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A Motivational Profile of Nurses Who Pursue Doctoral Education

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A MOTIVATIONAL PROFILE OF NURSES WHO PURSUE

DOCTORAL EDUCATION

by

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ABSTRACT

A MOTIVATIONAL PROFILE OF NURSES WHO PURSUE

DOCTORAL EDUCATION

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May 2017

The need for nurses to pursue doctoral education is imperative to the professionalization of the discipline of nursing in light of the changing healthcare environment. Presently, < 1% of the nursing workforce possesses a doctoral degree ("Transforming Nursing Education," 2016), albeit recommendations from the Institute of Medicine (IOM) (2010) admonish the need to increase the number of doctoral-prepared nurses. The need to understand characteristics of nurses who seek doctoral education is critical in planning long-term strategies for nursing education in the United States (US) (Kovner, Brewer, Katigbak, Djukic, & Fatehi, 2012). In conjunction with describing characteristics of nurses pursuing doctoral education, this research describes the motivational orientation and factors of registered nurses (RNs) pursuing doctoral education.

A descriptive correlational design was utilized to examine concepts relating to motivational orientation of RNs pursuing doctoral education. Participants were divided into two categories: (a) RNs seeking the Doctor of Philosophy (Ph.D.) degree and (b) RNs pursuing the Doctor of Nursing Practice (DNP) degree. A total of 173 RNs enrolled in either a Ph.D. or DNP program in the Gulf South region of the US comprised the final sample. Binary logistic regression was utilized to analyze the motivational orientation. Results of the study indicated that participants self-identified with the motivational

orientation of intrinsic motivation-to know—reflective of a self-determined motivational orientation. The second highest self-reported motivational orientation was extrinsic motivation-identified which further reflected a self-determined motivational orientation. Positive correlates included geographical locale, age, and race.

Namely, the odds of nonwhites as compared to whites were 1.857 times greater for enrollment in a Ph.D. course of study. Further results reflected the odds of someone residing in a rural area as compared to an urban area were 0.532 times less in a Ph.D. program. The odds of being in a Ph.D. program are 1.759 times greater for a 40-year-old as compared to a 39-year-old. By identifying the motivational orientation of RNs engaged in doctoral study, nurse administrators, policymakers, and educational institutions must seek innovative means to recruit RNs with a self-determined motivational orientation.

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DEDICATION

I cannot give thanks without beginning with the head of my life, my Lord, and Savior Jesus Christ. Thank you, Lord, for, without you, I am nothing! Truly, with God, all things are possible (Matthew 19:26).

This doctoral dissertation is dedicated in loving memory of my mother, Mollie Jean Knox, and my dearest Robert Lee Earl for their inspiration and encouragement to pursue my dreams. Despite your earthly assignments being completed here on earth, I know without a shadow of a doubt that you both would be extremely proud of me.

I would like to thank each of my professors who believed in me throughout this journey—even when I did not believe in myself. Sincerest thanks to Patsy Anderson, Dr. Janie Butts, Dr. Rowena Elliott, Dr. Katherine Nugent, and Dr. Lachel Story.

Further, I would like to thank my dad, Chester Luckett, and my aunts, Lilene and Odessa Knox, for always supporting me!

Lastly, to my children, Tamerrious, Tamerrion, and Tamerrick, you three are my greatest joy and inspiration.

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LIST OF ABBREVIATIONS

AMS   Academic Motivation Scale

DNP   Doctor of Nursing Practice

HRSA   Health Resources and Services Administration

IOM   Institute of Medicine

Ph.D.   Doctor of Philosophy

RN   Registered Nurse

SDT   Self-determination theory

SES   Socioeconomic status

SPSS   Statistical Package for the Social Science

US   United States

CHAPTER I - INTRODUCTION

Background of the Problem

The demand for nurses with advanced education within health care and community environments has stimulated the need for nurses prepared at the doctoral level. Patients of today are faced with more complex and multiple disease processes which further necessitate the need for nurses with advanced degrees. Moreover, recommendations from the Institute of Medicine (IOM) (2010) include doubling the number of nurses prepared at the doctoral level in the United States (US) by 2020 in an effort to ensure adequate faculty to educate future nurses and conduct nursing research. Nursing research by prepared nurses with a Doctor of Philosophy (PhD) and the translation thereof by nurses with a Doctor of Nursing Practice (DNP) are essential to the health of the public to test interventions that prevent disability and illness, promote health, and improve the safety and quality of health care (IOM, 2010). Namely, nursing research is imperative as it provides a means to formulate a scientific basis for care which is translated at the bedside and in clinical practice. In concert with the positive aspects of nursing research, nurses prepared at the doctoral level can have a significant impact on the creation of nurses as leaders and equal collaborating members within the healthcare environment (Potempa, Redman, & Anderson, 2008). The need for nurses to pursue doctoral education is imperative to the professionalization of the discipline of nursing and the healthcare environment. Furthermore, characteristics of nurses who seek doctoral education are poorly understood, and this information is imperative in formulating long-term strategies for nursing education in the US (Kovner, Brewer, Katigbak, Djukic, & Fatehi, 2012). Due to the need to understand characteristics of nurses pursuing doctoral

education, this research was undertaken to describe the motivational orientation and factors influencing registered nurses (RNs) pursuing doctoral education, as presently < 1% of the nursing workforce are prepared doctorally ("Transforming Nursing Education," 2016).

For at least 150 years, nursing has been identified as an "emerging profession" (Zerwekh & Claborn, 2009). Nurses are the largest group of health professionals within the US (Health Resources and Services Administration [HRSA], 2014). As of 2016, in the US there are 2,824,641 million RNs with an average age of 44.6 years ("Nurses by the numbers," 2015). Nurses, as the largest group of licensed health professionals, have a role in the design, delivery, and transformation of healthcare. Advancing the nursing profession through an investment in education serves the nation's health and advances the greater good. Nursing is poised to assume a leadership role in healthcare reform, and it is the responsibility of nursing leaders to elevate nursing standards through education in order to make the idea tangible (Zimmerman, Miner, & Zittel, 2010).

An evaluation of nursing workforce trends in the US and abroad predicts a shortage of nurses nationally and internationally (Clarke, 2011). The predicted shortage of nurses has the potential to impact the healthcare environment and in turn, could have a large scale impact on patient outcomes. Several researchers have identified the need for additional nurses in healthcare settings due to aging baby boomers and the increasing complexity of the healthcare environment (HRSA, 2014; Potempa et al., 2008); Smeltzer et al., 2014). For example, according to Sherman, Chiang-Hanisko, and Koszalinski (2013), as the population continues to age, the rates of chronic and long-term conditions will become a major driver of change, thereby increasing the demand for health services.

The demand for nurses educationally prepared to meet complex health needs continues to expand, thereby expanding the relevance of nursing workforce trends. Further, in some demographic regions, registered nurse supply is anticipated to outpace demand with substantial variation by state (HRSA, 2014). As revealed in the "Transforming Nursing Education" (2016) report, 2,798,678 employed RNs in the US were gainfully employed with 10, 022 doctoral-prepared which equates to 0.36% of the nursing workforce. An increase in doctoral-prepared nurses was indicated in 2013 as 2,984, and 678 RNs were gainfully employed. This number included 16,802 RNs within the workforces who were doctoral-prepared, which reflects 0.56% of the nursing workforce. Secondary to the limited number of doctoral-prepared nurses, additional doctoral-prepared nurses could conceivably have a positive impact on the predicted shortage of nurses and nurse educators.

The Education of Nurses

There is a general consensus among nursing historians who agree that nursing, which includes the care of ill and incapacitated individuals, has been performed since the start of human life and, in general, has been the role of women (Zerwekh & Claborn, 2009). Moreover, ill and incapacitated individuals were considered a societal burden, and care of these persons was left to nurses who included alcoholics and prostitutes. Zerwekh and Claborn (2009) further asserted that a transformation began when Florence Nightingale became a pioneer for reforming nursing. This transformation led to the professionalization of nurses which continues to this day.

The entry to professional practice as an RN has three distinct pathways. The pathways include diploma, associate degree, and baccalaureate degree. The registered

nurse diploma program is usually 2-3 years of education leading to entry into the nursing

profession (Smith, 2010). The associate degree registered nurse program is usually 2

years of community college education leading to entry into nursing practice. The

baccalaureate degree program usually includes 4 years of education at the college or

university level leading into nursing practice. Further, second-career nursing students are

now able to receive a generalist nursing degree at the Master of Science level.

The number of nurses pursuing master's level education has experienced a period

of rapid growth since the mid-1990s (Drennan, 2012). Graduate-level nursing education

includes a number of diverse pathways. A number of programs exist which allow for

transition of the associate degree nurse to master's level through an RN-MSN program.

The average length of these programs varies from 3-4 years and results in a master's

degree in nursing. Traditional master's degree or post-baccalaureate degree nursing

programs are usually 2-3 years in length resulting in a master's degree in nursing. A

number of schools and colleges of nurses have also instituted programs which allow

persons from academic disciplines other than nursing to obtain a graduate degree (Raines

& Taglaireni, 2008). Further options include the postmaster's certificate for individuals

seeking an additional education option which differs from their specialty in the primary

MSN degree.

During the latter part of the 20th century, nurses began planning for and

developing doctoral education in nursing (Barker, 2013). Presently, doctoral education in

nursing is experiencing a transitional shift (Brown & Crabtree, 2013). A variety of

choices exist for prospective students interested in pursuing doctoral education with

available choices including the Doctor of Philosophy (Ph.D.), Doctor of Nursing Practice

(DNP), Doctor of Education in Nursing (EdD), and Doctor of Nursing Science (DNS). The doctoral degrees vary in length and area specialization. The DNP degree prepares graduates for a number of specialized roles in practice. The EdD is a doctoral degree in nursing education. The Ph.D. and DNS roles prepare graduates as nurse scholars with a primary focus on nursing research. Length of study varies among the doctoral degree programs ranging from 2 years to -7 years.

