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Retirement and the Registered Nurse: The SAVER Study

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RETIREMENT AND THE REGISTERED NURSE:

THE SAVER STUDY

By

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2000

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A dissertation submitted in partial fulfillment
of the requirements for the

Doctor of Philosophy - Nursing

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ABSTRACT

Sixty percent of U.S. registered nurses (RNs) age 45-60 have not participated in retirement planning. Further, in the next 10 to 15 years, this cohort of 1 million RNs will reach retirement age. Previous RN retirement studies have focused on RN retirement outlook, RN economic preparation for retirement, or retirement intent. However, no contemporary research explores the psychological influences in RN retirement preparation; a concern since retirement benefits have been suggested as a retention strategy to improve patient care outcomes, satisfaction, and safety by reducing RN turnover. The purpose of the SAVER study was to identify predictors of future time perspective (FTP), retirement goal clarity (RGC), self-rated knowledge of financial planning for retirement (SKFPR), and retirement planning activity level (RPAL) in employed U.S. RNs.

The SAVER study utilized a cross sectional design, conducted via an online survey administered by Manwaring Web Solutions. A convenience sample of 706 employed RNs completed the SAVER study. The online survey was comprised of a researcher-designed questionnaire, and Hershey, Jacobs-Lawson, McArdle, and Hamagami's Retirement Planning Preparation Questionnaire was used to assess retirement preparation.

The average participant was female, 48 years old, Caucasian, not of Hispanic or Latino ethnicity, and married. Professionally, the average participant was initially licensed as a RN in 1993, currently working full time, held a bachelor's degree, worked 17 years full time during her RN career, 4 years part time or per diem, and spent 2 years out of the nursing profession. In addition, the following were the most commonly

occurring characteristics of the sample; an annual household income of $50,000 - $74,999, complete vesting in a retirement plan with a current employer, currently employed in an inpatient setting, with job satisfaction and health ratings both an "8" on a 1-10 scale (with 0 being "highly dissatisfied" and 10 being "highly satisfied" in job satisfaction, and 0 being "poor health" and 10 being "excellent health" in health).

Multiple regression hierarchical analyses identified predictors of FTP (health/race), RGC (health/income/nurse specialty/race/vesting), SKFPR (gender/health/income/vesting), and RPAL (gender/health/income/part time work/vesting). The only variable to make a statistically significant contribution for all four criteria was health (in FTP [$p < 0.001$], in RGC [$p < 0.001$], in SKFPR [$p < 0.001$], and in RPAL [$p < 0.001$]). The final models accounted for 9% of the variance in FTP, 20% of the variance in RCG, 22% of the variance in SKFPR, and 20% of the variance in RPAL.

The SAVER study indicated retirement preparation remains a key issue for RNs. The SAVER study found the better a person ranks their health status positively predicted retirement preparation, which is new knowledge. RNs preparing for retirement should be cognizant of the interrelationship between finances and health. Administration and nursing leadership should consider incorporating health-related interventions as part of retirement planning.

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CHAPTER 1: INTRODUCTION

Background

Approximately 57% of senior citizens have assets totaling less than $5,000 (LaLanne, Rettick, & Linkletter, 2008). Sixty percent of American workers report the total value of their household savings and investments to be less than $25,000 (Employee Benefit Research Institute [EBRI], 2012). Additionally, the recent economic recession occurring December 2007 to June 2009 negatively impacted both employment and retirement (Hill, 2011). Economists Rosnick and Baker (2009) estimated during this time, the net wealth of the baby boomer generation fell between 45% to 50%. For example, a boomer between the ages of 45-54 with a net worth of $172,400 in 2004 saw her net worth shrink to $94,200 (45%) in 2009. Many mature workers who lost significant amounts in retirement savings chose to remain employed rather than retiring (Hill, 2011), suggesting that finances are a critical factor in the retirement decision.

The 2007-2009 recession appears to be one of the most powerful influencers of retirement age with many workers extending current employment due to lack of sufficient retirement funds (Hill, 2011). Several additional factors, such as the retirement age for full Social Security benefits increasing from 65 to 67, reduced Social Security benefits, the elimination of employer sponsored health benefits for retirees, and a shift from employer-sponsored defined benefit plans encouraging early retirement now also impact the retirement date for many workers (Hill, 2011; Wang, 2013). With Americans' confidence in their ability to retire comfortably at historically low levels (just 14% of Americans are very confident they will have enough money to live comfortably in retirement) (EBRI, 2012), retirement preparation is a relevant and significant concern.

Because retirement funding is changing from government and work-sponsored programs to an individual-sponsored responsibility, retirement planning is an expanding component of the retirement process (Griffin, Loh, & Hesketh, 2013). Retirement research is also advancing in response to the current and forecasted retirement challenges. There is a contemporary move noted in retirement literature to move beyond economic assessments and uncover new knowledge about the individual process of retirement. This new retirement perspective has led to inquiries about retirement predictors and consequences (Wang, 2013), particularly as psychological factors may account for individual differences in retirement planning (Hershey, Jacobs-Lawson, McArdle, & Hamagami, 2007). For example, retirement financing varies individually secondary to cognitive outlook (Orbell, Perugini, & Rakow, 2004), personality, time perspective, and knowledge of financial planning (Hershey, 2004).

Problem Statement

The registered nurse (RN) workforce is not exempt from financial concerns resulting from recent economic events or late or inadequate retirement planning (Strohfus & Schrader, 2009). The average age of practicing RNs in the United States is 44.6 years (Health Resources and Services Administration [HRSA], 2013), and many nurses close to retirement age face significant financial challenges because of delayed or inadequate retirement savings (Strohfus & Schrader, 2009). Indeed, 60% of RNs age 45-60 have not participated in retirement planning (Women's Institute for a Secure Retirement [WISER], 2012). These data suggest that financial preparation may impact both RN workforce and personal sustainability.

Sustainability refers to differentiating practices that meet the today's needs without destroying or depleting tomorrow's resources (St. Pierre Schneider et al., 2009). Kossek and Berg (2012) noted that workforce sustainability includes persons constructively laboring in employment with appropriate support to both psychological and economic well-being over time. In a sustainable workforce, employees are presented with opportunities for growth which enhance both the professional and personal life. In a sustainable workforce, employees succeed not only within the scope of their employment, but also in life (Kossek & Berg, 2012). One of life's great processes is personal retirement readiness-preparing for this inevitable stage of life (Ekerdt, 2004) where one can succeed greatly or fail miserably.

In nursing, the experienced nurse's knowledge is a critical element of workforce sustainability because this cohort often provides mentorship, specific expert knowledge, and learning opportunities novice nurses cannot find with any other resource (Knowles, 2010). Therefore, retention of mature nurses is a key element of nursing workforce sustainability (Knowles, 2010), a relevant concern with the large cohort of nurses approaching retirement. Additionally, because health and well-being are critical to the sustainability of nursing workforce services (Knowles, 2010), the aspect of financial health has a direct connection to RN workforce sustainability. In looking at personal financial sustainability, it is important for nurses to assess whether they are meeting today's financial needs without depleting the resources needed for tomorrow's retirement.

Females comprise 91% of the RN workforce (HRSA, 2013), a relevant statistic given research indicates women are less prepared for retirement (Glass & Kilpatrick,

1998; Jacobs-Lawson, Hershey, & Neukam, 2004). Indeed, the U.S. Department of Labor

(USDL) (2007), reports women are more likely to work in part-time jobs that do not

qualify for a retirement plan, interrupt their careers due to family responsibilities, have

fewer retirement contribution years, make less monetary contributions to retirement

plans, live longer than men, and invest conservatively. Further, the need for RN

retirement preparation research is emphasized by advanced workforce age, economic

volatility, an increased cost of living, and the demand for a sustainable RN workforce

(Moore & Biordi, 1995). Although previous studies focused on RN retirement outlook,

RN economic preparation for retirement, or retirement intent, there is a paucity of

research regarding psychological influences in RN retirement preparation. This is

concerning as there are psychological mechanisms underlying retirement preparation

(Hershey et al., 2007). Psychological factors may include those elements influencing

function, attitudes, and characteristics of the human mind. Such factors include

personality traits, psychodynamic processes, learned cognitions, and behaviors (Wang &

Shi, 2014).

Only 9.6% of all RNs are under the age of 30 (HRSA, 2013). The rapidly aging

nursing workforce may have to work longer to avoid a shortfall in retirement income and

would benefit from retirement planning education while they are still employed (Robert

Wood Johnson Foundation [RWJF], 2006). According to the RWJF (2006), one practice

for RN retention includes providing retirement planning education. However, retirement

planning education must be based on RN financial retirement needs. New data are needed

to understand psychological influences in RN retirement preparation and ensure

development of applicable retirement planning education. Additionally, retirement

planning education development may be aided by understanding financial and demographic profiles of RNs who are financially prepared for retirement.

According to Buerhaus (2009), the recession-driven increase in RN employment alleviated the RN shortage in many health care facilities as experienced RNs returned to work or delayed retirement. However, as the economy improves, strategies to retain experienced RNs should be considered (Buerhaus, 2009) as RN turnover negatively impacts patient care outcomes, satisfaction, and safety (Hill, 2010; RWJF, 2006). Contemporary data comprising the current state of RN retirement is required to more completely address retirement benefits as a retention strategy. Companies employing nurses working beyond traditional retirement age may continue to benefit from skilled expertise by incentivizing these RNs to remain employed in their organizations rather than finding alternative employment elsewhere or exiting the workforce. Therefore, RN retirement studies are paramount to ensuring accurate, reliable data for building retention strategies involving retirement benefits.

Research Purpose

The purpose of the SAVER study was to identify predictors of future time perspective (FTP), retirement goal clarity (RGC), self-rated knowledge of financial planning for retirement (SKFPR), and retirement planning activity level (RPAL) in employed U.S. RNs. Investigation of retirement planning preparation predictors was necessary to establish a baseline understanding of psychological factors in RN retirement preparation. Identifying predictors in RN retirement planning may assist in better understanding retirement needs. Study findings have the potential to impact retirement marketing strategies and ultimately impact RN workforce sustainability, which can

ultimately improve patient care outcomes, satisfaction, and safety by reducing RN turnover (Hill, 2010; RWJF, 2006).

Research Questions

The following four research questions provided direction for the SAVER study.

1. Do age, education level, employment status, ethnicity, gender, health, income level, job satisfaction, marital status, nurse specialty, race, RN licensure year, vested status, years of full time employment, years of part time or per diem employment, or years spent out of the nursing workforce predict future time perspective in employed U.S. RNs?

2. Do age, education level, employment status, ethnicity, gender, health, income level, job satisfaction, marital status, nurse specialty, race, RN licensure year, vested status, years of full time employment, years of part time or per diem employment, or years spent out of the nursing workforce predict retirement goal clarity in employed U.S. RNs?

3. Do age, education level, employment status, ethnicity, gender, health, income level, job satisfaction, marital status, nurse specialty, race, RN licensure year, vested status, years of full time employment, years of part time or per diem employment, or years spent out of the nursing workforce predict self-rated knowledge of financial planning for retirement in employed U.S. RNs?

4. Do age, education level, employment status, ethnicity, gender, health, income level, job satisfaction, marital status, nurse specialty, race, RN licensure year, vested status, years of full time employment, years of part time or per diem

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employment, or years spent out of the nursing workforce predict retirement

planning activity level in employed U.S. RNs?

