Nursing-Course Coordinator
- Adult & Child Nursing I (Oxygenation)-Course Coordinator

Spoon River College; Macomb, IL, Nurse Educator August 1999-2008.
Continuing Clinical Education/Presentations: Independently created
- ICU training course for MDH staff nurses
- Organization skills, Critical Thinking, Problem solving
- Ventilator Review Course
- EKG Review Course

Special Topics ADN Curriculum: Independently created
Dosage Calculations and Study Habits for nursing students

Professionalism and tips on success for nursing students

Special Topics Curriculum: Curriculum pre published
Meds publishing NCLEX-RN review course. May 2007

McDonough District Hospital; Macomb, IL
Staff nurse and charge nurse in Intensive Care Unit. November (1997) – present part time in 1999.

Vanderbilt University Medical Center; Nashville, TN
Staff nurse in Surgical Intensive Care Unit. February (1996) – October (1997).

Vanderbilt University Medical Center; Nashville, TN
Staff nurse and charge nurse in Surgical step-down unit. August (1995)-February (1996).

Vanderbilt University Medical Center; Nashville, TN
Nurse extern in Surgical step-down unit. August (1994) – April (1995).

Wheaton College; Wheaton, IL
Student athletic trainer. August-January 1992-1993 and 1991-1992.

Horizon Ambulatory Medicine; Carthage, IL
Nursing assistant and medical records clerk. May-July 1991.

ACTIVITIES: **Professional Memberships:**
Wheaton College Alumni Association 1993.
Vanderbilt University Alumni Association 1995.
Sigma Theta Tau member 1994.
AACN October 1994.
NLN August 2001.
IEA-NEA August 1999.

COMMITTEES: **Western Illinois University Committee Involvement:**
College of Arts & Sciences Faculty Council Rep. for nursing (2009-present).
Nursing Senate Member (2008-present).
Nursing Undergraduate Curriculum Committee Member (2008-present).
Nursing Evaluation and Outcome Committee Member (2008-present).

Spoon River College Committee Involvement:
Curriculum Committee at Spoon River College 2001-2004.
Professional Development Committee at Spoon River College 2004-2008.

Personal Community Involvement:
Various community involvements including: Sunday school teacher, BP screenings, food drives, parade events, fundraising.

HONORS:
Spoon River College Faculty Tenure 2002.
Sigma Theta Tau International Honor Society (Iota Chapter) August 1994.
Spoon River College H. Truman Standard Award for excellence in teaching May 2007.