Advancing nursing through education is a focal point within the nursing profession. Clunie (2006) asserted that postgraduate education is a present trend and will continue to be an important trend in nursing for years to come. The importance of postgraduate education cannot be understated. According to Udlis and Mancuso (2015), as healthcare needs become more complex, the need to expand the educational preparation of nurses with a focus on leadership and evidence-based practice to improve healthcare outcomes becomes a primary driver. The expansion of nursing knowledge through research is a key component in ensuring professionalization of the nursing profession (Jarvis, 2005).

One method identified by the Institute of Medicine ((IOM) (2010) to improve patient outcomes and meet challenges of the US health system, although it is not projected to add to the nursing pool, is the recommendation for advanced educational achievement in the nursing workforce. The additional achievement of education among RNs has the ability to enhance RNs' capability to improve healthcare in the US (Kovner et al., 2012). Moreover, a number of research studies have identified the positive connection between higher levels of nursing education and improved patient outcomes (Abraham, Gohan, & Pfrimmer, 2015; Aiken, Clark, Cheung, Sloane, & Silber, 2003;

Long, 2004). Advanced education among nurses is desired to improve patient outcomes and add to the body of nursing science. Increased graduation rates of nurses can increase the number of nurses in the workforce, albeit attention to nursing scholarship and the science of nursing is important to contribute to the continuation and expansion of nursing as a discipline (Emerson & Records, 2005).

<div align="center">Statement of the Problem</div>

A review of the literature regarding the need for advanced education among nurses revealed a number of studies related to advanced education among nursing professionals and the impact on patient outcomes. Dissemination of knowledge is an important component in the growth of nursing as a profession (Emerson & Records, 2005). Nurses prepared at the doctoral level have the capacity to advance the science and professionalization of the nursing discipline. However, a shortage of nurses prepared at the doctoral level persists as < 1% of the nursing workforce hold a doctoral degree ("Transforming Nursing Education," 2016).

A gap exists between research and practice as it can take from one to two decades before nursing research is utilized in clinical practice (Agency for Healthcare Research and Quality [AHRQ], 2001). The collaborative knowledge and skill level of DNP- and PhD-prepared nurses provides a means to improve the gap between research and practice. A hallmark recommendation from the IOM (2010) is to double the number of nurses with a doctoral degree by 2020. Additional studies also exist on the motivators for nurses pursuing a baccalaureate or master's degree. According to Sarver, Cichra, and Kline (2015), nurses highly regard continuing professional education; but, in order to achieve success, support from nursing leadership is paramount. Altmann (2012) further asserted

that the attitudes of all nurses in regard to Bachelor of Science in Nursing (BSN) education are in need of improvement. Megginson (2008) identified extrinsic and intrinsic motivators as reasons for students pursuing BSN education. Megginson further noted motivators for continued formal education include timing in life, options with work, personal aspirations, credible professional identity, encouragement from colleagues, and practical RN-BSN programs. However, no known studies to date examined the relationship of the motivational orientation of RNs specifically pursuing doctoral education. It was proposed that this information may be critical to understanding why nurses return to school. If one can understand factors which influence nurses' decision to return to school, then one can influence those decisions.

<div align="center">Theoretical Foundation Overview</div>

Motivation is an important concept as it relates to innate drives and education. The beginnings of the motivation theory date back to the time of Darwin and Freud who proposed that a relationship existed between behavior and motivation (MacLeod, 1957). Using this perspective, the motivation theory expanded beyond the workings of Darwin and Freud to include theories relating to motivation based on individual needs and the achievement of goals.

The SDT developed by Edward L. Deci and Richard M. Ryan (Deci & Ryan, 1985) can be viewed as an addition to the motivation/needs paradigm. The SDT is a human motivation theory that explains extrinsic and intrinsic sources of motivation. Intrinsically motivated behaviors include the pleasure obtained from simply engaging in the behavior (Deci, 1971). In contrast, extrinsically motivated behaviors are engaged in as a means to an end and not for the simple pleasure derived from the activity (Deci,

1975). The main aspiration of the theory was to develop awareness of the conditions

where positive motivation was realized. Deci and Ryan (1985) and Ryan and Deci

(2000) proposed that humans have an instinctual drive for knowledge which is evident at

birth. This instinctual drive was then promoted or discouraged within their environment.

Further, instinctual psychological needs led to the individual pursuing their goals as a

mechanism to improve their situation (Ballmann & Mueller, 2008). The theoretical

framework for this study was based on the SDT and the framework that RNs have varied

motivational orientations and factors for pursuing doctoral education. Motivational

orientations of RNs are proposed as either intrinsic, extrinsic, or amotivated. The SDT

provides a mechanism to explain human behavior and categorizes individual behaviors as

intrinsically motivated, extrinsically motivated, or amotivated.

This research study examined the motivational orientation and factors for RNs'

decisions to pursue doctoral education. Intrinsic motivators for RNs' decision include

inherent rewards such as the pleasure received with degree completion. Extrinsic

motivators for RNs' decision include financial gain or other outward rewards. It was

projected that this study would provide a means to inform practice and suggest policies

related to facilitation of nurses' decisions to return to school for doctoral education.

Hence, the purpose of this study was to describe the motivational orientation and factors

of RNs pursuing doctoral education. The study included currently enrolled RNs pursuing

the DNP or the Ph.D. It was anticipated that results could provide a means to describe

the motivational orientation and factors of RNs who pursue doctoral education.

Justification

The demand for doctoral prepared nurses is a direct result of the need for advanced knowledge in nursing research, nursing academia, healthcare, and communities. The need for advancing nursing education is mandatory (Warren & Mills, 2009). Numerous research studies support the assertion that advanced education among nurses can improve outcomes in patients (Abraham et al., 2015, Aiken et al., 2003; Long, 2004). Moreover, doctoral education among nurses has the potential to provide improved quality of patient care (Abraham et al., 2015). Levett-Jones (2005) further asserted that a prepared and continually improving nursing workforce is imperative to the preservation and advancement in the quality of care provided by nurses.

The US is expected to undergo a shortage of RNs that is anticipated to exacerbate as baby boomers age and health care demands increase ("Nursing Shortage Fact Sheet," 2014). On a national level, the shift in RN supply between 2012 and 2025 is expected to exceed demand based on the geographical distributing of RNs in the workforce (HRSA, 2014). Practicing nurses have a responsibility to advance in learning to keep up with the latest and most effective techniques to improve patient standards (Bahn, 2007). Patient outcomes provide the primary driver to necessitate advanced education for nurses (Altmann, 2012). Advanced education for nurses is a complex, multifaceted, and controversial issue in healthcare circles.

Deepening the shortage of nurses is the lack of qualified nurse educators to prepare RNs for the complex needs of the workforce. According to Emerson and Records (2005), secondary to the impact of the nursing shortage, nursing education and nursing research/scholarship are placed in peril. The educational preparation of nurses

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has a significant impact on the safety of patients, outcomes, the nursing shortage, the faculty shortage, and the attitude and actions of nurses (Altmann, 2012). The shortage of nursing faculty has the potential to impact the ability of colleges and schools of nursing to produce the number of nurses necessary to sustain the delivery of healthcare services. In order to meet or exceed the demands of the healthcare environment, RNs with bachelor's degrees (BSN) must return to school and pursue graduate study (Squires, Kovner, Faridaben, & Chyun, (2013). The completion of this study was important to practicing nurses, health care leaders, health policymakers, and consumers. This study had the potential to impact health policy as the educational advancement of RNs identified by the IOM (2010) as an important recommendation to transform healthcare.

Research Questions

The motivational orientation and factors of RNs pursuing the DNP and the Ph.D. were described. The study was guided by the following research questions:

1. What is the motivational orientation (intrinsic or extrinsic) of RNs pursuing doctoral education?

2. What are the relationships between the motivational orientation of RNs pursuing doctoral education and demographic factors of: age, race, gender, socioeconomic status (SES), geographical locale, and employment/occupation?

Delimitations

This research study was delimited to RNs who were currently enrolled in either a Ph.D. or DNP course of study in nursing. The study did not include RNs who have already completed a doctoral degree. Furthermore, the study did not include RNs

enrolled in a master's level of study, baccalaureate degree course of study, or doctoral

course of study in a discipline outside nursing. The results of the study are generalizable

to RNs who are presently enrolled in a doctoral course of study and reside in the Gulf

South region of the US.

<center>Assumptions</center>

Assumptions in the study included honest disclosure and individual completion of

the survey instrument after consent was granted. Anonymity and confidentiality were

preserved through implementation of the study. Moreover, participation in the study was

voluntary, and participants could withdraw participation at any time. A shortage of RNs

has persisted for quite some time, and the need for advanced levels of education within

the nursing profession will continue due to current and future healthcare trends.

<center>Theoretical Definitions</center>

Doctor of Nursing Practice (DNP) nurse is a registered nurse educationally

prepared with a terminal professional degree in nursing practice as opposed to the

research-focused terminal degree.

Motivation is the drive or desire to complete an action. It is defined as the innate

or psychological drive for behaviors and the reason for participation in an activity

(Ballmann & Mueller, 2008).

Motivational orientations include the underlying factors for RNs to pursue

doctoral education; which included features of the Academic Motivation Scale (AMS).

The Echelle de Motivation en Education (EME) was initially developed and utilized in

French to measure motivation or self-determination toward academic pursuits. The

instrument was later translated into English and titled the AMS (Vallerand et al., 1992).