Definition of Terms

Defining concepts in research allows researchers to be consistent in the way terms

are used, applied, or incorporated in a field of study. The conceptual definitions provided

are more comprehensive than denotative definition and may link constructs. In contrast,

the operational definition is a specific definition for a particular term, relative to the

current study investigation (Burns & Grove, 2009).

Age: Conceptually, age refers to any interval of time or a stage of life (Agnes,

2000). Age was defined operationally according to the U.S. Census Bureau (2012) as the

length of time in completed years a person has lived at the time of questionnaire

completion.

Education level: Education level refers to formal training or knowledge

development (Agnes, 2000). For this study, the operational definition of educational level

referred to the highest level of formal schooling a person successfully completed. This is

distinct from the level of schooling an individual is currently enrolled in (U.S. Census

Bureau, 2012). Categories for educational level included Associate's degree, Bachelor's

degree, Master's degree, and Doctoral degree.

Employment status: Employment status is the occupation, work, profession, or job

a person maintains (Agnes, 2000). For this study, the operational definition included the

employment the participant maintained at the time the questionnaire was answered.

Employment was categorized as the amount of time the respondent is employed as a RN:

full-time, part-time, or prn/per diem.

Ethnicity: Ethnicity is an ethnic classification or affiliation (Agnes, 2000). The operational definition of ethnicity for this study included Hispanic or Latino and Not Hispanic or Latino. According to the U.S. Census Bureau (2012), people who identify their origin as Hispanic or Latino may be any race as Hispanic origin is viewed as the heritage, nationality, lineage or country of birth of the person or ancestors.

Future time perspective: Future time perspective refers to the extent to which individuals enjoy thinking about and planning for the future (Hershey et al., 2007).

Gender: Gender is referred to as the condition of being a male or female human being (Agnes, 2000). Gender was defined operationally according to the U.S. Census Bureau (2012) as a person's biological male or female categorization.

Health: Health conceptually includes physical and mental well-being (Agnes, 2000). For this study, the operational definition of health included the participant's personal evaluation of their overall physical and mental well-being categorized on a ten point scale with 0 = poor health and 10 = excellent health.

Income level: Income level is the total household income, categorized as the money gained by an individual for labor or services (Agnes, 2000). The operational definition for income level was the household earnings per year before taxes are withdrawn categorized as: < $30,000; $30,000 to $39,999; $40,000 to $49,999; $50,000 to $74,999; $75,000 to $99,999; $100,000 to $124,999; $125,000 to 149,999; $150,000 or over.

Job satisfaction: Job satisfaction refers to the extent a person's hopes dreams and expectations regarding employment are fulfilled (The Free Dictionary, 2013). The operational definition for this study included the categorical ranking of job satisfaction

with a current employer on a ten point scale with 0 = highly dissatisfied and 10 = highly satisfied.

Marital status: Marital status refers to marriage condition (Agnes, 2000). Operationally, marital status was defined by the U.S. Census Bureau (2012) as a state of wedlock categorized as: never married, married, widowed, divorced, or a nonspousal partnership.

Nurse specialty: Nurse specialty refers to the specific technical training and duties performed by a RN. For this study, the respondents selected what they considered to be their specialty within the nursing profession.

Race: Race refers to a specific classified group where members may share similarities in biological traits (Giger, 2013). For this study, race was defined by the U.S. Census Bureau (2012) as the social definition of race recognized in the United States and was not an attempt to define race biologically, anthropologically, or genetically. The six race categories, as used by the U.S. Census Bureau (2012) were: Black/African-American, American Indian/Alaska Native, Asian, Pacific Islander, White/Caucasian, or Other.

Registered nurse: A RN is defined as a licensed professional with an active registered nursing license who has completed the necessary requirements to work in the occupation of a RN (Anderson, 1994), and is currently working in the capacity of a RN in the United States. For this study, the operational definition included those, licensed, employed U.S. RNs that met inclusion criteria.

Retirement goal clarity: Retirement goal clarity is the act of thinking about, discussing, or setting goals for the future, particularly in relation to the retirement quality of life (Hershey et al., 2007).

Retirement planning activity level: Retirement planning activity level refers to the information seeking and instrumental retirement planning activities occurring over the previous 12 months (Hershey et al., 2007).

Self-rated knowledge of financial planning for retirement: Self-rated knowledge of financial planning for retirement encompasses the individual's perceptions of his/her general knowledge of retirement planning (Hershey et al., 2007).

Vested status: Vesting means the employee has earned the right to benefits without the risk of forfeiting them (USDL, 2014) and vested status refers to retirement funding that is either reduced or in-full based on credited employment. For this study, vesting was categorized as the nurse's ownership of funds in a retirement account with a current employer categorized as: not vested, somewhat vested, completely vested, or unknown vested status.

Research Assumptions

For the purpose of this study, the following statements were assumed to be correct:

1. The nursing profession has a large cohort of RNs approaching retirement in the population being sampled.

2. Retirement benefits are relevant to the sustainability of the RN profession.

3. Study participants will answer questions truthfully.

4. Background and demographic characteristics may influence an individual's
reality, perceptions, and actions.

Research Limitations

Limitations are factors that may impact study results, interpretation of study
results, and study generalizability (Burns & Grove, 2009). Often, limitations are factors
beyond the researcher's control, but they should be mentioned to alert readers to possible
errors or difficulties in interpreting study results (Burns & Grove, 2009). The SAVER
study was limited to employed U.S. RNs, and the findings will be generalizable to only
this population. The SAVER study investigated selected predictors of retirement
planning, which does not allow for determination of causality. Further, the selected
predictors were not comprehensive but selected based on those appearing most frequently
in retirement literature. Therefore, the SAVER study was not a comprehensive
examination of all predictors for FTP, RGC, SKFPR, and RPAL. The target population
responding to the survey invitation, and ultimately determining study results, was not a
random sample, which is another limitation. The sample may contain confounding
variables unknown to the researcher.

Study Significance

Despite research indicating RNs are unprepared for retirement there is no
discussion of the psychological influences in RN retirement preparation in the current
nursing literature. Additionally, much of the current research focuses on foreign
retirement processes, thus limiting the generalizability of research findings to U.S. RNs
(Blakeley & Ribeiro, 2008; O'Brien-Pallas et al., 2003). The SAVER study sought to
identify those predictors of RN retirement preparation with respect to FTP, RGC,

SKFPR, and RPAL. Once predictors of RN retirement preparation are identified, interventions to improve RN retirement preparation through retirement planning education can be implemented and prospective longitudinal studies conducted.

Chapter Summary

In summary, this chapter presented the argument for retirement as a critical, current RN workforce issue. This chapter introduced and explained the background of RN retirement, stated the problem and purpose of the SAVER study, and provided an overview of the research questions. The definitions, limitations, and assumptions were noted within this chapter. Finally, this chapter asserted knowledge gaps are present in the literature with regard to the psychological influences in RN retirement preparation and proposed the significance of this study in creating new knowledge.

CHAPTER 2: REVIEW OF THE LITERATURE

The State of the Science

An integrative literature review approach was utilized to determine the state of the

science. To reduce bias and ensure comprehensiveness in this detailed research analysis,

varying data isolation methods were employed as recommended by Whittemore and

Knafl (2005). The following databases were accessed to identify applicable RN

retirement literature: Academic Search Premier, Cumulative Index to Nursing and Allied

Health Literature (CINAHL), Psychological Information Database (PsycINFO), PubMed

and Medline. Search terms included *registered nurse retirement, registered nurse*

retention, nurse retirement, nurse retention, registered nurse workforce retention and

registered nurse retirement planning. Additional approaches included journal hand

searching, networking with retirement planners (i.e. Fidelity Investments), and

investigation of previous doctoral dissertations. The following is a summary of the state

of the science.

Inclusion/exclusion criteria. Prior to the early 1990's, nursing literature gave

little attention to retirement issues. Early literature in the 1960's, 1970's, and 1980's

included only anecdotal information or discussion of benefit packages (Moore, 1992).

Therefore, literature published between 1995-2012 was included in this review. Present

economic factors (including the 2007-2009 recession), and the lack of RN retirement

literature prior to 1995 dictated the chosen timeframe. The search was restricted to

studies from peer-reviewed journals in the English language. Studies were included if

they provided relevant, timely information on RN retirement in the United States. Both

theoretical and empirical sources were reviewed so as to improve understanding of RN

retirement, but only published studies were included in the written literature review. Literature on foreign RN retirement processes were excluded because, although studies exist investigating retirement factors of RNs in other countries (O'Brien-Pallas, et al., 2003; O'Brien-Pallas, Duffield, & Alksnis, 2004), the focus was on RN retirement in the United States. Unpublished works (such as dissertations and abstracts) were excluded.

Once the literature was accessed, data were isolated for analysis and integration. Each study was systematically evaluated, with major themes and conclusions identified. A total of 145 papers were initially identified. After inclusion and exclusion criteria were applied, 17 papers were included in the review. Of these, seven were qualitative studies and 10 were quantitative studies.

To ensure methodological rigor, each study included in the literature review was evaluated on methodological features based on criteria outlined by Alvarenga (2005). Quantitative studies were evaluated on 18 criteria (Figure 1) and qualitative studies on 14 criteria (Figure 2). Scored points were then summed for a grand total of between 1-18 points. Quantitative articles with 14 to 18 points and qualitative articles with 11 to 14 points were scored as a grade 3 (high quality [$n = 7$]). Quantitative articles with 9 to 13 points and qualitative articles with seven to 10 points were scored as a grade 2 (medium quality [n = 9]). Finally, quantitative articles with one to eight points and qualitative articles with one to six points were scored as a grade 1 (poor quality [n = 1]).

Figure 1: Quantitative Study Critique Form

— Problem is clearly stated.
— Purpose is logically linked to the problem.
— Review of literature is relevant.
— Researcher opinion expressed is supported by evidence.
— Review of literature provides rationale and direction for the study.
— Objectives, questions, or hypotheses are clearly stated.
— Objectives are logically linked to the research purpose.
— Variables are relevant to the research purpose.
— Research methods and procedures are clearly defined.
— Measures to ensure consistency are described.
— Threats to validity are addressed and minimized.
— Sampling method is adequate to produce representative sample.
— Instruments adequately measure study variables.
— Validity and reliability of instrument are described and appropriate for current research.
— Data collected are relevant to research objectives.
— Possible explanations for significant and non-significant findings are explored.
— Study limitations are outlined by the author.
— Conclusions are consistent with findings from analyses.

Each item = 1 point

Scoring:

14–18 points = Grade 3 (high quality)

9–13 points = Grade 2 (medium quality)

1– 8 points = Grade 1 (poor quality)

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Figure 2: Qualitative Study Critique Form

— All steps and elements of the study are clearly described.
— Informants have personal experience with the phenomenon under study.
— Wording of questions does not include theoretical terminology.
— Questions reflect informants' personal experience, not theoretical understanding.
— Informant responses reflect true experiences and are not influenced by extraneous variables.
— Researcher clearly outlines rules employed for arriving at ratings or judgments.
— Interpretive statements correspond with findings.
— Informants validate findings.
— Categories and themes developed are inclusive of existing data.
— Data are assigned to appropriate categories.
— Hypotheses and propositions are clearly identified and supported by data.
— Relationship between concepts is clearly expressed and validated by data.
— Researcher compares study findings with existing body of knowledge.
— Conclusions are based on clearly stated evidence.

Each item = 1 point
Scoring:
 11–14 = Grade 3 (high quality)
 7–10 = Grade 2 (medium quality)
 1–6 = Grade 1 (poor quality)

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Literature Data Analysis

Data from the included studies were organized, categorized, and summarized to construct a rational summary. A review of the selected studies offered the following taxonomy for coding: retirement preparation, preretirement planning, retention of mature RNs, and retention policies.

Retirement preparation. Moore and Biordi (1995) conducted the first study investigating RN retirement preparation. The researchers used a one-time, cross sectional

design. A 61 item author-generated questionnaire served as the measure. The sample

included 209 RNs, which represented 6% of the US population of RNs in 1995. This

sample size is adequate (Burns & Grove, 2009). A significant finding from this study was

half of the nurses participating expressed they would be unprepared for retirement,

regardless of the age they chose to retire. Additionally, the majority of RNs expected the

greater part of their retirement income would be from Social Security benefits. This

finding is of concern as Social Security income is directly dependent on lifelong income

and number of years worked. Nurses often participate sporadically in the workforce, an

action directly impacting the return on Social Security benefits and vesting status. The

study also found retirement savings to be low, as the mean savings account balance

equaled $20,000. The sample of RNs estimated they would need $32,000 annually for

retirement, but few actually were on course to meet this required amount. Based on

Alvarenga (2005) criteria, this study was a grade three. Significant study limitations and

biases included an unclear definition of research methods and procedures and no

measures of consistency were described. Further, the authors neglected to outline study

limitations.

    Kowalski, Dalley and Weigand (2006) conducted a cross-sectional study of 129

nurse educators from 91 U.S. schools of nursing using a researcher created survey. The

respondents mean anticipated age of retirement was 64.4 years of age with most having

no intention to continue working beyond 65 years of age. A significant factor influencing

the timing of retirement was financial status. Of the 129 participants, 33 strongly agreed

they were financially secure, 17 strongly agreed they had sufficient funds from retirement

plans, and 26 strongly disagreed they had other sources for retirement. Eleven

participants wrote additional comments reflecting financial concerns including having

enough money to retire, current debts, fears of the stock market's volatility, and current

retirement fund status. Based on Alvarenga (2005) criteria, this study was a grade three.

The sample size was adequate (Burns and Grove, 2009). There were no critical omissions

when evaluated with Alvarenga's (2005) quantitative study critique criteria.

Klug (2009) used an online survey and semi-structured interview questions to

identify barriers mature RNs face. The questions also identified possible retention

strategies in retaining mature RNs. The final sample size was not clearly discussed.

Respondents' top priorities included increased retirement contributions, including the

403(b) plan, improved financial education programs tailored to the mature RN, flexible

scheduling, health care insurance bridges to Medicare, and role modification. One

emerging theme from the research suggested mature RNs are worried about retirement,

and do not have the means to retire early. Based on Alvarenga (2005) criteria, this study

was a grade two. The researcher did not clearly outline the rules for arriving at

judgments, and categories were not inclusive of existing data. Further, the qualitative

sample size was not discussed in terms of saturation, which leaves the reader to question

whether the sample size was adequate (Burns & Grove, 2009).

Valencia and Raingruber (2010) interviewed 16 intensive care RNs to investigate

what motivated experienced RNs to continue working or consider retirement. The RNs

were divided into two groups: 31-49 years of age and 50-65 years of age. Both cohorts

voiced concerns about changing benefits and financial security and noted the

aforementioned motivated them to continue working. Further, both cohorts felt

apprehensive they would not accumulate enough money and health benefits for

retirement. Both younger and mature nurses were paying debts, planning for retirement, and trying to save money for retirement. Moreover, all participants expressed profound concerns about economic security. This was the only study that identified uncertain economic times as an influencing factor on RN retirement decisions. Based on Alvarenga (2005) criteria, this study was a grade three. The researchers clearly outlined the rules for arriving at judgments, citing use of the Heideggerian phenomenological approach (Valencia & Raingruber, 2010). The sample size was adequate as Valencia and Raingruber (2010) described that the interview process "yielded rich data" (p. 270). Further, Valencia and Raingruber (2010) noted the interview process was discontinued "at the point of saturation" (p. 271).

The aforementioned studies demonstrate the lack of RN retirement preparation. Common themes in RN retirement studies include a lack of retirement savings (Moore & Biordi, 1995; Valencia & Raingruber, 2010) and decreased retirement fund status (Klug, 2009; Kowalski, et al., 2006). Only one study discussed RN retirement in conjunction with recent economic events (Valencia & Raingruber, 2010). These studies validate RNs are consistent with national trends in lack of retirement preparation.

Preretirement planning. In a preretirement planning study of 145 RNs, Wiggins and Henderson's (1996) quantitative study found RNs to have limited methods of retirement planning. Findings indicated RNs between the ages of 40 and 50 felt it was too early to begin retirement planning. Participants who were closer to retirement were found to have more positive attitudes about retirement and were more actively engaged in financial planning. Additionally, knowledge of economic issues differentiated those who had planned for retirement from those who had not. Interestingly, the majority of

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participants were not seeking help in retirement planning. Based on Alvarenga (2005) criteria, this study was a grade three. The research methods and procedures were not clearly defined, threats to validity were not addressed, and study limitations were not discussed.

Kelly and Swisher (1998) used focus groups and open-ended questions in their qualitative study of RN retirement preparation. The sample of 19 female RNs representing two hospitals and four nursing schools indicated they felt inadequate in financial preparation. Family responsibilities, finances, access to health insurance, spouse's employment status, job satisfaction, and health status were found to impact retirement. Additionally, participants expressed awareness that retirement planning should have started earlier. Another concern was access to health insurance following retirement. Further, early retirement as part of incentive packages resulted in less time to prepare for retirement, resulting in anxiety. Some participants expressed distressing emotional and physical reactions when they lost control over the decision to retire. Based on Alvarenga (2005) criteria, this study was a grade three. Kelly and Swisher (1998) did not discuss the concept of saturation, which raises concern regarding the adequacy of sample size (Burns & Grove, 2009).

Rosenfeld (2007) conducted a qualitative exploratory study of 28 RNs who provided eldercare to a family member. One purpose of the semi-structured interviews was to investigate whether the eldercare experience impacted the RNs' plans for retirement. The average participant age was 50 years. Participants verbalized needs for financial and retirement planning, along with legal aid from experienced eldercare attorneys. Further, respondents recommended assistance programs be located in or close

to the workplace for ease of accessibility. Findings indicated monetary incentives were not necessarily attractive to mature RNs. This research suggested many facilities already provide retirement services, but the locations may be inconvenient or unknown to RNs. Based on Alvarenga (2005) criteria, this study was a grade two. The research did not clearly outline rules for arriving at ratings, the study steps and elements lacked in clarity, and conclusions were not based on clearly stated evidence. Additionally, Rosenfeld (2007) does not include specific quotes to support the identified themes, which is a significant limitation of the qualitative study (Burns & Grove, 2009).

Taken together, these studies, particularly the analysis provided by Wiggins and Henderson (1996), emphasize the lack of preretirement planning. Studies of RN retirement preparation (Wiggins & Henderson, 1996; Kelly & Swisher, 1998; Rosenfeld, 2007) suggest there is a general lack of preretirement planning. Additionally, these studies highlight the impact of caregiving on preretirement planning needs.

Retention of mature RNs. A mailed survey completed by 282 certified nurse midwives (CNM) suggested recruitment and retention measures, such as retirement benefits, are needed in nursing (Jevitt & Beckstead, 2004). Current workforce challenges included variations in retirement trends, RN education, and employment opportunities. Four respondents indicated they would never retire. The study underscored the familial responsibilities women undertake, particularly with regard to child and eldercare. These responsibilities were discussed in the context of impact on a predominantly female RN professional workforce. Based on Alvarenga (2005) criteria, this study was a grade two. The researchers expressed opinion not backed by evidence, and the review of the

literature was limited. Further, the authors did not address validity, reliability, or study limitations.

Cyr (2005) studied factors influencing retirement for 1,553 hospital based RNs. A researcher-created questionnaire measured RN retirement decisions and surveyed five proposed changes to the work environment: reduction of hours, seasonal employment, ergonomic devices, miscellaneous incentives, and Less Work for Less Pay (a postretirement work program option). Of the factors affecting early retirement, financial independence was cited most frequently with financial incentives cited as a positive factor in choosing to work after retirement age. Work intensity was cited as a problem in retention. A spouse's early retirement was rated less often by respondents as a reason for early retirement, a finding inconsistent with previous research findings. Seventeen percent of respondents planned on working past age 65. Based on Alvarenga (2005) criteria, this study was a grade two. The review of the literature was lacking, measures to ensure consistency were not described, threats to validity were not addressed, and study limitations were not outlined by the author.

In a facility where RNs received public employee benefits including pensions, Mion et al. (2006) investigated nurses' perceptions and thoughts on the work environment and retirement. Themes identified included: the worth of older nurses, generational issues, roles for the aging nurse, and strategies to support the aging nurse. Initiatives arising from the research included new roles for RNs, such as discharge experts, intake experts, elder life program (where mature RNs train volunteers on caring for older hospitalized adults), and education experts. Other retention strategies included improved communication between RNs and administration, expanded roles for mature

RNs, ergonomic strategies, benefits, and education. Based on Alvarenga (2005) criteria, this study was a grade two. Mion et al. (2006) did not disclose the total number of participants. Further, the researchers did not compare study findings with the existing body of knowledge, and the hypotheses were not clearly identified. Mion et al., (2006) did not discuss the concept of saturation, raising concern regarding the adequacy of sample size (Burns & Grove, 2009). Finally, not all steps and elements of the study were defined, and there was no discussion of how ratings or judgments were discovered from the semi-structured interviews.

Nooney, Unruh and Yore (2010) used nationally representative data from the 2004 National Sample Survey of 29,472 Registered Nurses to investigate attrition of the RN workforce. Nooney et al., (2010) found that labor force separation begins to increase between 30-40 years of age with the highest attrition rates occurring after the age of 60. These data suggest Social Security benefit eligibility is a major factor in the retirement decision. The findings also supported previous research indicating family responsibilities are one factor predisposing RNs to labor force withdrawal. The researchers recommended a prospective, longitudinal study to more accurately investigate attrition rates at each life stage. The researchers emphasized that European countries collect more detailed information on individual employment outcomes as part of standard workforce statistics. Based on Alvarenga (2005) criteria, this study was a grade two. The research methods were not clearly described, measures to ensure consistency were not described, threats to validity were not addressed, the validity and reliability of the instrument were not fully described, and study limitations were not addressed by the author.

Friedrich, Prasun, Henderson, and Taft (2011) attempted to ascertain contributing factors of continued RN practice after the retirement age of 62. The researchers utilized semi-structured interviews in two phases with a total of 25 RNs (13 RNs age 62 and older in phase one, and 12 RNs age 55-62 years in phase two). Four major themes emerged from the study, including pre-existing ideas and attitudes (e.g. a love of nursing, experience, and appreciation for learning), retention factors (e.g. flexible scheduling), needs (e.g. finances, cognitive stimulation, and camaraderie), and unique contributions (e.g. sharing expertise). With specific regard to finances, participants noted money may not be the major reason for working but concluded it was necessary to maintain current lifestyle and health insurance and to keep up with the increased cost of living. Friedrich et al., (2011) suggested the following retention strategies for mature RNs: flexible work options, mentoring, workplace ergonomics, education, increased 401(k) or 403(b) contributions, pension modification, retirement planning, and phased retirement. Based on Alvarenga (2005) criteria, this study was a grade three. Friedrich et al. (2011) did note the use of the Appreciative Inquiry and the methodological approach of grounded theory. However, not all elements of the study were clearly described, and the researchers did not discuss the concept of saturation, which raises concern regarding the adequacy of sample size (Burns & Grove, 2009).