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The AMS includes rankings on a 7-point Likert scale with ranges from 1 (*Does not correspond at all*) to 7 (*Corresponds exactly*) in response to each item. The instrument was validated in a research study with an internal consistency of .81 and a means test-retest correlation of .79. High levels of self-determination correspond with integrated regulation or intrinsic motivation. Low levels of self-determination correspond with external or extrinsic motivation. To calculate a person's score on the AMS, the mean response for each of the subscales will need to be determined. The means varied between 1 and 7.

Nursing doctoral education includes an academic focus with a concentration in nursing higher than a master's degree culminating with conferral of a doctoral degree.

Doctor of Philosophy (Ph.D.) nurse is a registered nurse educationally prepared with a terminal professional degree in nursing research as opposed to the nursing practice focused terminal degree.

Registered nurse (RN) is a professional nurse who has successfully completed a nursing course of study from an accredited program, passed the state licensing exam, and has been registered to practice nursing by the authority of a state or licensing agency.

Self-determination is the instinctual or innate psychological driver which provides the stimulus for an action.

<div align="center">Operational Definitions</div>

Extrinsic motivation for purposes of this study is defined as having on a self-determination continuum, low levels of self-determination (external) to high (integrated regulation). The Academic Motivation Scale (AMS) instrument developed by Vallerand et al. (1992) was utilized to measure the motivational orientation, which in turn is

reflective of the self-determination level. The AMS instrument includes 28 items, divided into seven subscales. Further, each subscale utilizes a 7 point Likert scale to measure the motivational orientation on the continuum. Extrinsic motivation is identified by a mean score of 3.5 or higher on the 7-point Likert scale for items 3, 10, 17, and 24 (extrinsic motivation-identified), 7, 14, 21, and 28 (extrinsic motivation-introjected), and 1, 8, 15, and 22 (extrinsic motivation-external regulation).

Intrinsic motivation in this study is identified as actions which an individual engages in for their own sake or simply from the pleasure gained from performing an action. Intrinsic motivation is identified by a mean score of a 3.5 or higher on the 7-point Likert scale for items 2, 9, 16, and 23 (intrinsic motivation-to know), items 6, 13, 20, and 27 (intrinsic motivation-toward accomplishment), and items 4, 11, 18, and 25 (intrinsic motivation–to experience stimulation).

Self-determination, for purposes of this study, is identified as high if mean scores on intrinsic motivation measuring items were > 3.5. Low levels of self-determination were identified if mean scores on extrinsic motivation or amotivation measuring items were > 3.5.

<div align="center">Summary</div>

Current and future nursing trends are reflective of a continued shortage of RNs which is directly impacted by the shortage of qualified nursing faculty. A shortage of RNs has the potential to create peril within the healthcare environment. In an effort to prevent a crisis within the healthcare environment, policymakers within nursing academia must seek innovative methods to educate more nurses for entry into the healthcare

environment. One means to achieve greater production of nurses hinges upon the availability of qualified nursing faculty.

An increase in the number of doctoral-prepared nurses provides one potential means to increase the availability of qualified faculty and in turn produce more nurses to work in the healthcare environment. Moreover, an awareness of factors which predict RNs pursuing doctoral education could be invaluable for nursing professionals in academia. The present quantitative study aimed to describe the motivational orientation and factors of RNs pursuing doctoral education that can inform nurse leaders in academic settings to formulate strategies for the recruitment of RNs with an interest in pursuing doctoral education. The demographic variables, which are included in the correlations, are motivational orientation, age, race, gender, socioeconomic status (SES), geographical locale, and employment/occupation. This chapter presented the background of the problem, statement of the problem, theoretical foundation overview, study purpose, justification, research questions, delimitations, assumptions, and operational definitions. The next chapter will present an examination of the literature on the shortage of nurses, the shortage of nursing faculty, motivators for nurses pursuing advanced education, and self-determination theory.

CHAPTER II - LITERATURE

Student motivation for pursuing advanced education is individualized and varied. The unique motivating factors which lead to the pursuit of advanced education are of interest to nurse educators in academia (Megginson, 2008). The major purpose of this study was to describe the motivational orientation and factors of RNs pursuing doctoral study. A limited number of studies exist on the motivational orientations of nurses pursuing advanced degrees. Existing studies on motivation include drivers for RNs pursuing bachelor's and master's degrees. The foundation for the present literature is based upon nursing research regarding the shortage of doctoral-prepared RNs, shortage of nursing faculty, motivators for nurses pursuing advanced education, and the self-determination theory (SDT).

Search criteria for the literature included utilizing the database cumulative index of nursing and allied health literature (CINAHL), PubMed, Academic search premier, and MEDLINE from 1995 to the present using the keywords *registered nurse advanced education*, *doctoral degrees nursing*, *motivators nursing education*, *barriers nursing education*, and *nursing self-determination theory*. The search criteria were further narrowed to full-text articles in English. Articles pertaining to advanced degrees in nursing and motivators were reviewed, and the reference list examined. Articles excluded from the review included any written before 1995, not available in English, and articles that did not pertain to advancing nursing education unless they were especially persuasive. Themes found in this review included the shortage of nurses, shortage of nurse educators, and motivators for the achievement of advanced education in nursing.

The theoretical framework for the present study is shaped by the selected studies. The study design utilized a survey designed to provide insight into the motivational orientation consisting of extrinsic and intrinsic factors that influence RNs to pursue doctoral study. To explore the theoretical foundation of motivation in RNs, this chapter examines articles on the predicted geographic distribution of nurses with corresponding shortage in some locales, the shortage of nursing faculty, the shortage of nurse scientists, motivators for nurses pursuing advanced education, and self-determination theory.

Shortage of Nurses

A predicted shortage of nurses has been on the horizon for a number of years. The predicted shortage is related to the geographical distribution of nurses in some locales (HRSA, 2014). Each conducted study relating to the predicted nursing shortage further supports the need to implement measures to prevent the detrimental impact of a shortage on the healthcare environment. Contributing to the shortage of nurses is an aging population with a corresponding aging nursing workforce. Moreover, it is essential to gain insight into motivators for nurses pursuing doctoral education as nurses prepared with a terminal degree can potentially provide a pipeline to supply the healthcare environment with sufficient numbers of nurses to meet demands.

An adequate pipeline of nurses is essential to meet the complex, chronic multiple conditions of Americans to ensure a safe and effective healthcare system (Abraham et al., 2015; Shen, Peltzer, Teel, Pierce, 2015). Nursing labor force trends present as a significant concern within the healthcare environment. The critical shortage of nurses is anticipated to continue for an undetermined period of time as people are living longer and requiring more health care services (Cohen, 2011; Robb, 2005). According to Snavely

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(2016), current trends indicate stabilization in the nursing workforce, though a number of predicted factors will revive a critical shortage in the nursing workforce in years to come. Further, Staiger, Auerbach, Buerhaus (2012) asserted that in spite of the present absence of a nursing workforce shortage, policymakers and employers within the healthcare environment should anticipate the nursing shortage will reappear as the economy improves. As nurses retire and the demand for more nurses increase as a result of the anticipated health care crisis, there is a need to increase the supply of nurses to work in the healthcare environment. In order to produce more nurses, additional educators are in demand, and doctoral education for nurses provides one possible means to achieve this goal.

Shortage of Nursing Faculty

The increasing demands of the complex healthcare environment substantially contribute to the need for masters and doctoral-prepared nurses as faculty and educators. The shortage of nursing faculty presents a significant threat within the US as a steady pipeline of nurses is needed to produce the amount of nurses necessary to sustain the delivery of healthcare services. In order to provide a steady number of nurses prepared to work in the healthcare environment, RNs with bachelor's degrees (BSN) must return to school and pursue graduate study (Squires et al., 2013; Udlis & Mancuso, 2015). A recommendation by the IOM which called for an increase in the proportion of nurses with a BSN to 80% and doubling the proportion of nurses with a doctoral degree by 2020 is one means to achieve the goal of nurses prepared at higher levels of education (IOM, 2010). These recommendations from the IOM are intertwined as increasing the numbers

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of nurses prepared with advanced degrees provides a means to increase the proportion of BSN nurses as nurses with advanced degrees will educate the next generation of nurses.

The reality of a predicted nursing faculty shortage is exacerbated by the lack of PhD-prepared nurses (Berlin & Sechrist, 2002; Nehls, Barber & Rice, 2015). Nehls et al. further asserted that the problem is complicated by the fact that graduates from nursing PhD programs have a fairly short period of time to make significant contributions to the field. The average age of PhD-prepared nursing graduates is 46 years—over a decade older than the mean age of all doctoral graduates. Also, Potempa et al. (2008) noted that current methods for nursing doctoral education do not prepare a sufficient number of graduates to replace retiring faculty or expand capacity. Similarly, Edwardson (2004) reported that the nursing profession is afflicted with an acute shortage of doctoral-prepared faculty rather than an overproduction of PhDs. According to the Campaign for action in 2010, there was a total of 2,798,678 employed RNs. Of this number, 10,022 were prepared with a doctoral degree which equates to 0.36% of the nursing workforce ("Dashboard Secondary Indicators - Campaign for Action | Campaign for Action," 2016). Further, in 2013 a total of 2,984,924 were employed RNs with 16,802 working with a doctoral degree, which is equivalent to 0.56% of the nursing workforce

In the study conducted by Shen et al. (2015) findings revealed that PhD- and DNP-prepared RNs were the most employed in the field of nursing with PhD-prepared nurses working primarily in academic settings and DNP prepared nurses working in ambulatory care, academic settings, or hospitals. Also, Smeltzer et al. (2015) noted that the current mixture of faculty teaching in DNP and PhD programs has implications for the development of the scientific discipline of nursing. Implications for nursing as a

scientific discipline include the low numbers of doctoral-prepared nurses which prevent the ability of the discipline to generate and use science to impact the public domain in a manner like the medical and public health disciplines (Potempa et al., 2008). Identifying factors which lead registered nurses to pursue doctoral education has the ability to influence policy and recruitment in colleges of nursing which offer doctoral education.