Several strategies for RN retention are mentioned in these studies, including retirement benefits (Friedrich et al., 2011; Mion et al., 2006), suggesting administrators should consider current literature when compiling or revising employee benefits. A recurring theme in the literature is the impact of family responsibility on women in the workforce (Cyr, 2005; Jevitt & Beckstead, 2004; Nooney et al., 2010) and the subsequent

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financial consequences of interrupted workforce participation. These findings support the USDL (2007) facts regarding women and retirement.

Retention policies. Letvak (2002) indicated a sizeable percentage of employed RNs to be age 55 or over, with the majority of administrators wishing to retain mature RNs. Of the 290 administrators who responded to the survey, only 6% reported their facility had special policies addressing the mature RN needs, and 87% reported they had no forthcoming plans to implement retention programs, despite being very concerned about the nursing shortage. Of facilities with mature RN retention plans, such programs included benefit packages geared toward mature RNs, reduced or part time hours, flexible shifts, and retirement benefits. Based on Alvarenga (2005) criteria, this study was a grade two. In this quantitative study, the objectives were not clearly stated, measures to ensure internal consistency were not described, and the authors did not discuss the validity and reliability of the instrument.

Norman et al. (2005) analyzed national survey data from 1,783 RNs. One-third of RNs aged 50 and older planned to leave their current position in the next three years. To retain these nurses, economic incentives including enriching retirement benefits, tax based incentives for employers of older RNs, and new salary structures were suggested. Based on Alvarenga (2005) criteria, this study was a grade two. The research methods were not clearly defined, measures to ensure consistency were not described, the instrument did not adequately measure study variables, the validity and reliability of the instrument were not described, and the study limitations were not outlined by the author.

Using a descriptive survey design, McHaney and Varner (2006) discovered 11.78% of employed RNs were over age 55 in a sample of 108 facilities. However, only

3.7% of surveyed facilities had retention policies, and 77.8% of facilities had no immediate plans to implement retention programs. As in the Letvak (2002) study, the majority of administrators were very concerned about the nursing shortage. Based on Alvarenga (2005) criteria, this study was a grade two. The research objectives were not clearly stated, nor linked to the research purpose. Research methods were not clearly defined. Measures to ensure consistency were not described. The validity and reliability of the instrument were not described.

Spetz and Adams (2006) interviewed 44 RNs in four focus groups. The focus groups identified eight types of paid benefits relevant to RN retention. The researchers recommended administrators review benefit packages to ensure RNs were receiving wanted and needed benefits as a means of RN retention, pointing out there is no "one size fits all" benefit package. Based on Alvarenga (2005) criteria, this study was a grade one. The steps of the qualitative study were not described, the researchers does not clearly outline rules employed for arriving at ratings, interpretative statements did not correspond with findings, the hypotheses were not clearly identified, and the relationship between the concepts was not clearly expressed nor validated by data. Spetz and Adams (2006) did not discuss the concept of saturation, which raises concern regarding the adequacy of sample size (Burns & Grove, 2009).

Palumbo, McIntosh, Rambur, and Naud (2009) examined RN perceptions of workplace culture, intent to remain in the employed position, and human resource (HR) practices/policies in a sample of 583 RNs. Fifty eight percent of participants indicated they plan to work as a RN after reaching retirement age, with 4% of respondents planning on working full time after reaching retirement age. Based on Alvarenga (2005) criteria,

this study was a grade three. The objectives were not clearly stated, and the validity and reliability of the instrument were not fully described.

Researchers have clearly demonstrated the majority of investigated facilities do not offer mature RN retention programs despite significant concerns regarding the RN shortage (Letvak, 2002; McHaney & Varner, 2006; & Palumbo et al., 2009). It is unclear why little is being done to retain mature RNs despite significant workforce concerns about the large cohort approaching retirement age (Letvak, 2002). Additionally, there does not appear to be a standard benefit package that will meet the needs of both younger and mature RNs (Spetz & Adams, 2006).

Taken together, the findings of these previous studies suggest the majority of RNs are financially unprepared for retirement. Further, it does not appear there is a "one size fits all" benefit package for the RN workforce, despite unique RN workforce needs due to intermittent workforce participation. Notwithstanding the sizeable cohort of RNs approaching retirement age, studies indicate facilities do not offer mature RN retention programs. The literature demonstrates a general lack of knowledge regarding the psychological predictors of RN retirement planning. The proposed study seeks to facilitate a more complete understanding of RN retirement while addressing this gap in the current knowledge base.

Study limitations and biases were presented with each study. In quantitative studies, the greatest omissions included a lack of clearly defined research methods and procedures, a lack of measures of consistency, a limited literature review, omission of study limitations, and little discussion of the study measures' validity and reliability. A measure investigates particular phenomena based on theory and therefore, a lack of

consistency, validity and reliability threatens the soundness of research findings (DeVellis, 2012). Studies should present a thorough literature review because it is critical in generating an understanding about what is currently known about the phenomenon, and where the gaps in knowledge lie (Burns & Grove, 2009). Omission of identifiable study limitations is a critical research error as limitations decrease the study's generalizability (Burns & Grove, 2009). A key research objective is to not only discover new knowledge but acknowledge what remains unknown (Burns & Grove, 2009).

In the qualitative studies presented, the greatest omissions included the researcher not clearly outlining rules for arriving at judgment ratings, a lack of clarity in study steps and elements, and conclusions not based on clearly stated evidence. Because qualitative research demands data immersion, data reduction and data analysis, researchers should present a narrative description of how the process evolved (Burns & Grove, 2009). This process allows the development of a logical chain of evidence for the qualitative research process (Burns & Grove, 2009). Some qualitative studies failed to include specific quotes to support the identified themes, which is a significant limitation of the qualitative study (Burns & Grove, 2009).

Non-peer reviewed research. Two recent national, non-peer-reviewed studies specific to RN retirement should be mentioned. The Fidelity Investments Nurses Study (Fidelity Investments, 2011), was an online study from August 8 to August 12, 2011. A total of 408 practicing U.S. RNs comprised the sample. Of the sample, 11% had a workplace retirement savings plan available to them but were not currently participating in the plan. One-half of surveyed RNs noted their retirement plans had changed in one or more ways because of the recent recession and market volatility. Subsequently, RNs were

planning on working later in retirement than previously planned and retiring later than previously planned and expected to cut back on their expected retirement lifestyle. Of the study sample, 71% recognized they are not saving enough for retirement. Over 50% RNs were overwhelmed by retirement planning and expressed a desire for guidance. This study confirmed retirement is a concern for many RNs.

The Nurses' Investor Education Project, sponsored by WISER (2012), included a national survey of 900 RNs investigating retirement preparation. Following the 2008 survey, a financial training program specifically for RNs was created. Ten nurse trainers conducted 29 state workshops in Maine, Missouri, Nebraska, South Dakota, and Virginia. Seven hundred RNs attended the workshops. One year follow up evaluation surveys indicated 90% of the follow-up respondents had taken one active step to address a financial issue, 50% had started looking more carefully at expenditures, 33.3% had increased their retirement account contributions, and 33.3% had met with a financial planner. The Nurses' Investor Education Project (WISER, 2012) emphasized the measurable benefit of financial and retirement education.

Taken together, these two studies further illustrate contemporary concerns of RN retirement preparation. The available literature focuses on RN retirement outlook, RN economic preparation for retirement, or retirement intent. However, once again, there is no information on the psychological factors in RN retirement preparation. The SAVER study sought to address this gap in the literature.

Chapter Summary

In summary, RN retirement has been studied to some extent in the nursing literature. This literature review highlighted four distinct coding taxonomies for RN

retirement studies including retirement preparation, preretirement planning, retention of mature RNs, and retention policies. Systematic analysis of the literature revealed RN retirement studies within nursing literature were missing discussion of psychological factors in retirement preparation. The proposed research study aimed to increase knowledge of psychological factors in RN retirement preparation.

CHAPTER 3: CONCEPTUAL FRAMEWORK

The theoretical framework selected for this study was Hershey's Conceptual Model of the Factors that Influence Investor Behavior. Hershey (2004) specifically adapted the life planning model of Freidman and Scholnick (1997) for retirement planning. Friedman and Scholnick (1997) suggested life planning decisions and behaviors are founded in four contributing factors: psychological influences, cultural influences, environmental influences, and task considerations. Hershey's Conceptual Model of the Factors that Influence Investor Behavior (2004) modified the life planning for retirement planning. Hershey's (2004) four contributing factors to investor behavior include psychological influences (including personality, cognitive, and motivational factors), cultural ethos (e.g. family, societal, and peer norms), financial resources and economic forces (e.g. income base, financial and economic support, and general economic conditions), and task components (e.g. task characteristics, the availability of investment options, and the level of task complexity and experience). The graphic depiction of this model in Figure 3 demonstrates the collective "pushes and pulls that determine whether or not one will plan, save and invest for retirement" (Hershey, 2004, p. 33).

Figure 3: Hershey's Conceptual Model of the Factors that Influence Investor Behavior

Psychological Influences

Personality Factors
(e.g., future time perspective; financial risk tolerance; conscientiousness; and emotional stability)

Cognitive Factors
(e.g., knowledge of finance and investing; perceptions of task relevance, feasibility, and complexity)

Motivational Factors
(e.g., retirement goal clarity; financial goal strength; personal values; and self-beliefs)

Cultural Ethos
(family, societal, and peer norms)

Task Components
(task characteristics; level of task complexity and experience; availability of investment options)

Investor Behavior
(level of involvement and quality of retirement planning, saving, and investing efforts)

Financial Resources & Economic Forces
(income base; financial and economic support; general economic conditions)

From Hershey (2004). Reprinted with permission from the author.

Psychological Influences

Until the mid-1990's, psychological influences on planning and saving were often overlooked in retirement preparation (Jacobs-Lawson & Hershey, 2005). Psychological influences that may impact investor behavior include personality, cognitive, and motivational factors (Hershey, 2004). To expand on these influences, examples include a

one's financial risk tolerance, financial conscientiousness, emotional stability, knowledge

of finance and investing, goals, values, and self-beliefs (Hershey, 2004). One's focus on

the past, present, or future also acts as an influence on investing behavior (Hershey,

2004). For example, a future-oriented person may view investing differently than a

present-oriented person. Further, one with a risk-seeking personality is more likely to

invest aggressively, while one more risk-averse is more likely to invest conservatively

(Hershey, 2004). Cognitive or intellectual skills govern the suitability of decisions, and

color the individual life experience (Hershey, 2004). Two major cognitive factors, a

knowledge of finance and investing, and the perceived relevance of financial and

retirement planning determine the level of involvement in retirement planning (Hershey,

2004). Motivational factors, such as goals and ambitions, also shape financial planning

for retirement (Hershey, 2004). Retirement goal clarity is a significant psychological

process that predicts retirement planning activity level, which consequently, predicts

saving tendency (Hershey, 2004).

Cultural Ethos

The sociocultural influences include the societal customs originating from

"family, societal, and peer group norms" (Hershey, 2004, p. 33). Cultural dynamics not

only shape an individual's psychology but may also impact the availability of financial

resources (Hershey, 2004). By definition, these influences may vary by region, society,

and custom.