Motivators for Advanced Education

The value of higher levels of education among nurses has been identified in the workplace and in patient outcomes. On an international level, the university preparation for nurses and standards are rapidly changing (Zimmerman et al., 2010). Similarly, Clunie (2006) reported that post-graduate education has been and is becoming critical in the nursing profession. In the quest for professionalization within the discipline of nursing, postgraduate education is seen as an essential component. For a number of years, the profession of nursing was not concerned with obtaining academic credibility. However, this scenario has changed over time, and the drive to gain recognition is evident as a profession as nursing has had to reorganize and change its focus (Clunie, 2006).

The educational preparation of RNs has an impact on patient safety, outcomes, the nursing shortage, the faculty shortage, and the attitude and actions of nurses. Patient outcomes provide the primary motivation to encourage continued formal education (Abraham et al., 2015); Altmann, 2012). Likewise, Wilkes and Mohan (2008) reported that the complexity of the current healthcare environment necessitates that clinical nurses be proficient as professional leaders and investigators who could structure nursing practice in more effective ways.

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The collaborative DNP-PhD team has the capacity to lead efforts in translating research into practice. The joint knowledge and skills of DNP and Ph.D. nurses provide a process to address the gap between research and practice (Murphy, Staffileno, & Carlson, 2015). The DNP-prepared nurse provides a means to bring practice into focus and facilitate the clinical context to improve patient outcomes. The Ph.D. educationally-prepared nurse will utilize the research process and acquired knowledge to ensure valid and reliable results. A further benefit of the joint effort between the DNP and Ph.D. is scholarly activity through dissemination of research results. Murphy et al. (2015) further asserted collaboration among doctoral-prepared nurses can promote the translation of research into practice, improve the delivery of healthcare, and reform patient outcomes.

Byrne, Mayo, and Rosner (2014) conducted a pilot study to identify internal motivators for RNs to pursue a BSN. Findings from the study indicated that respondents believed pursuing advanced education would provide career opportunities. However, the experience of returning to school would be unpleasant. Further findings indicated that nurses' self-perception was that their current level of education was sufficient. Similarly, in a study conducted by Warren and Mills (2009), findings indicated that nurses expressed little desire to return to school. Moreover, lower intent to stay in the present job with lower levels of job satisfaction was a predictor of nurses pursuing a master's degree (Kovner et al., 2012). Likewise, Altmann (2012) noted that the top barriers for not pursuing advanced education included older age, the lack of additional salary compensation, not a condition of employment, and not needed to provide quality patient care. While this study added to the body of knowledge regarding internal motivators for RNs to pursue a BSN degree, information is lacking on the motivators for RNs pursuing

doctoral degrees. Further, recommendations from the study support the need for future

research on how to overcome nurses' reluctance for further education. A study which

identifies extrinsic and intrinsic motivators for nurses pursuing doctoral education is

posited to provide a means to understand nurses' perspective on further education.

Warren and Mills (2009) conducted a nonexperimental descriptive study to

examine nurses' preferences for incentives and rewards within organizations that might

motivate them to pursue advanced education. Study findings revealed that only 19.4% of

the 297 nurses sampled intended to enroll in a nursing degree program. Moreover, the

findings demonstrated that if the right mixture of rewards and incentives was offered, it

was predictive of nurses planning to pursue additional education, continuing in a nursing

career, and willingness to pursue a BSN as a condition of employment. This study

demonstrated the positive impact of rewards for the pursuit of a BSN degree. However,

no known studies to date have examined the impact of rewards on RNs pursuing doctoral

education. A study which examines the motivational factors and impact of rewards for

nurses pursuing doctoral education could potentially provide the framework for the

recruitment and retention of nurses in doctoral education.

Richardson (2011) conducted a research study to examine the extrinsic and

intrinsic motivational orientations of RNs who pursue advanced degrees. A comparison

was examined of nurses pursuing a master's degree as compared to nurses pursuing a

doctoral degree. Results revealed no statistical differences in the motivational

orientations reported by RNs who pursued a doctoral or master's degree. RNs seeking a

master's or doctoral degree scored the highest on intrinsic motivation-to know, extrinsic

motivation-identified second, and third on intrinsic motivation-toward accomplishment.

By the same token, in a study conducted by Altmann (2012), findings revealed that the main motivator for nurses pursuing advanced education stems from personal desire. Key recommendations from this study included the need to replicate the study at the same level to determine if findings would be similar to the present findings. Further, the sample size was small, which necessitates the suggestion to conduct future studies examining the differences in motivational orientations among RNs who pursue a master's versus a doctorate but with a larger sample. A study which addressed the motivational orientation of RNs pursuing a doctoral degree could potentially add to the body of knowledge, with implications for nursing academia.

A study conducted by Kovner et al. (2012) utilized a logistic regression analysis on data collected from a nationally representative panel study which followed the career paths of newly licensed RNs. The significance of geographic location was noted in the study. Findings revealed that associate degree-prepared nurses living in a rural setting at the time of graduation were more likely to obtain a BSN degree than persons residing in urban settings 3.5 to 4.5 years after completion of an associate degree course of study. In contrast, a study conducted by Altmann (2012) which examined nurses' attitudes toward continuing formal education was compared by education and geography. Findings did not reveal a difference from participants on the east coast as compared to participants on the west coast. Further significant variables identified included age, race, marital status, and the educational level of parents. Findings by Kovner et al. (2012) revealed predictors of higher education as younger, unmarried nurses with higher work motivation and work experience in non-health related fields are predictors of nurses more likely to pursue school for a BS degree.

Self-Determination Theory

The self-determination theory has been utilized in several studies across a number of disciplines including healthcare, education, and psychiatry. Moreover, SDT is a theory which provides an explanation for intrinsic and extrinsic motivators. Deci and Vansteenkiste (2004) asserted that SDT is a macro-theory of personality, motivation, and optimal functioning. A hallmark of SDT is the principle that a straight line exists as it relates to individual actions for human self-determination. On this straight line, the far left is amotivation (the absence of motivation) and to the far right on the line is intrinsic motivation.

As a means to effectively identify individual motivation or the motive for participation in activity, according to Deci and Ryan (1985), the differences between the different types of motivation must be distinguished. The idea of intrinsic motivation developed from the works of Harlow (1953) and White (1959) which were opposed to the dominant behavior theories of the time (Deci & Vansteenkiste, 2004). Deci and Vansteenkiste (2004) further asserted that intrinsic motivators include behaviors that are not motivated by physiological drives and the benefit is the satisfaction associated with the activity itself rather than with operationally separable consequences. Intrinsic motivation is an inborn quality, and the basis of intrinsic motivation is the individual's need for competence and self-determination (Deci, 1975). According to Deci and Flaste (1995), intrinsic motivation results in a more robust experience, improved conceptual understanding, greater creativity, and improved problem solving relative to external controls.

Extrinsic motivation, in contrast to intrinsic motivation, refers to behavior that targets outcomes extrinsic to the behavior itself (Deci, 1975). According to Ryan and Deci (2000), extrinsic motivation is utilized when an activity is performed to achieve a separate outcome. Extrinsic motivation increases after childhood as external societal demands facilitate the achievement of goals/outcomes. Further, extrinsic motivation includes four types of extrinsic motivation which are ranked on a self-determination continuum. From low levels of self-determination to high levels which proceed from (a) external regulation, (b) introjected regulation, (c) identified regulation, and (d) integrated regulation. External regulation refers to externally motivated behaviors usually through recompenses or constraints (Vallerand & Bissonnette, 1992). Introjected regulation refers to an individualized internal motivator for actions. Identified regulation includes a self-determined behavior selected and valued by the individual. Integrated regulation reflects a high level of self-determination on the self-determination continuum. Integrated regulation refers to an autonomous decision to engage in an activity.

The final component identified by Deci and Ryan (1985) to explain human motivation is amotivation. Amotivation refers to the lack of intention to act (Ryan & Deci, 2000). Ryan and Deci further asserted that the amotivated individual lacks intentionality and a sense of personal connectedness.

Summary

A number of theories exist on motivation; however, the SDT theory was selected as it provided the most effective means to address the proposed research questions. An identified gap is noted in the literature on the motivational orientation for RNs pursuing doctoral education. Studies to date have examined the motivation for RNs pursuing BSN

degrees (Byrne et al., 2014; Warren & Mills, 2009). Further studies have examined the impact of incentives or rewards as motivators for nurses to pursue advanced education. One study included a comparison of the motivational orientation of nurses pursuing a master's degree with nurses pursuing a doctoral degree (Richardson, 2011). This study consisted of a small sample size with recommendations for future replication of the study. A noticeable gap exists in the literature as it relates to the motivational orientation of RNs pursuing doctoral education. No known studies to date have examined the motivational orientation with a sole focus on nurses pursuing doctoral education. A study which examines the motivational orientation of nurses pursuing doctoral education can likely inform practice and recruitment in nursing academia. The next chapter will present a description of the research design, plan for sampling, procedure, instrument description, instrument revision, and internal consistency. Further, data collection measures, data analysis, ethical considerations, and plan for informed consent are provided.

CHAPTER III - METHODOLOGY

Purpose of the Study

The research study was designed to describe the motivational orientation and factors of RNs pursuing doctoral education. The study provided a means to answer the following research questions.

1. What is the motivational orientation (intrinsic or extrinsic) of registered nurses pursuing doctoral education?

2. What are the relationships between the motivational orientation of nurses pursuing doctoral education and demographic factors of age, race, gender, socioeconomic status (SES), geographical locale, and employment/occupation?

Research Design

To address research questions, a nonexperimental descriptive correlational design was utilized. The academic motivation scale (AMS) developed by Vallerand et al. (1992) with modifications specific to nursing was used as the survey instrument. Correlations were determined by utilizing a survey instrument. Generalizations or inferences can be made regarding the sample when a survey instrument is utilized (Creswell, 2014). The data collected from the survey instrument on motivation were exported from Qualtrics and then analyzed using Statistical Package for the Social Sciences (SPSS) Version 23. Demographic factors were examined to identify demographic differences in doctoral students. Data were collected from a final sample of 173 RNs pursuing a doctoral degree to describe their motivational orientation (Question Number One). Question Number Two, the relationship between motivational orientations was defined by the seven

subscales on the AMS. The subscales were as follows: (a) intrinsic motivation-to know, (b) intrinsic motivation-toward accomplishment, (c) intrinsic motivation-to experience stimulation, (d) extrinsic motivation-identified; (e) extrinsic motivation introjected, (f) extrinsic motivation-external regulation, and (g) amotivation. Demographic variables (i.e., age, race, gender, SES, geographical locale, and employment/occupation) were examined.

Sample

There are currently 279 Ph.D. and DNP nursing programs within the US ("Member Directory," 2015). Twenty randomly selected programs in the Gulf South region were selected for participation in the study. The Gulf South region was utilized as no known studies to date were conducted with the population of interest in this region. A sample of RNs enrolled in either a Ph.D. or DNP educational program in the Gulf South region of the US from various universities were invited to participate in the study. The study used a convenience sample of RNs enrolled in doctoral study. Inclusion criteria included RNs who self-reported being currently enrolled in a nursing doctoral degree awarding program. Participants were then divided into two groups: RNs seeking the Ph.D. and RNs seeking the DNP.

Procedure

Online survey research provides a number of benefits including the ability to administer the questionnaire to a large population sample. Benefits of online surveys include access to unique populations, time-saving for researchers, and cost saving as compared with a paper-based medium (Wright, 2005). Uhlig, Seitz, Eter, Promesberger, and Busse (2014) asserted that depending upon the complexity of the survey instrument,

electronic addressing is more efficient with respect to workflow, responsiveness, time, and financial costs for populations of 300 or more persons.

A power analysis was performed to identify the needed sample size. The effect size utilized was 0.5, the type I error was 0.05 and power of 0.8. A total of 250 completed questionnaires were needed for data analysis so the targeted sample size was 1,000 to ensure that a sufficient number of surveys were available for analysis. The final sample for data analysis included responses from 173 RNs enrolled in doctoral study. A comprehensive listing of doctoral degree-awarding programs was identified from the American Association of Colleges of Nursing (AACN). Schools offering doctoral degrees were next entered into a 2013 version of Excel spreadsheet. Identified schools were listed in Alabama, Florida, Louisiana, Mississippi, and Texas. The programs for randomization then were grouped and numbered on the spreadsheet by state and degree awarded (e.g., Ph.D., DNP, or both). As each organization was numbered, then the website *random.org* was utilized to randomize selection of participating institutions. The researcher then requested agreement to participate from each selected institution. Permission to complete the study was granted by the Institutional Review Board (IRB) at The University of Southern Mississippi (see Appendix A).

After obtaining permission to conduct the study, the contact person at each institution was asked to distribute the surveys, and an email was sent via Qualtrics with the link to the survey for potential participants. The Dillman (2007) method was utilized to recruit participants with five contacts to participants. Further, reminder emails were sent at biweekly intervals during the first month, then monthly during the data collection period to engage participants. An email was then sent with instructions with the

intentions of the study and the identified population of interest which included RNs

presently enrolled in a doctoral course of study. Participants were advised of the

estimated time of 20 minutes to complete the survey. The survey opening and ending

time period in a setting of their choice was also provided in the instructions to

participants. At the completion of the survey instrument, participants were asked to

proceed and consent for entry into a drawing for a gift card in the amount of $100 as a

token of appreciation for their time and participation if they desired to be included.

Participants were provided with the opportunity to review the online informed consent

(see Appendix B) with the ability to print a copy for their personal records if desired.

Participants, who did not wish to participate, did not complete a survey. Moreover,

participants were advised of the voluntary nature of participation and the ability to cease

participation at any time. The informed consent included the email address of both the

principal investigator and dissertation chair for participants to utilize for questions or

concerns. To protect the safety and integrity of data, data were stored after collection,

during analysis, and afterward in a secure location.

<div align="center">Instrument</div>

The Academic Motivation Scale (AMS) is a survey instrument developed to

measure motivation toward education. The first version of the instrument was developed

in French and titled the Echelle de Motivation en Education (EME). The instrument is

based upon tenets of the self-determination theory. The EME is a 28-item, self-reporting

instrument divided into seven subscales that include (a) intrinsic motivation-to know, (b)

intrinsic motivation-toward accomplishment, (c) intrinsic motivation-to experience

stimulation, (d) extrinsic motivation-identified, (e) extrinsic motivation introjected, (f)

<div align="center">29</div>

extrinsic motivation-external regulation, and (g) amotivation. The EME was translated

into English and titled the AMS (Vallerand et al., 1992) (see Appendix C). The AMS

includes ratings on a 7-point horizontal numeric scale with ranges from 1 (*Does not*

correspond at all) to 7 (*Corresponds exactly*) in response to each item. The AMS,

developed by Vallerand et al. (1992) with modifications (electronic approval to revise

obtained from Vallerand et al., 1992) specific to nursing, was used as the survey

instrument to identify factors which might motivate RNs to pursue doctoral education.

See Appendix D for electronic request to use the AMS and subsequent approval to

modify the AMS.

Internal Consistency

In a research study consisting of 745 university students from the province of

Ontario, the AMS revealed an internal consistency of .81 and a means test-retest

correlation of .79 (Vallerand et al., 1992). The instrument has been utilized in a number

of academic disciplines including nursing and psychology (Richardson, 2011; Vallerand

et al., 1992). Further, a confirmatory factor analysis (LISREL) was utilized to validate

the 7-point structure of the AMS. Findings of the study provided sufficient support of the

factorial validity and reliability of the AMS with validation of its use in academic

research on motivation (Vallerand et al., 1992). Reliability of the instrument was

validated using a Cronbach alpha for each subscale.

Instrument Revision

The AMS instrument is designed for college students in pursuit of general

education. The instrument was revised with electronic permission granted by Vallerand

et al. for RNs in pursuit of doctoral education. Collectively, the revisions to the AMS

instrument were minor and consisted of rephrasing words. Moreover, the survey solicited demographic information, such as age, race, gender, socioeconomic status (SES), geographical locale, and employment/occupation to facilitate educators in gaining insight into the motivational orientation and factors which motivate RNs to pursue doctoral study. The following questions were revised to ensure applicability to doctoral level students:

1. Question Number 1: The words *high school* were revised to *bachelor's* or *master's*.

2. Question Number 3: The word *college* was revised to *doctoral*.

3. Question Number 7: The word *college* was revised to *doctoral*.

4. Question Number 12: The words *going to college* were revised to *pursuing doctoral education*.

5. Questions Numbers 14 and 27: The word *college* was revised to *doctoral education*.

6. Question Number 19: The words *go to college* were revised to *pursue doctoral education*.

Data Collection

Potential participants for the study were sent an email invitation for participation in the study by a contact person within each of the randomly selected institutions. Data were collected using the AMS and a demographic data sheet (see Appendix E). Data were collected during a 4-month timeframe using Qualtrics to arrange collected information. After completion of data collection, Qualtrics data were exported directly

into Statistical Package for the Social Sciences (SPSS) for Windows Version 23 for analysis.

The survey instrument included 11 items which provided a means to obtain demographic information, with 28 Likert-type items to collect information on the motivational orientation. The survey was formatted with the informed consent on the first page, and then participants moved through each individual page to answer items—with the ability to move forward. The instrument did not include a method to go backward or change response after submission. Further, Qualtrics formatting methods were used to ensure that the instrument had the same look and feel whether utilizing a laptop, smartphone, or other electronic device.

Data Analysis

The initial methods used included exporting the data from Qualtrics into SPSS Version 23. Data cleaning was utilized by reviewing collected data for missing items, normality, and outliers. The variables were then labeled and levels identified by the principal investigator for coding. Coding included for the degree awarded 0 = PhD or 1 =-DNP participant. Further coding included the following: Race: 0 = White; 1 = Nonwhite; Gender: Male = 0, Female = 1; Marital status: 0 = Married and 1 = All other; Geographical local: 0 = Urbanized area, 1 = All other; Place of employment: 0 = Educational institution and 1 = All other. For purposes of this study, binary logistic regression was used to describe the motivational orientation and factors for RNs pursuing doctoral education. Data collected from the research study were analyzed using SPSS Version 23 computer software. Descriptive statistics were utilized to analyze collected data for the entire sample. Binary logistic regression and calculation of the mean for each

of the seven subscales provided a means to answer Research Question One: What is the

motivational orientation of RNs pursuing doctoral education? Further, binary logistic

regression was utilized to answer Research Question Two: What are the relationships

between the motivational orientation of RNs pursuing doctoral education and

demographic factors of age, race, gender, socioeconomic status (SES), geographical

locale, and employment/occupation? Logistic regression was utilized to predict which of

two groupings a person is probable to belong to given certain other information (Field,

2005). Field further asserted logistic regression provides a means to predict outcome

variables that are categorical.

Ethical Considerations

The responsibility lies with the researcher to ensure the confidentiality of all

collected data. In an effort to protect confidentiality, no information that can be traced

back to individual participants was collected. The rights of participants were protected

and the expressed voluntary nature of the study explained. Further, participants were not

coerced into participation in the study. The identity of participants was protected by

granting participants a waiver of written documentation in the informed consent.