Financial Resources and Economic Forces

Financial resources and economic forces distinguish Hershey's (2004) model

from Freidman and Scholnick's (1997) life planning model. Specific entities of this

influence include one's base income, savings, personal assets, and discretionary income (Hershey, 2004). Interestingly, supportive resources, such as financial advisors, friends, or a significant other, are included in this factor (Hershey, 2004). Additionally, educational materials (e.g. books, newsletters), technology (e.g. internet, and long-term economic influences (e.g. changes in tax legislation, general economic climate) also play a role in investor behavior (Hershey, 2004).

Task Components

The actual availability of retirement opportunities, such as available investment options and retirement plan options, are a final major force in investor preparation and decision making processes (Hershey, 2004). Specific task components, such as tax planning or financial transactions, may be perceived as simple or complex duties, relative to the individual investor (Hershey, 2004). Prior task experience also is included within task components.

A major proposition of Hershey's model is the four factors interact with each other in a dynamic manner (Hershey, 2004). Hershey's (2004) model was chosen as the framework of the SAVER study because the model recognized the varying psychological factors in retirement planning, as the SAVER study sought to do. Additionally, Hershey's (2004) model served as the conceptual framework for Hershey et al.'s (2007) Retirement Planning Preparation Questionnaire, so utilizing the two for the SAVER study appeared to be a logical approach, as the two complement one another. Because the subject of retirement planning is complex, relevant influences should be included and considered in retirement research. As Hershey's (2004) model comprises the varied and detailed factors influencing investor behavior, it was an appropriate foundation for this study.

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Chapter Summary

      In conclusion, this chapter introduced Hershey's Conceptual Model of the Factors that Influence Investor Behavior, the conceptual framework for the SAVER study. This chapter presented the four contributing factors to investor behavior including psychological influences, cultural ethos, financial resources and economic forces, and task components (Hershey, 2004).

CHAPTER 4: METHODOLOGY

The methods utilized in this quantitative study are discussed in this chapter. The SAVER study's design, variables, sample, procedure, instrumentation, validity, reliability, statistical analysis, and ethical considerations are presented.

Research Design

The SAVER study utilized a descriptive, cross sectional design because the study examined groups of RNs in various stages of development with the intent to describe changes in the phenomenon of retirement preparation. Selecting participants at various points in the retirement preparation process provided important information regarding the totality of the process. This design was appropriate because it is a non-experimental exploration of the overall phenomenon being examined (Burns & Grove, 2009). Threats to validity were addressed by linking the conceptual and operational variable definitions, ensuring appropriate sample selection and size, and the use of a valid and reliable instrument (Burns & Grove, 2009). There was no risk of attrition because the SAVER study was a one-step survey. It is important to note variables were assessed at one point in time because the SAVER study was not longitudinal. Causality relationships of the variables cannot be determined (Burns & Grove, 2009).

Variables

The independent variables for the SAVER study included age, education level, employment status, ethnicity, gender, health, income level, job satisfaction, marital status, nurse specialty, race, RN licensure year, vested status, years of full time employment, years of part time or per diem employment, and years spent out of the nursing workforce. The researcher investigated the effect of these predictors on specific

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entities of retirement planning. The dependent variables include future time perspective, retirement goal clarity, self-rated knowledge of financial planning for retirement, and retirement planning activity because the research is investigating the response or outcome predicted or measured in the research study (Burns & Grove, 2009).

Sample

Type of sampling. This study utilized convenience sampling as there are many strategies for selecting a convenience sample (Burns & Grove, 2009). Convenience sampling provided greater accessibility for potential participants, was helpful when faced with study time constraints, provided for cost-effectiveness, and was less time consuming than other sampling techniques (Burns & Grove, 2009). The convenience sample consisted of RN participants with active U.S. state licenses who were actively employed in a capacity requiring RN licensure. The target population included all RNs in the United States who had successfully passed the NCLEX exam and were currently employed in a capacity requiring RN licensure. To increase accessibility and ensure the research was fiscally feasible, the study initially focused on the accessible population of potential nursing conference participants from Arizona, California, Colorado, Idaho, Nevada, and Wyoming. However, to achieve the number of participants necessary for statistical power, the study extended invitations to RNs on the email list servs of two national nursing organizations and three schools of nursing.

Sample size. According to the National Council of State Boards of Nursing [NCSBN] (2013), the combined total of active U.S. RN licenses is 3,641,023. Following power analysis, the necessary sample size was determined to be 384 (G*Power Analysis, n.d.; Raosoft, 2004). The alpha error probability was 0.05, with power of 0.95, and effect

size of 0.15. The actual power was calculated at 0.95 with a critical F of 1.85 and a noncentrality parameter λ of 26.7. Study participant inclusion and exclusion criteria are noted below.

Inclusion criteria:

a. The participant must have an active U.S. RN license.

b. The participant must be actively employed in a capacity requiring an RN license for employment.

c. The participant must have the ability to read and understand English.

d. The participant must have the technological skills to complete online survey questions.

e. The participant must be at least 21 years of age and willing to give informed consent.

Exclusion criteria:

a. Participants who held active RN licenses but were not currently working in employment requiring an active RN license.

b. Participants who did not have the ability to read and understand English were excluded.

c. Participants were excluded if they less than 21 years of age.

d. Participants were excluded if they were unwilling to give informed consent.

Procedure

Following University of Nevada, Las Vegas (UNLV) Institutional Review Board (IRB) approval on May 9, 2013, the SAVER study began. See Appendix A for UNLV IRB approval documentation. Manwaring Web Solutions created the SAVER study website, www.saverstudy.com. During the months of July and August 2013, the SAVER study website was tested and perfected. All questions were coded as to how they would be entered into statistical software for analysis. The first screen of the SAVER study website provided the SAVER study purpose, a statement regarding the benefits of research to the nursing profession, and UNLV IRB approval notice. The participants were provided informed consent electronically, via the survey website. Study procedure information was included for review. Participants were notified they would contribute to nursing knowledge, which was the most significant benefit of study participation. Participants were reminded participation was voluntary. Participants were notified no identifying data would be used in the study or subsequent publications to protect participant privacy and anonymity. The participants were notified the survey would take no more than 20-30 minutes to complete, there would be no compensation, and there were no major risks associated with taking the survey other than perhaps some discomfort in answering questions.

The researcher obtained permission to set up a booth at the following venues listed in order of conference date: the Arizona Nurses Association Conference, the Wyoming Nurses Association Conference, the Idaho Nurses Association Conference, the Colorado Nurses Association Conference, the Sigma Theta Tau International Nursing Odyssey California Conference, and the Nevada Organization of Nurse Leaders

Conference. Although many conferences reduced the price of the booth and included

internet connection in the price of the student vendor registration fees, the researcher did

pay conference vendor fees.

Table 1

SAVER Study Vendor Booth: Summary of Nursing Conferences

Conference/Location	Dates Attended	Cost	NOA
Arizona Nurses Association/ Phoenix, AZ	09/19/13- 09/20/13	$199.00	391
Wyoming Nurses Association/Jackson Hole, WY	09/26/13	$200.00	75
Idaho Nurses Association/ Boise, ID	09/27/13	$375.00	75
Colorado Nurses Association/ Denver, CO	10/26/13	$ 45.00	84
Sigma Theta Tau International: Nursing Odyssey 2013 Conference/ San Diego, CA	11/1/13	$200.00	200
Nevada Organization of Nurse Leaders/Reno, NV	11/7/13	$200.00	400

Note. NOA= Number of Conference Attendees

During the conferences, the researcher cordially approached conference attendees

as they passed by the vendor booth and invited them to participate in the research

investigation. The conference booths were equipped with three tablets (i.e. two Ipads and

one Microsoft Surface) with internet access, allowing conference attendees to take the

online survey immediately onsite. Additionally, the researcher provided business cards

with a quick response (QR) code participants could elect to scan to their smart phone,

permitting them to complete the research questionnaire at a later date or pass along to a

colleague (Figure 4). Participants received instruction regarding how to complete the

online SAVER study questionnaire through written means via the secure study website,

and informed consent was obtained electronically prior to online study questionnaire

commencement. The average time for survey completion, based on participant feedback

to the researcher, was 12 minutes. The online study questionnaire was distributed through

the secure online survey website designed and maintained by Manwaring Web Solutions.

Participant responses were kept anonymous, and participant identifying information was

not collected. All responses were stored by Manwaring Web Solutions' server with

password protection. The setting for these participants was the vendor area of the

respective conference they attended, or their own natural environment, if they took the

SAVER study outside of the conference setting.

To better publicize this study, the acronym SAVER was used for marketing

purposes (Table 2). The researcher offered nominal incentives for research participation,

including candy, pens, and piggy banks, which were branded with the study logo (Figure

5). Business cards with study information, and the QR code were also distributed (Figure

6).

Figure 4: SAVER Study QR Code

Table 2
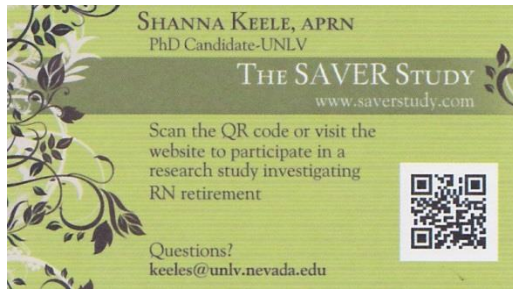
SAVER Acronym Meaning

Acronym	Relationship to Study
S	Studying
A	and Analyzing
V	Variable
E	Elements
R	of RN Retirement Preparation

Figure 5: SAVER Study Branding Logo

Figure 6: SAVER Study Business Card with QR Code

Following the first three conferences in Arizona, Wyoming, and Idaho, the total

SAVER study response was 100. The student researcher was concerned about meeting

the required sample size with the three remaining conferences. Two national

organizations, the American Assembly for Men in Nursing (AAMN) and the Academy of

Medical-Surgical Nurses (AMSN), along with three schools of nursing (UNLV, the

University of Nevada, Reno [UNR], and California State University, Bakersfield [CSU-

Bakersfield]), agreed to forward an electronic invitation for the SAVER study to RNs via

organizational list servs. An invitational email with abbreviated study information and the

SAVER study link were electronically mailed to RNs by the organizations via the list

servs. If the RN desired to participate, he or she clicked on the SAVER study link

(www.saverstudy.com) within the email invitation and were directed to the first page of

the SAVER study. After reading the informed consent, he or she decided whether to

proceed with study participation or elected not to participate. The setting for these

participants was a naturalistic setting.

Study participants were provided IRB protection. Study participants read information online detailing the purpose of the SAVER study and their rights as a participant. Study participants provided informed consent prior to study commencement by clicking the "Begin" icon on the SAVER study home page. The participants were notified in the informed consent that they could stop the study at any time without penalty and could choose not to answer questions they were uncomfortable with. The SAVER study website opened September 19, 2013, and closed November 25, 2103. On the closure date, the SAVER study homepage was changed to indicate the study was closed. The survey questions were then no longer available to anyone accessing the SAVER website. All study data were converted into a Microsoft Excel format for use in the Statistical Package of the Social Sciences (SPSS) software, version 22.0, manufactured by International Business Machines (IBM). Data were then uploaded into SPSS version 22.0 for data screening and analysis.

Instrumentation

Utilizing online survey methods, RN demographics and other variables were measured through a student researcher designed questionnaire (Appendix B). Registered nurse retirement preparation was assessed using Hershey et al.'s (2007) Retirement Planning Preparation Questionnaire, which specifically investigated FTP, RGC, SKFPR, and RPAL (Appendix C). Permission to use this measure was granted by the intellectual property owner, Douglas A. Hershey Ph.D. on February 8, 2013 via electronic mail (Appendix D).