Moreover, no uniform resource locator (URL) information was collected. This method

provided a means to ensure confidentiality as participants were not required to sign their

name on the informed consent. Participants wishing to enter into the drawing for the

$100 gift card were asked to provide contact information for entry. Moreover, the study

findings are reported in a way to protect the confidentiality of the participant without a

link to the educational institution of the participant. Participants of the study were made

aware of the name of the researcher and the study purpose. The protection of human

subjects was ensured by obtaining approval of the IRB and strictly adhering to the recommended guidelines.

Informed Consent

Informed consent to participate in the study was implied and granted with completion of the online survey. A waiver of written documentation of informed consent was requested from each participant as a means to promote confidentiality. The informed consent was provided in an electronic format for participants to view and print for their individual records at will.

Summary

The research methodology for the study utilized the quantitative design in an electronic survey. The purpose of the study was to describe the motivational orientation and factors of RNs pursuing doctoral education. A sample of RNs enrolled in either a Ph.D. or DNP course of study was sampled for the study. Data were collected in the study using Qualtrics and analyzed with SPSS Version 23. The next chapter will include a description of the demographics of the sample and reliability and analysis of the data collected in the study.

CHAPTER IV – RESULTS

This chapter reflects the findings of the data analysis, description of demographic factors, and key findings. The quantitative survey opened in Qualtrics on March 28, 2016, and closed on June 8, 2016. The calculated mean was utilized to identify the motivational orientation of RNs pursuing doctoral degrees as calculated on the AMS instrument. Results of binary logistic regression demonstrated the relationship between doctoral-prepared RNs and select demographic factors. Results in response to each research question are provided to answer each of the two research questions.

Sample Size and Demographics

A total of 173 registered nurses enrolled in doctoral education responded to the survey for a response rate of 70%. Ph.D. respondents represented the highest proportion of respondents (48.28%) followed by DNP (32.18%), BSN-DNP (17.82), and BSN-PhD (3.45%). Most were female (89%), Caucasian (71%), second African Americans (19%) and between the ages of 23 and 66 years. The calculated mean age for participants was 40 years. A complete demographic of racial background is provided in Table 1.

Student Sample Narrative

Respondents in the quantitative study were mostly married (70%), with single respondents being the second largest at 21.18%. Further respondents were mainly employed full-time (67.25 %), had between 1 and 10 years of experience (41.52%), and were living in an urbanized area (65.50 %), with variation in total household income between $126,000-$150,000 (28.40%) and $50,000-$75,000 (23.08 %) annually. Current place of employment was identified by respondents with responses provided in Table 2.

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Table 1

Race

Race	f	%
Caucasian/White		
(non-Hispanic)	123	71.10
African American/Black		
(non-Hispanic)	33	19.09
Hispanic	9	5.20
Middle Eastern/North African	0	0.00
Asian	5	2.89
Pacific Islander	0	0.00
American Indians or		
Alaskan Natives	0	0.00
Other (specify)	3	1.73
East Indian (1)		
White and Latino (1)		
Latino, non-Hispanic (1)		
Total	173	100.00

Table 2

Current Place of Employment

Current employment	f	%
Regional hospital	19	11.18
Teaching hospital	20	11.76
Rural hospital	3	1.76
Medical center	20	11.76
Research and teaching hospital	14	8.24
Clinic	11	6.47
Four-year college or university	36	21.18
Two-year college or technical college	16	8.82
Other	32	18.82
Total	173	100.00

Reliability

The AMS instrument utilized in the study included seven motivation subscales with four items. The Cronbach alpha coefficient for each of the seven subscales is reflected in Table 3.

Table 3

Cronbach Alpha Reliability Coefficient

Subscale	*N*	No. of items	Cronbach α
IM-to know	173	4	.908
IM-toward accomplishment	173	4	.917
IM-to experience stimulation	173	4	.856
EM-identified	173	4	.829
EM-introjected	173	4	.880
EM-external regulation	173	4	.863
Amotivation	173	4	.834

Note. IM = Intrinsic motivation, EM = Extrinsic motivation.

Binary Logistic Regression Model

For purposes of this research study, participants were coded as 0 for Ph.D. or 1 for DNP. The initial classification table revealed a 54.6 overall percentage, and the final classification resulted in a 67.8% as provided in Tables 4 and 5. A chi-square test of independence was calculated comparing the doctoral-prepared RN and the select demographic factors of age, race, gender, SES, geographical locale, and employment/occupation. A significant interaction was noted, χ^2 (15) = 36.61, p $\leq$ .05. The level of statistical significance was .001, which is highly significant. Further, results of the Hosmer and Lemeshow test goodness of fit test reflected χ^2 (8) = 6.040, p $\geq$ .05.

The level of statistical significance is .643, which is indicative of a correctly specified

model.

Table 4

Percentage of Performance Based on Predicted Scores of Ph.D. and DNP Students on

the AMS

Observed		Predicted		
		0	1	% correct
			0	100
Step 0 0	83		0	0
1	69			
Overall Percentage				54.6

Note. 0 = PhD students, 1 = DNP students.

Table 5

Results of Scores of Ph.D. and DNP Students on the AMS

Observed		Predicted		
		0	1	% correct
		65	18	78.3
Step 1 0		31	38	55.1
1				
Overall Percentage				67.8

Note. 0 = PhD students, 1 = DNP students.

Research Question One

Research Question One in the quantitative study was as follows: What is the

motivational orientation of registered nurses pursuing doctoral education? To identify the

motivational orientation of Ph.D. and DNP students, the calculated mean for each of the

seven subscales on the AMS instrument was utilized. The motivational orientation of

RNs pursuing doctoral degrees was measured utilizing a 7-point Likert scale with a range

of 1 = Does not correspond at all to 7 = Corresponds exactly. Mean scores above the

midrange of 3.5 reflected more favorable objective corresponding perceptions or beliefs,

and scores < 3.5 indicated less favorable corresponding perceptions or beliefs.

The mean scores of the AMS instrument were computed for the motivational

orientation of RNs using the seven subscales of motivation. The seven subscales

provided a means to identify the motivational orientation of RNs with three forms of

intrinsic motivation, three forms of extrinsic motivation or amotivation. Participants self-

reported on the instrument as to how closely each item reflected their reasons for

pursuing doctoral education. Mean scores were computed to identify the motivational

orientation of RNs pursuing doctoral education. The AMS instrument measures seven

different motivational orientations, of which the highest mean score (5.069) reflected

intrinsic motivation-to know. Extrinsic motivation-identified ($M = 4.911$) and reflected

the second highest mean. Further results reflected intrinsic motivation-toward

accomplishment ($M = 4.585$), extrinsic motivation-introjected ($M = .799$), extrinsic

motivation-external regulation ($M = 3.776$), intrinsic motivation-to experience

stimulation ($M = 3.086$), and amotivation ($M = 1.530$). Participants self-reported a

motivational orientation of intrinsic motivation-to know, which indicated a self-

determined motivational orientation. The second highest self-reported motivational orientation was extrinsic motivation-identified which further reflected a self-determined motivational orientation.

<div align="center">Research Question Two</div>

Research Question Two in the study was as follows: What are the relationships between the motivational orientations of nurses pursuing doctoral education and demographic factors of: age, race, gender, socioeconomic status (SES), geographical locale, and employment/occupation? To determine the relationship of RNs pursuing doctoral education and the demographic factors of age, race, gender, SES, geographical locale, and employment/occupation binary logistic regression was utilized. Results did not reveal significance in the motivational orientation and the selected demographic factors as reflected in Table 6. However, three of the factors with the lowest significance included race, geographic locale, and age. The odds of being in the Ph.D. program were 1.857 times greater for nonwhites as compared to whites. The odds of being in the Ph.D. program were 0.532 times less than for someone in a rural as compared to an urban area. Lastly, the odds of being in a Ph.D. program are 1.759 times greater for a 40-year-old as compared to a 39-year-old. The calculated mean age of participants was self-reported as 40.

Table 6

Level of Significance of Selected Demographic Factors on the AMS

Demographic factor	Exp(B)	Sig.
Years of nursing experience	1.040	.248
Race	1.857	.179
Gender	1.756	.372
Marital status	.779	.615
Geographical locale	.532	.135
Employment status	.763	.605
Age	1.759	.099
Socioeconomic status	1.016	.925
IM-to know	.918	.696
IM-Toward accomplishment	.886	.621
IM-To experience stimulation	1.154	.473
EM-Identified	.861	.466
EM-Introjected	1.116	.570
EM-External regulation	1.200	.248
Amotivation	1.174	.506

The motivational orientation with the highest mean score was intrinsic

motivation-to know. In regard to the motivational orientation and demographic factors of

age, race, gender, SES, geographical locale, and employment/occupation, no statistically

significance was reflected in study participants. The demographic factors of race,

geographical locale, and age did reflect as factors with the lowest significance.

Chapter V will include the discussion of results, implications for nursing,

recommendations for future research studies, study limitations, and the conclusion.

CHAPTER V – DISCUSSION

Presently, within the nursing workforce there is a shortage of doctoral-prepared nurses. Secondary to the need for a more educationally advanced nursing workforce and a focus on improving patient outcomes, the need exists to increase the number of doctoral-prepared nurses. Further, an increase in the number of doctoral-prepared nurses can impact the nursing workforce through practice, policy, research, and education.

The objective of this research study utilizing quantitative methodology sought to identify the motivational orientation of RNs and select demographic factors of age, race, gender, socioeconomic status (SES), geographical locale, and employment/occupation. The SDT developed by Deci and Ryan (1985) identified the motivational orientation as intrinsically motivated, extrinsically motivated, or amotivated. In agreement with the concepts provided in Deci and Ryan's (1985) SDT, there is a correlational relationship between a self-determined motivational orientation and the accomplishment of determined behaviors and actions which enhances the drive for learning and completion of doctoral study. Key findings of the study revealed the motivational orientation of RNs pursuing a doctoral degree with the highest computed mean as 5.069, intrinsic motivation-to know. Further encouraging findings revealed a motivational orientation of extrinsic motivation-identified with a mean of 4.911 second highest. Lastly, intrinsic motivation-toward accomplishment reflected the third highest calculated mean of 4.585. Hence, RNs pursuing doctoral education were, in essence, pursuing doctoral study simply for the accomplishment and learning involved in obtaining a doctoral degree.

Findings of the study supported and further illustrated the limited body of research specific to the motivational orientation of RNs in pursuit of advanced education.

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One noteworthy similarity between this study and Richardson (2011) was the identified

motivational orientation of RNs as intrinsic motivation-to know. Findings further

supported studies performed by Altmann (2012) and Warren and Mills (2009) which

reflected nurses satisfied with their present employment (an extrinsic motivator) as

having little desire to pursue further education. In essence, a positive correlation exists

between an intrinsic motivational orientation and pursuing doctoral education.

Findings in the second research question reflected no statistically significant

differences in the motivational orientation of Ph.D. and DNP students and the select

demographic factors of age, race, gender, SES, geographical locale, and

employment/occupation. The factors of age, geographical locale, and race did provide

the lowest significance. One potential explanation for the findings may be due to the

small size which could impact the ability to detect significant differences. Further, the

demographic factors of employment and SES for the sample were comparable with

limited variation.

One noticeable demographic finding included the large number of female-

enrolled participants ($n = 154$) compared to participants ($n = 19$). Findings may reflect

current trends in the nursing workforce as female nurses outnumber males in the nursing

workforce. The percentage of male nurses licensed between 2010 and 2013 included

11% (American Nurses Association, 2014). Further, participation was voluntary, and

male participants may have declined responding.

The validity of the subscales of the instrument was determined by analyzing the

Cronbach alpha reliability coefficient for each of the subscales. Minor revisions of the

instrument were undertaken to reflect the intent of the study. The identified reliability of

the instrument is a positive finding as the instrument could be used in future research on the motivational orientation of nurses.

Implications for Nursing Education

Results of this research provided insight into the motivational orientation of RNs pursuing doctoral education. These results may provide guidance into the recruitment and attrition of this population. Overall, participants self-reported an intrinsically motivated orientation. Therefore, it is recommended that colleges and schools of nursing can formulate recruitment methods with the intrinsically motivated orientation in mind. Positive benefits associated with intrinsic motivation can provide guidance for recruiters in educational settings. The recruitment of this population should emphasize benefits of doctoral education to include personal satisfaction from the completion and accomplishment of doctoral study. Further, potential recruitment methods could include peer-to-peer mentoring among doctoral students to further positively recruit this student population. The identification of the motivational orientation of RNs provides a means for nurse recruiters and educators to guide prospective students into doctoral study. This method could, in turn, provide a means to enlarge the pool of applicants for doctoral study, hence enlarging the supply of doctoral-prepared nurses.

Study Limitations

In reviewing the results of the quantitative research study, a number of study limitations are noted. The first potential limitation identified is the risk of response bias as the sample consisted of women predominantly who voluntarily participated. This may differ from nonvoluntary participants. Further, the sample included a convenience sample which may impact the generalizability of the study. A third identified limitation

includes the small sample size with low response rate. A total of 250 completed questionnaires was indicated by the power analysis which used the effect size of 0.5; the Type I error was 0.05 and power of 0.8. The final sample consisted of 173 completed questionnaires. One potential explanation for this factor could be the timing of the survey administration, as administration was initiated during the middle of the term when likely a number of tests and assignments are due. The results of the study revealed no significant difference in the motivational orientation and select demographic factors which may have been impacted by the low sample size and response rates. Lastly, the recruitment strategy for the study included invitation via email. Therefore, participants without access to email would be unable to participate even though in today's technological society this was very unlikely to significantly influence response rates.

Recommendations for Future Research

The purpose of the study was to describe the motivational orientation and factors of RNs pursuing doctoral study. In identifying the purpose, the necessity of further research was evident. Replication of this study would provide a means to validate findings from the study through similarities in identified outcomes. The sample size in the present study was small, which necessitates replication of the study to include a larger sampling pool. One means to achieve this goal is to include other regions within the US as the present study was delimited to RNs in the Gulf South region.

A second area of further research on this topic is to integrate a qualitative component. A qualitative study to examine the motivational orientation of RNs pursuing doctoral degrees would provide greater insight into the specific drivers for doctoral study.

Further, the researcher could determine which extrinsic motivators might provide the greatest stimulus for pursuing the doctoral degree.

Conclusion

The need for nurses to work in settings providing care to complex patients is a significant trend which is anticipated to continue for many years to come. The need for nurses prepared at the doctoral level provides a means to influence practice, policy, and research in the healthcare environment. The results of this study highlight the motivational orientation and select factors for RNs pursuing doctoral education. An encouraging finding of the study is the innate benefits perceived by RNs in the select programs as reflected in the intrinsically motivated orientation. Insight into the motivational orientation of RNs in pursuit of doctoral degrees is imperative as the commitment to lifelong education is an expectation for nursing professionals in the US and abroad.

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

INSTITUTIONAL REVIEW BOARD
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NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
  Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 16022403
PROJECT TITLE: A Motivational Profile of Nurses who Pursue Doctoral Education
PROJECT TYPE: New Proejct
RESEARCHER(S): Tomekia Earl
COLLEGE/DIVISION: College of Nursing
DEPARTMENT: Systems Leadership
FUNDING AGENCY/SPONSOR: N/A
IRB COMMITTEE ACTION: Exempt Review Approval
PERIOD OF APPROVAL: 02/24/2016 to 02/23/2017
Lawrence A. Hosman, Ph.D.
Institutional Review Board

APPENDIX B – INFORMED CONSENT

A MOTIVATIONAL MODEL PREDICTIVE OF NURSES WHO PURSUE

DOCTORAL EDUCATION

You are invited to participate in a research study conducted by Tomekia Earl, Ph.D.

candidate from The University of Southern Mississippi. You must be 18 years or older to

participate in the research study. Your participation is voluntary. Please take as much

time as you need to read the information sheet. You may also choose to discuss

participation with family, friends, colleagues, or faculty. You may print out a copy of this

consent for your records.

PURPOSE OF THE STUDY

We are asking you to participate in the study because we are trying to learn more about

motivators for registered nurses pursuing doctoral education. Response and submission of

the completed survey instrument will constitute consent to participate in this research

project.

PROCEDURES

You are asked to complete an online survey regarding why you are pursuing a doctoral

education. The survey will take approximately 20 minutes.

POTENTIAL RISKS

Participation in this study does not propose any foreseeable risks to you. If you decide to

stop at any time before you have finished the questionnaire, your answers will not be

recorded.

POTENTIAL BENEFITS TO PARTICIPANTS/SOCIETY

There are no direct benefits to you for participating but you will be contributing to the discipline's knowledge on the motivational orientations of registered nurses who pursue doctoral education.

PAYMENT/COMPENSATION

You will not receive any payment for your participation in this study. However, upon completion of the survey, participants may be entered into a drawing for a gift card in the amount of $100 as thanks for their time and participation if they desire to be included.

CONFIDENTIALITY

Your responses will be kept completely anonymous. The results of your participation will not be released in an individually identifiable form. Your name cannot be associated with your responses to the questionnaire. Results will be presented in summative form only. The results from the study may be presented in academic settings and might be published in a professional journal in the field of nursing, education, and/or psychology. Individuals in this study will only be identified as "participants." No one will be able to identify who you are in this study.

PARTICIPATION AND WITHDRAWAL

You can choose to participate in the study or not. If you choose to participate in the study, you may withdraw participation at any time without consequence.

ALTERNATIVES TO PARTICIPATION

Your alternative to participation is to not participate.

RIGHTS OF RESEARCH PARTICIPANTS

Being in this study is completely voluntary. You may choose not to participate at any

time. Not participating or stopping participation will have no effect on your relationship

with your University. The University of Southern Mississippi Institutional Review Board

is a committee that looks out for the ethical treatment of people in research studies. They

may review the study records if they wish. This is to be sure that people in research

studies are being treated fairly and that the study is being carried out as planned.

IDENTIFICATION OF RESEARCHERS

If you have any questions or concerns about the research, please feel free to contact the

Principal Investigator Tomekia Earl, Ph.D. candidate (Tomekia.luckett@eagles.usmedu

or the committee chair, Dr. Shelia Davis Sheila.Davis@usm.edu

I have read this informed consent form. I have had a chance to ask questions. I agree to

take part the research study. Proceeding to the attached survey constitutes your consent

to participate and certifies that you are 18 years of age or older. Please print a copy of

this informed consent form to retain for your records.

APPENDIX C ACADEMIC MOTIVATION SCALE (AMS-C 28)

College (CEGEP) Version

Robert J. Vallerand, Luc G. Pelletier, Marc R. Blais, Nathalie M. Brière,

Caroline B. Senécal, Évelyne F. Vallières, 1992-1993

Educational and Psychological Measurement, vols. 52 and 53

Scale Description

This scale assesses the same 7 constructs as the Motivation scale toward College (CEGEP) studies. It contains 28 items assessed on a 7-point scale.

References

Vallerand, R.J., Blais, M.R., Brière, N.M., & Pelletier, L.G. (1989). Construction et validation de l'Échelle de Motivation en Éducation (EME). Revue canadienne des sciences du comportement, 21, 323-349.

WHY DO YOU GO TO COLLEGE (CEGEP) ?

Using the scale below, indicate to what extent each of the following items presently corresponds to one of the reasons why you go to college (CEGEP).

Does not correspond at all	Corresponds a little	Corresponds moderately	Corresponds a lot	Corresponds Exactly		
1	2	3	4	5	6	7

WHY DO YOU GO TO COLLEGE (CEGEP) ?