Reliability. The personality construct FTP was a five-item scale designed to assess the extent to which individuals enjoy thinking about and planning for the future

(Hershey et al., 2007; Koposko, 2012; Gerrans & Hershey, 2013). Participants rated each of the five statements using a seven point Likert response format (1 = never like me, 7 = always like me) (Hershey et al., 2007). In previous studies, coefficient alpha for the scale was 0.89 and the minimum item-total correlation was 0.63 (Koposko, 2012; Gerrans & Hershey, 2013). Coefficient alpha is an indicator of reliability measuring internal consistency and generally, values equal to or greater than 0.70 are considered acceptable (DeVellis, 2012). Item-total correlation evaluates the performance of the questions (DeVellis, 2012). Values for an item-total correlation between 0 and 0.19 may indicate the question is not discriminating well, values between 0.2 and 0.39 indicate good discrimination, and values 0.4 and above indicate very good discrimination (DeVellis, 2012). The Coefficient alpha and item-total correlation values for this scale are acceptable.

Retirement goal clarity was measured using a 5-item scale reflecting the process of thinking about, conversing or setting goals for the future (Hershey et al., 2007). Each of the 5 items used a 7-point Likert response format (1 = strongly disagree, 7 = strongly agree) (Hershey et al., 2007). In previous studies, Coefficient alpha for the scale was 0.87 and the minimum item-total correlation was 0.61 (Hershey et al., 2007), which are both acceptable values.

The SKFPR scale investigated participants' perceptions of general retirement knowledge (Hershey et al., 2007). The measure contained five questions scaled in a Likert fashion in a seven point format (1 = strongly disagree, 7 = strongly agree) (Hershey et al., 2007). In previous studies, the Coefficient alpha was 0.93 and the

minimum item-total correlation was 0.67 (Hershey et al., 2007), which both are acceptable values.

Retirement planning activity level was measured using a 10 item scale investigating information seeking and active planning activities occurring in the past 12 months (Hershey et al., 2007). The items used a 7 point Likert-type response format (1 = strongly disagree, 7 = strongly agree) (Hershey et al., 2007). In previous studies, the Coefficient alpha was 0.89 and the minimum item-total correlation was 0.53 (Hershey et al., 2007), which are both acceptable.

Each specific measure provided information about aspects of retirement planning. Because planning activities are intrinsically connected to psychological inclinations and psychological constructs predict behavioral tendencies (Hershey et al., 2007), it is appropriate these measures were used for this study. Further, psychological influences, such as personality (reflected in FTP), cognitive (i.e. knowledge of financial planning), and motivational factors (i.e. clear retirement goals), are key components in understanding investor behavior (Hershey et al., 2007).

Validity. The content validity of Hershey et al.'s (2007) Retirement Planning Preparation Questionnaire had been previously established through multiple research studies. The instrument items were developed by retirement research specialists. The student researcher developed questionnaire included demographic and retirement factors previously identified as relevant to retirement (Jacobs-Lawson & Hershey, 2005). Construct validity of the researcher-created questionnaire was supported through a structured literature review. Both measures reflected those concepts consistently reported relevant to retirement preparation research, and therefore, validity may be recognized.

Statistical Analysis

Statistical analysis followed data collection cessation and occurred during December, 2013. Windows SPSS Version 22.0 software was used for data analysis. Data coding was utilized to assign numerical values to nonnumeric categories of a variable (i.e., male = 0, female = 1) (Hinkle, Wiersma, & Jurs, 2003) during the website creation. For statistical analysis, the SAVER study also utilized dummy coding for those variables that were not dichotomous. Further discussion of the dummy coding procedure is presented in Chapter 5. Because some participants did not fully complete the online survey, data were preserved by electing to exclude cases pairwise versus listwise. Because it is unwise to discard relevant information, pairwise exclusion is recommended (Pallant, 2007). Statistical significance was set at 0.05; however, SPSS was also able to detect data with a significance of 0.01 or 0.001, which was noted. A statistical expert confirmed statistical analyses procedures after the researcher performed data analysis.

Data analysis included hierarchical regression analysis, means, and standard deviation. Regression analysis is a statistical method used to better understand the relationship between dependent and independent variables, and the purpose of multiple regression is to predict a single variable from one or more independent variables (Tabachnick & Fidell, 2007). Regression analysis is widely used for forecasting and prediction (Tabachnick & Fidell, 2007). Further, regression analysis can help a researcher understand which independent variable is related to the dependent variable and how the independent variable affects the dependent variable (Tabachnick & Fidell, 2007).

Hierarchal regression analysis is a variation of multiple regression allowing for a fixed order of variable entry in order to control for the effects of covariates or to test

the effects of certain predictors independent of the influence of others (Tabachnick & Fidell, 2007). Hierarchical regression adds terms to the regression model in stages. At each stage, an additional term is added to the model, and the change in R^2 is calculated and determined whether the change in R^2 is significantly different from zero. Because the literature provided a theoretical foundation for a variable's inclusion in a step, this was an appropriate statistical analysis method. Descriptive statistics, such as means (M) and standard deviations (SD), classify, summarize and describe data (Hinkle et al., 2003), and were also used in analysis. Prior to data analysis, the data were examined to ensure underlying assumptions for hierarchical regression were met. These procedures are discussed in detail in Chapter 5.   .

Ethical Considerations

Ethical considerations regarding the study and the use of human subjects were addressed through the UNLV IRB review process. Additionally, UNLV requires all researchers to complete the Collaborative Institutional Training Initiative (CITI) tutorial for the protection of human subjects, which is another protection for the participants. The informed consent invitational letter included the study purpose, participant inclusion criteria, study procedures, risks and benefits of study participation, costs and compensation, a voluntary participation disclaimer, a confidentiality statement, and acknowledgement of consent. Further, the student researcher's contact information and the contact information for the UNLV Office of Research Integrity were provided on the first screen of the online study. The student researcher did not deliver the survey directly to the electronic mail address of the sample population. Rather, the survey invitation was provided in person at the respective conference via the researcher's electronic tablets, via

a business card invitation, or was electronically mailed through a separate party. The internet protocol address where the survey was input from was not recorded, providing an additional safeguard for participants. Collected data included only limited identifying information, such as age and gender. Participants could elect to not answer any question they were uncomfortable with.

To further protect the participants, study data will remain securely stored. All records will be locked, and stored electronically on a server with strong password protection for three years after study completion. After the three year storage time terminates, the gathered information will be destroyed in a secure manner.

Chapter Summary

In conclusion, all research methods were selected to provide the greatest opportunity for an accurate and relevant investigation of predictors RN retirement preparation. This quantitative, cross-sectional study sought to describe those predictors of RN retirement preparation with respect FTP, RGC, SKFPR, and RPAL. This chapter addressed the SAVER study's design, variables, sample, procedure, instrumentation, statistical analysis, validity, reliability, and ethical considerations.

CHAPTER 5: RESULTS

The SAVER study examined whether age, education level, employment status, ethnicity, gender, health, income level, job satisfaction, marital status, nurse specialty, race, RN licensure year, vested status, years of full time employment, years of part time or per diem employment, or years spent out of the nursing workforce predicted FTP, RGC, SKFPR, and RPAL among employed U.S. RNs. This chapter presents descriptive statistics of the research study's survey sample demographic attributes and results for each of the study's four research questions.

Study Sample Size and Response Rate

Non-probability sampling or convenience sampling was used for the SAVER study, with a resulting 706 total participants. The large number of participants was desirable as the more participants a research study has, the less likely the study will have sampling error (Burns & Grove, 2009). The researcher personally extended the survey invitation to participants at state nursing conferences in Arizona, California, Colorado, Idaho, Nevada, and Wyoming. The total number of conference participants was 1,225. After the first three conferences (Arizona, Wyoming and Idaho), the response rate was 8%, with a total number of 100 completed surveys. It was then determined the likelihood of meeting the required sample size of 384 was marginal using only conference participants. Following abstract submission and review, two national organizations, AAMN and AMSN, agreed to email the invitation letter to their members. The AMSN sent one email invitation to 11,259 members. Of those members, 2,854 (25%) opened the email. The AAMN sent out four email invitations to 1,200 members. Of those members, 300 (25%) opened the email. An email open rate of 15-20% is considered "good"

(Benchmark, 2014). The AAMN also posted the survey link on its website for 3 weeks. The average daily website visits for this site is 110 visits per day. Additionally, UNLV, UNR, and CSU-Bakersfield emailed the invitation to a total of 456 RNs. The response rate for all methods of participant recruitment was 5%. A survey response rate of 60% has historically been used as the threshold of acceptability; however, Johnson and Wislar (2012) noted "there is no scientifically proven minimally acceptable response rate" (p.1805).

Reliability of Summated Scales

The SAVER study utilized an instrument proven valid and reliable in previous studies. To ensure reliability of the summated scales in this predictive analysis, internal consistency reliability of FTP, RGC, SKFPR, and RPAL levels were examined. Evaluation of internal consistency revealed very good reliability, with each sub-scale's coefficient alpha measuring greater than 0.80. Table 3 includes the internal consistency reliability information for the measures.

Future Time Perspective. This measure was intended to assess the degree to which an individual enjoys thinking about and planning for the future. Participants rated how well each of the five items described them using a 7 point Likert scale response format (1 = never like me; 7 = always like me). An example item from this scale includes, *"It is important to take a long-term perspective on life"*. Coefficient alpha was 0.91. In Koposko (2012), this scale was found to have a coefficient alpha of 0.89.

Retirement Goal Clarity. Participants considered their agreement to five items using a 7 point Likert scale response format (1 = strongly disagree; 7 = strongly agree). Items comprising the scale encompassed goals, plans, and other considerations for quality

of life during retirement. An example item from this scale includes, *"I set clear goals for gaining information about retirement."* Coefficient alpha was 0.89. In Hershey et al. (2007), this scale was found to have a coefficient alpha of 0.87.

Self-Rated Knowledge of Financial Planning for Retirement. To assess participants' general knowledge of financial planning for retirement, six items using a 7 point Likert scale response format (1 = strongly disagree; 7 = strongly agree) were used. An example item from this scale includes, *"I am knowledgeable about how Social Security works."* Coefficient alpha was 0.93. In Hershey et al. (2007), this scale was found to have a coefficient alpha of 0.93.

Retirement Planning Activity Level. To assess the frequency in which participants had sought retirement information or participated in retirement planning activities during the previous 12 months, a ten item 7 point Likert scale response format (1 = strongly disagree; 7 = strongly agree) was used. An example item from this scale includes, *"During the past 12 months, I have gathered or organized my financial records."* Coefficient alpha was 0.89. In Hershey et al. (2007), this scale was found to have a coefficient alpha of 0.89.

Table 3

Reliability Descriptive Statistics for the Retirement Planning Preparation Questionnaire

Factor	M	SD	Cronbach's Alpha	Skewness	Kurtosis	n
FTP	5.55	1.21	0.91	-0.91	0.52	693
RGC	5.07	1.36	0.89	-0.61	-0.26	690
SKFPR	4.35	1.53	0.93	-0.29	-0.83	684
RPAL	3.41	1.46	0.89	0.19	-0.83	667

Note. *FTP* = Future Time Perspective, *RGC* = Retirement Goal Clarity, *SKFPR* = Self-rated Knowledge of Financial Planning for Retirement, *RPAL* = Retirement Planning Activity Level, *M* =mean, *SD* =standard deviation, *n* =number of responses.