1. Because with only a high-school degree I would not

   find a high-paying job later on.   1   2   3   4   5   6   7

2. Because I experience pleasure and satisfaction

   while learning new things.   1   2   3   4   5   6   7

3. Because I think that a college (CEGEP) education will help me

   better prepare for the career I have chosen.   1   2   3   4   5   6   7

4. For the intense feelings I experience when I am

   communicating my own ideas to others.   1   2   3   4   5   6   7

5. Honestly, I don't know; I really feel that I am wasting

   my time in school.   1   2   3   4   5   6   7

Does not correspond at all	Corresponds a little	Corresponds moderately	Corresponds a lot	Corresponds exactly		
1	2	3	4	5	6	7

WHY DO YOU GO TO COLLEGE (CEGEP) ?

6. For the pleasure I experience while surpassing
   myself in my studies.   1   2   3   4   5   6   7

7. To prove to myself that I am capable of completing my
   college (CEGEP) degree.   1   2   3   4   5   6   7

8. In order to obtain a more prestigious job later on.   1   2   3   4   5   6   7

9. For the pleasure I experience when I discover
   new things never seen before.   1   2   3   4   5   6   7

10. Because eventually it will enable me to enter the
    job market in a field that I like.   1   2   3   4   5   6   7

11. For the pleasure that I experience when I read
    interesting authors.   1   2   3   4   5   6   7

12. I once had good reasons for going to college (CEGEP);
    however, now I wonder whether I should continue.   1   2   3   4   5   6   7

Does not correspond at all	Corresponds a little		Corresponds moderately	Corresponds a lot		Corresponds exactly
1	2	3	4	5	6	7

WHY DO YOU GO TO COLLEGE (CEGEP) ?

13. For the pleasure that I experience while I am surpassing

    myself in one of my personal accomplishments.　　1　　2　　3　　4　　5　　6　　7

14. Because of the fact that when I succeed in college (CEGEP)

    I feel important.　　1　　2　　3　　4　　5　　6　　7

15. Because I want to have "the good life" later on.　　1　　2　　3　　4　　5　　6　　7

16. For the pleasure that I experience in broadening my

    knowledge about subjects which appeal to me.　　1　　2　　3　　4　　5　　6　　7

17. Because this will help me make a better choice

    regarding my career orientation.　　1　　2　　3　　4　　5　　6　　7

18. For the pleasure that I experience when I feel completely

    absorbed by what certain authors have written.　　1　　2　　3　　4　　5　　6　　7

19. I can't see why I go to college (CEGEP) and frankly,

    I couldn't care less.　　1　　2　　3　　4　　5　　6　　7

Does not correspond at all	Corresponds a little		Corresponds moderately	Corresponds a lot		Corresponds exactly	
1	2	3	4	5	6	7	

WHY DO YOU GO TO COLLEGE (CEGEP) ?

20. For the satisfaction, I feel when I am in the process of
    accomplishing difficult academic activities.   1   2   3   4   5   6   7

21. To show myself that I am an intelligent person.   1   2   3   4   5   6   7

22. In order to have a better salary later on.   1   2   3   4   5   6   7

23. Because my studies allow me to continue to learn about
    many things that interest me.   1   2   3   4   5   6   7

24. Because I believe that a few additional years of
    education will improve my competence as a worker.   1   2   3   4   5   6   7

25. For the "high" feeling that I experience while reading
    about various interesting subjects.   1   2   3   4   5   6   7

26. I don't know; I can't understand what I am
    doing in school.   1   2   3   4   5   6   7

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Does not correspond at all	Corresponds a little		Corresponds moderately	Corresponds a lot		Corresponds exactly
1	2	3	4	5	6	7

WHY DO YOU GO TO COLLEGE (CEGEP) ?

27. Because college (CEGEP) allows me to experience a

    personal satisfaction in my quest for excellence

    in my studies.   1   2   3   4   5   6   7

28. Because I want to show myself that I can succeed

    in my studies.   1   2   3   4   5   6   7

KEY FOR AMS-28

 # 2, 9, 16, 23   **Intrinsic motivation-to know**

 # 6, 13, 20, 27   **Intrinsic motivation-toward accomplishment**

 # 4, 11, 18, 25   **Intrinsic motivation-to experience stimulation**

 # 3, 10, 17, 24   **Extrinsic motivation-identified**

 # 7, 14, 21, 28   **Extrinsic motivation-introjected**

 # 1, 8, 15, 22   **Extrinsic motivation-external regulation**

 # 5, 12, 19, 26   **Amotivation**

APPENDIX D CONSENT TO USE AND REVISE AMS

From: **Tomekia Luckett** <xxxxxx.xxxxxxx@eagles.usm.edu>
Date: Tue, Apr 21, 2015 at 8:33 PM
Subject: AMS instrument
To: xxxxx.xxxxx@gmail.com

Hello,

I am a student at the University of Southern Mississippi. I would like to use the
Academic motivation scale instrument for my dissertation. I have thus far been unable to
locate information on how to obtain permission. I wanted to find out in advance, what is
the process for seeking permission to use the instrument.

Thanks.

****

On Tue, Apr 28, 2015 at 12:21 PM, Ariane St-Louis <xxxxx.xxxxx@gmail.com> wrote:

Hi,

You have the permission to use the AMS and you can download the scale from our web
site:

http://www.er.uqam.ca/nobel/r26710/LRCS/echelles_en.htm

AMS

To calculate a person's score on the AMS, you need to find the mean response for each
of the subscales. These means will vary between 1 and 7. You then insert these means in
the following formula which will able you to calculate a self-determination index:

$2((know+acc+stim/3)) + iden - ((intro+reg/2) + 2amo) =$ self-determination index

know= intrinsic motivation to know

acc= intrinsic motivation to accomplishments

stim= intrinsic motivation to experience stimulation

iden= identification

intro= introjected regulation

reg= external regulation

amo= amotivation

This formula will give you scores ranging from -18 (very little self-determination) to +18 (extreme self-determination). Most of the people we have tested with this scale obtain scores around 10.

Highest level of self-determination: 2((7+7+7/3)) + 7 - ((1+1/2) + 2*1)

 So :

2((7+7+7/3))+7-((1+1/2)+2(1)= would be the highest self-determined score = 18

2((21/3))+7-((2/2)+2(1)

2((7))+7-((1)+(2)

2((7))+7-(3)

2((7))+7-(3)

14+7-3=18

I would like to mention that this scale has not been normalized. This index is only used for research purposes. Nevertheless, we noticed that a high index is associated with positive consequences and, on the opposite, a low index is associated with negative consequences for the person.

I hope these few words will help you.

I wish you good luck in your research project!

2015-04-21 21:37 GMT-04:00 Bob Vallerand <xxxxx.xxxxx@gmail.com>:

Robert J. Vallerand, Ph.D., FRSC
Professeur de Psychologie Sociale
Professor of Social Psychology and Director
Laboratoire de Recherche sur le Comportement Social
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International Positive Psychology Association

www.ippanetwork.org
Fellow
Institute of Positive Psychology and Education
Australian Catholic University

For more on passion: **Prof Robert Vallerand 'Making a difference in people's lives' at**

Mind & Its Potential 2012

From: **Tomekia Luckett** <xxxxx.xxxxx@eagles.usm.edu>
Date: Thu, Apr 30, 2015 at 3:41 PM
Subject: Re: AMS instrument
To: Ariane St-Louis <xxxxx.xxxxx@gmail.com>

Hello,

I would like to sincerely take the time to thank you for responding to my request. I sincerely appreciate the information you provided as it will help with my study. I do have two last questions. Does the granted permission include adaptation? As I will need to make minor terminology changes to the instrument as my focus is nursing students. Lastly, I found reliability information at this website. Wanted to be sure it was accurate. Thanks, again for all of your assistance.
http://www. selfdeterminationtheory.org/ SDT/documents/1992_
VallerandPelletierBlaisBriere_ EPM.pdf this website

****

On Tue, May 5, 2015, at 1:04 PM, Ariane St-Louis <xxxxx.xxxxx@gmail.com> wrote:
Yes, you have the permission to adapt the scale and the paper you found is the one that validates the AMS.

Ariane

APPENDIX E DEMOGRAPHIC QUESTIONNAIRE

Please select the appropriate answers for each question. This information will only be

used for the purpose of comparison to others in this study.

1. **How old are you?**

    1. 24 – 34

    2. 35-44

    3. 45 – 54

    5. 55 – 65

    6. Other

2. **Which doctoral degree are you pursuing?**

    1. PhD

    2. DNP

3. **Which of the following best reflects your racial or ethnic background?**

1. Caucasian (white)

2. African American (black)

3. Hispanic

4. Alaskan/Native American

5. Asian

6. Other

4. What is your gender?

    1. Female

    2. Male

5. What is your marital status?

    1. Single

    2. Married

    3. Divorced

    4. Widowed

6. What is your employment status?

    1. Full-time

    2. Part-time or PRN

    3. Retired

    4. Full-time student

7. Which of the following categories best describes your total household income before taxes?
    1. $50,000 –$75,000

    2. $76,000–$100,000

    3. $101,000–$125,000

    4. $ 126,000–$150,000 or more

8. **Which of the following best describes your geographical locale?**

   1. Urban (area containing at least 2,500 and less than 50,000 people)

   2. Rural (any population, housing, or territory outside urban areas)

9. **How many years of nursing experiences do you as a registered nurse?**

   1. 1 – 10

   2. 11 – 20

   3. 21 – 30

   4. 31– 40

   5. 41 – 50

   6. 50 or more

10. **What is your current place of employment?**

   1. Regional Hospital

   2. Teaching Hospital

   3. Rural Hospital

   4. Medical Center

   5. Research and Teaching Hospital

   6. Clinic

   7. Four-Year-College or University

   8. Two-Year-College or Technical College

   9. Other

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