Study Demographic Characteristics

The following discusses the characteristics of the 706 SAVER study participants. Statistical computations were accomplished through the use of SPSS Version 22.0 software. The sample reported their gender as 88.4% (*n* = 621) female and 11.5% male (*n* = 81). The average age of the sample was 47.89 years (*SD* = 12.63) with an age range of 21-81 years. The majority of the sample, 82.2% (*n* = 580), reported their race as white/Caucasian. With regard to marital status, 67.1% (*n* = 474) indicated they are married. The average year of initial licensure was 1993, with a range of 1953-2013 (*SD* = 13.52). With regard to employment, 81.9% (n = 578) of the sample were employed full time, with the majority of participant household income earning between $50,000 to $74,999 (*n* = 170). With regard to vesting, 57.4% (*n* = 405) were completely vested in a retirement account with a current employer. The majority, 62.9% (*n* = 444), classified their employment as inpatient. Detailed information regarding the SAVER study's

sample is presented in Tables 4 through 7 with table arrangement according to the steps

entered into the hierarchical regression analyses.

Table 4

Demographic and Frequency Statistics of Block 1 Sample Characteristics

Individual Characteristic	*n*	%
Gender		
Female	621	88.4%
Male	81	11.5%
Not Reported	4	0.6%
Age		
21-30	86	12.2%
31-40	130	18.4%
41-50	139	19.7%
51-60	235	33.3%
61-70	111	15.7%
>71	5	0.7%
Not Reported	0	0%
Race		
Black/African-American	28	4%
American Indian/Alaska Native	4	0.6%
Asian	54	7.6%
Pacific Islander	4	0.6%
White/Caucasian	580	82.2%
Other	33	4.7%
Not Reported	3	0.4%
Ethnicity		
Hispanic or Latino	40	5.7%
Not Hispanic or Latino	661	93.6%
Not Reported	5	0.7%
Marital Status		
Never married	99	14%
Married	474	67.1%
Widowed	11	1.6%
Divorced	91	12.9%
Nonspousal partnership	28	4%
Not Reported	3	0.4%

n= 706

Table 5

Demographic and Frequency Statistics of Block 2 Sample Characteristics

Individual Characteristic	*n*	%
Education		
Associate degree	171	24.2%
Bachelor's degree	267	37.8%
Master's degree	208	29.5%
Doctoral degree	53	7.5%
Not Reported	7	1%
Year of Initial Licensure		
1953-1970	22	3%
1971-1980	141	20%
1981-1990	124	18%
1991-2000	158	22%
2001-2010	194	27.5%
2011-2013	67	9.5%
Not Reported	0	0%
Years of Full Time Work		
0-10	261	37%
11-20	173	24.5%
21-30	122	17%
31-40	113	16%
>41	24	3.4%
Not Reported	13	2%
Years of Part Time Work		
0-10	581	82%
11-40	75	10.6%
41-50	4	1%
Not Reported	46	6.5%
Non-nursing Workforce Years		
0-20	664	94%
21-40	17	2.4%
Not Reported	25	3.5%
		4%
Current Employment		0.4%
Full Time	578	81.9%
Part Time	65	9.2%
Per Diem	50	7.1%
Not Reported	13	1.8%

n = 706

Table 6

Demographic and Frequency Statistics of Block 3 Sample Characteristics

Individual Characteristic	*n*	%
<u>Income</u>		
Less than $30,000	24	3.4%
$30,000-$39,999	14	2%
$40,000-$49,9999	33	4.7%
$50,000-$74,9999	170	24%
$75,000-$99,999	167	23.7%
$100,000-$124,999	129	18.3%
$125,000-$149,999	60	8.5%
$150,000 or over	109	15.4%
Not Reported	0	0%
<u>Vested Status</u>		
Not vested	61	8.6%
Somewhat vested	85	12%
Completely vested	405	57.4%
Unknown vested status	65	9.2%
No retirement account with employer	61	8.6%
Other	24	3.4%
Not Reported	5	0.7%

n = 706

Table 7

Demographic and Frequency Statistics of Block 4 Sample Characteristics

Individual Characteristic	*n*	%
Health		
0 (Poor)	3	0.4%
1	0	0%
2	0	0%
3	3	0.4%
4	3	0.4%
5	17	2.4%
6	40	5.7%
7	111	15.7%
8	235	33.3%
9	199	28.2%
10 (Excellent)	93	13.2%
Not Reported	2	0.3%
Job Satisfaction		
0 (Highly dissatisfied)	6	0.8%
1	4	0.6%
2	9	1.3%
3	20	2.8%
4	22	3.1%
5	63	8.9%
6	50	7.1%
7	111	15.7%
8	189	26.8%
9	137	19.4%
10 (Highly satisfied)	88	12.5%
Not Reported	7	1%
Nursing Specialty		
Inpatient (hospital)	444	62.9%
Outpatient	60	8.5%
Public health	10	1.4%
School Nurse	7	1%
Education	119	16.9%
Research	4	0.6%
Other	59	8.4%
Not Reported	3	0.4%

n = 706

Margin of Error

The SAVER study's margin of error was calculated using an online calculator

provided by American Research Group, Inc. (2012). Based on the population of 635,822

and sample size of 706, the resulting margin of error was 3.69%. The most common

margin of error is less than 5%, and a margin of error greater than 10% is not advised

(SurveyMonkey, n.d). The SAVER study's margin of error is less than both of these

limits. This result indicates the SAVER study findings are highly generalizable to the

target population of employed RNs, particularly when compared to HRSA (2013)

demographic data.

Descriptive Instrument Results

Descriptive findings of the four subscales used in the SAVER study are presented

in Table 8.

Table 8

Descriptive Results of Study Instruments

Instrument	*LPS*	*HPS*	*M*	*SD*	*n*	*Not Reported*
FTP	1	7	5.55	1.21	693	13
RGC	1	7	5.07	1.36	690	16
SKFPR	1	7	4.35	1.53	684	22
RPAL	1	7	3.41	1.46	667	39

Note. *LPS* = Lowest Possible Score, *HPS* = Highest Possible Score, *M* = mean, *SD* =
standard deviation, *n* = number of responses, *FTP* = Future Time Perspective, *RGC* =
Retirement Goal Clarity, *SKFPR* = Self-rated Knowledge of Financial Planning for
Retirement, *RPAL* = Retirement Planning Activity Level.

Assumption Testing

      Data. According to Tabachnick and Fidell (2007), the formula for calculating sample size for hierarchical regression is $N > 50 + 8m$ (N = number of Participants and m = number of IVs). A sample size of 706 was deemed adequate.

      Data Screening. Data were screened for out-of-range values, plausible means and standard deviations, outliers, missing data, skewness, and kurtosis.

      Multicollinearity. All IVs met the values for the collinearity statistics including Tolerance and Variance Inflation Factor (VIF) with the exception of licensure year, which had a Tolerance of 0.091 and a VIF of 10.990. However, because no other factor had a high VIF, this variable was not altered for regression analysis. Additionally, a large sample size will typically decrease standard errors (Tabachnick & Fidell, 2007). As dropping the offending variable could lead to specification error, it was decided to leave the variable for analysis.

      Normality, Linearity and Homoscedasticity. A visual examination of residual and scatter plots indicated the assumptions of normality, linearity, and homoscedasticity were all satisfied.

      Outliers. Cook's distance and Mahalanobis distance scores indicated no multivariate outliers.

Research Question Results

      To assess the four research questions, a series of hierarchical multiple regression analyses were conducted to describe how much of the variance in the dependent variable can be explained by the independent variables (Pallant, 2007). For each regression, the

independent variables included age, education level, employment status, ethnicity, gender, health, income level, job satisfaction, marital status, nurse specialty, race, RN licensure year, vested status, years of full time employment, years of part time or per diem employment, and years spent out of the nursing workforce. To better assess the non-dichotomous variables, marital status, education level, race, employment status, annual household income, vested status and nurse specialty were dummy coded. The reference groups are listed in Table 9. The reference group was always the lower coded variable.

Table 9

Dummy Coding Reference Groups

Variables	Reference Group
Marital status	Married
Marital status 1 = Married	
Marital status 2 = Widowed	
Marital status 3 = Divorced	
Marital status 4 = Nonspousal partnership	
Education level	Associate degree
Education level 1 = Bachelor's degree	
Education level 2 = Master's degree	
Education level 3 = Doctoral degree	
Race	Caucasian
Race 1 = Black/African-American	
Race 2 = American Indian/Alaska Native	
Race 3 = Asian	
Race 4 = Pacific Islander	
Race 5 = Other	
Employment status	Full time employment
Employment status 1 = Part time employment	
Employment status 2 = PRN/Per diem employment	
Income	Less than $30,000 annually
Income 1 = $30,000 - $ 39,999	
Income 2 = $40,000 - $ 49,999	
Income 3 = $50,000 - $ 74,999	
Income 4 = $75,000 - $ 99,999	
Income 5 = $100,000 - $124,999	
Income 6 = $125,000 - $149,999	
Income 7 = $150,000 and over	
	Not vested
Vested status	
Vested status 1 = Somewhat vested	
Vested status 2 = Completely vested	
Vested status 3 = I do not know my vested status	
Vested status 4 = I do not have a retirement account with my current employer	
Vested status 5 = Other	
Nurse specialty	Inpatient
Nurse specialty 1 = Outpatient	
Nurse specialty 2 = Public health	
Nurse specialty 3 = School nurse	
Nurse specialty 4 = Education	
Nurse specialty 5 = Research	
Nurse specialty 6 = Other	

Hierarchical multiple regression was utilized to determine what each assessed independent variable added to the prediction of the dependent variables, after controlling for previous variables. Four blocks were utilized to answer each research question. The first block contained demographic variables including age, ethnicity, gender, marital status, and race. These variables were selected for this block because from a theoretical perspective, demographic profiles cannot be altered through training or intervention (Jacobs-Lawson, et al., 2004). Block two included level of education, RN licensure year, years of full time RN work, years of part time or per diem RN work, non-nursing years (i.e. years out of the RN workforce) and current employment status (i.e., full time, part time, etc.). This block centered on the factors of education combined with years in the nursing labor force because career retirement literature (Keele & Alpert, 2013; Moore & Biordi, 1995; Kelly & Swisher, 1998) suggests career discontinuity and non-linearity may influence retirement. Block three included income and current employment vested status because of their monetary commonality. Additionally, vested retirement benefits are typically based on the service and salary earned as an active employee. Income levels have also been shown to be a useful predictor of retirement planning behaviors (Jacobs-Lawson et al., 2004), but little data exists investigating income, vesting status, and retirement preparation. Therefore, this block was appropriate for original examination of these variables. The fourth and final block included health, job satisfaction and nurse specialty. The variables of health and job satisfaction were selected for consideration because each has received a reasonable amount of attention in retirement studies. Retirement studies, particularly those prior to 1970, noted health factors as antecedents for retirement decisions (Hanisch & Hulin, 1990). Further, retirement literature indicates

the decision of organizational withdrawal is also strongly associated with job satisfaction (Hanisch & Hulin, 1990; Quinn, 1977). Nurse specialty was added to this block because literature indicates workgroup satisfaction differs within nurse specialty (Boyle, Miller, Gajewski, Hart, & Dunton, 2006; Leatt & Schneck, 1980). However, retirement as it relates to nurse specialty has not been investigated (Keele & Alpert, 2013). Therefore, this block was appropriate for original examination of these variables.

Research Question One

The above mentioned independent variables served as the predictors, with FTP serving as the criterion. Hierarchical regression served as the statistical method. Demographics at step one did not result in a significant increase in the portion of variance accounted for in FTP ($F\Delta = 1.27$, $p > 0.05$); however, race was positively associated with FTP (Asian had the higher coded value compared to Caucasian [$\beta = 0.10$, $p < 0.05$].) Education, year of licensure, full time work, part time work, non-nursing years and current employment were entered at step two, explaining 0.9% of the variance in future time perspective and were nonsignificant ($F\Delta = 0.62$, $p > 0.05$). Income and vesting status were entered at step three, explaining 2.2% of the variance in future time perspective and were also nonsignificant ($F\Delta = 1.17$, $p > 0.05$). However, step four which included health, job satisfaction and nurse specialty was statistically significant, and contributed a 3.5% increase in the portion of variance accounted for in future time perspective ($R^2 \Delta = 0.035$, $F \Delta (8, 606) = 2.88$, $p < 0.01$.) Health ($\beta = 0.18$, $p < 0.001$) was positively associated with future time perspective. The total variance explained by the model as a whole was 9% [$F (41, 606) = 1.43$, $p < 0.01$]. The best predictor of FTP was Health ($\beta = 0.18$).

Table 10

Summary of Hierarchical Regression Analysis for Variables Predicting FTP

Variables	R	R²	R²Δ	B	SE	β	T	F	Df
Step 1	0.15	0.02						1.27	(12, 635)
Race [a]				0.47	0.19	0.10*	2.54		
Step 2	0.18	0.03	0.01					0.99	(21, 626)
Step 3	0.23	0.05	0.02					1.06	(33, 614)
Step 4	0.30	0.09	0.04					1.43*	(41, 606)
Health				0.16	0.38	0.18***	4.25		

Note. $n = 706$; Statistical significance: $*p < 0.05$, $**p < 0.01$, $***p < 0.001$; [a]Asian had the higher coded value compared to Caucasian.

Research Question Two

The previously mentioned independent variables served as the predictors, with RGC serving as the criterion. Hierarchical regression served as the statistical method. Demographics entered at step one explained 9% of the variance in RGC. Education, year of licensure, full time work, part time work, non-nursing years and current employment were entered at step two, explaining 2% of the variance in RGC. Income and vesting status were entered at step three, explaining 6% of the variance in RGC. Finally, health, job satisfaction and nurse specialty were entered at step four, explaining 4% of the variance in RGC. The total variance explained by the model as a whole was 20% [$F (41, 604) = 3.78, p < 0.001$]. Steps one [$R^2 \Delta = 0.09, F \Delta (12, 633) = 5.24, p < 0.001$], three [$R^2 \Delta = 0.06, F \Delta (12, 612) = 3.40, p < 0.001$], and four [$R^2 \Delta = 0.04, F \Delta (8, 604) = 3.82, p < .001$] demonstrated statistically significant findings, but step two was not statistically

significant (F Δ = 1.38, *p* > 0.05).Within step one, the variables that made a statistically significant contribution included Asian when compared to Caucasian (β = 0.09, *p* < 0.05) and Other compared to Caucasian (β = 0.09, *p* < 0.05). In step three, the income level of <$30,000 annually made a statistically significant contribution when compared to the income level of $30,000 – $39,999 annually (β = -0.19, *p* < 0 .001). Those who were not vested were found to have made a statistically significant contribution when compared to those that did not know their vesting status (β = -0.17, *p* < 0.05). In step four, health once again was found to have made a statistically significant contribution (β = 0.18, *p* < 0.001). Nurse specialty also indicated that when compared to nurses employed in education, the inpatient employed sector made a statistically significant contribution (β = -0.10, *p* < 0.05). The best predictor of RCG was income (β = -0.19), with income levels of $30,000 – $39,999 having the higher coded value compared to income of less than $30,000.

Table 11

Summary of Hierarchical Regression Analysis for Variables Predicting RGC

Variables	R	R²	R²Δ	B	SE	β	T	F	df
Step 1	0.30	0.09						5.24***	(12, 633)
Race[a]				0.45	0.20	0.09*	2.28		
Race[b]				0.55	0.26	0.09*	2.09		
Step 2	0.33	0.11	0.02					3.60***	(21, 624)
Step 3	0.41	0.16	0.06					3.63***	(33, 612)
Income[c]				-1.90	0.54	-0.19***	-3.52		
Vesting[d]				-0.80	0.24	-0.17**	-3.31		
Step 4	0.45	0.20	0.04					3.78***	(41, 604)
Health				0.18	0.04	0.18***	4.58		
Specialty[e]				-0.35	0.17	-0.10*	-2.13		

Note. $n = 706$; Statistical significance: *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$; [a]Asian had the higher coded value compared to Caucasian, [b]Other had the higher coded value compared to Caucasian, Annual income of [c]\$30,000-39,999 had the higher coded value compared to annual income of less than \$30,000, [d]Unknown vested status had the higher coded value compared to those not vested, [e]Educators had the higher coded value compared to RNs employed in the inpatient setting.

Research Question Three

To ascertain whether age, gender, marital status, education level, health, job satisfaction, race, ethnicity, employment status, income level, vested status, and nurse specialty predict SKFPR, in employed U.S. RNs, data were collected. The aforementioned variables served as the predictors, with SKFPR serving as the criterion. Hierarchical regression served as the statistical method. Demographics entered at step one explained 11% of the variance in SKFPR. Education, year of licensure, full time work, part time work, non-nursing years and current employment were entered at step two, explaining 3% of the variance in SKFPR. Income and vesting status were entered at

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step three, explaining 5% of the variance in SKFPR. Finally, health, job satisfaction and

nurse specialty were entered at step four, explaining 4% of the variance in SKFPR. The

model as a whole explains 22% of the variance in self-rated knowledge of financial

planning for retirement [F (41, 606) = 1.43, $p < 0.05$]. Each step demonstrated statistical

significance as noted: step one [$R^2 \Delta = 0.11$, $F \Delta$ (12, 630) = 6.47, $p < 0.001$], step two

[$R^2 \Delta = 0.03$, $F \Delta$ (9, 621) = 2.00, $p < 0.05$], step three [$R^2 \Delta = 0.05$, $F \Delta$ (12, 609) = 3.29,

$p < 0.001$], and step four [$R^2 \Delta = .04$, $F \Delta$ (8, 601) = 3.41, $p < 0.05$]. The variables that

made a statistically significant contribution included male gender when compared to

female gender ($\beta = -0.10$, $p < 0.01$). The annual income level of $< \$30,000$ made a

statistically significant contribution when compared to the annual income level of

$\$30,000 – \$39,999$ ($\beta = -0.16$, $p < 0.01$). Those who were not vested were found to have

made a statistically significant contribution when compared to those that did not know

their vesting status ($\beta = -0.13$, $p < 0.05$). Health once again was found to have made a

statistically significant contribution ($\beta = 0.16$, $p < 0.001$) and was the best predictor of

SKFPR.

Table 12

Summary of Hierarchical Regression Analysis for Variables Predicting SKFPR

Variables	R	R²	R²Δ	B	SE	β	t	F	df
Step 1	0.33	0.11						6.47***	(12, 630)
Gender[a]				-0.49	0.18	-0.10**	-2.69		
Step 2	0.37	0.14	0.03					4.61***	(21, 621)
Step 3	0.43	0.19	0.05					4.62***	(33, 609)
Income[b]				-1.70	0.60	-0.16**	-2.85		
Vesting[c]				-0.67	0.27	-0.13*	-2.49		
Step 4	0.47	0.22	0.04					4.20***	(41, 601)
Health				0.18	0.40	0.16***	4.03		

Note. $n = 706$; Statistical significance: $*p < 0.05$, $**p < 0.01$, $***p < 0.001$; [a]Females had the higher coded value compared to males, [b]Annual income of \$30,000-39,999 had the higher coded value compared to annual income of less than \$30,000, [c]Unknown vested status had the higher coded value compared to those not vested.

Research Question Four

To ascertain whether age, gender, marital status, education level, health, job satisfaction, race, ethnicity, employment status, income level, vested status, and nurse specialty predict retirement planning activity level in employed U.S. RNs, data were collected. The aforementioned variables served as the predictors, with RPAL level serving as the criterion. Hierarchical regression served as the statistical method. Demographics entered at step one explained 8% of the variance in RPAL. Education, year of licensure, full time work, part time work, non-nursing years and current employment were entered at step two, explaining 3% of the variance in RPAL. Income and vesting status were entered at step three, explaining 6% of the variance in RPAL.

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Finally, health, job satisfaction and nurse specialty were entered at step four, explaining

3% of the variance in RPAL. The model as a whole explains 20% of the variance in

RPAL [F (41, 604) = 3.78, $p < 0.001$]. Each step demonstrated statistical significance as

noted: step one [$R^2 \Delta = 0.08$, $F \Delta$ (12, 613) = 4.47, $p < 0.001$], step two [$R^2 \Delta = 0.03$, $F \Delta$

(9, 604) = 2.39, $p < 0.05$], step three [$R^2 \Delta = 0.06$, $F \Delta$ (12, 592) = 3.34, $p < 0.001$], and

step four [$R^2 \Delta = 0.03$, $F \Delta$ (8, 584) = 2.60, $p < 0.01$]. The variables that made a

statistically significant contribution included male gender when compared to female

gender ($\beta = -0.14$, $p < 0.001$). Part time work when compared to full time work made a

statistically significant contribution ($\beta = 0.14$, $p < 0.05$). When compared to an annual

household income of \$30,000 – \$39,999, an annual income of less than \$30,000 made a

significant contribution ($\beta = -0.14$, $p < 0.05$). Annual incomes of \$100,000 – \$124,999 (β

$= 0.19$, $p < 0.05$), and > \$150,000 ($\beta = 0.27$, $p < 0.05$) statistically significant

contributions when compared to an annual income of less than \$30,000. Those who were

not vested were found to have made a statistically significant contribution when

compared to those that did not know their vesting status ($\beta = -0.13$, $p < 0.05$). Health

once again was found to have made a statistically significant contribution ($\beta = 0.16$, $p <$

0.001), and was the only variable to make a statistically significant contribution in all

four research questions. The best predictor of RPAL was income ($\beta = 0.27$); specifically,

income of \$150,000 and over had the higher coded value compared to income of less than

\$30,000.

Table 13

Summary of Hierarchical Regression Analysis for Variables Predicting RPAL

Variables	R	R²	R²Δ	B	SE	β	t	F	df
Step 1	0.28	0.08						4.47***	(12, 613)
Gender[a]				-0.63	0.18	-0.14***	-3.55		
Step 2	0.34	0.11	0.03					3.63***	(21, 604)
PT Work				0.03	0.10	0.14**	3.04		
Step 3	0.41	0.17	0.06					3.63***	(33, 592)
Income[b]				-1.44	0.59	-0.14*	-2.44		
Income[c]				0.71	0.35	0.19*	2.05		
Income[d]				1.05	0.35	0.27**	2.99		
Vesting[e]				-0.66	0.26	-0.13*	-2.50		
Step 4	0.44	0.20	0.03					3.49***	(41, 584)
Health				0.17	0.04	0.16***	3.84		

Note. $n = 706$; Statistical significance: *$p < 0.05$, ** $p < 0.01$, ***$p < 0.001$; [a]Females had the higher coded value compared to males, [b]Annual income of $30,000-39,999 had the higher coded value compared to annual income of less than $30,000,[c] Annual income of $100,000-124,999 had the higher coded value compared to annual income of less than $30,000,[d]Annual income of equal to or greater than$150,000 had the higher coded value compared to income of less than $30,000,[e]Unknown vested status had the higher coded value compared to those not vested.

Chapter Summary

The sample of employed RNs in the SAVER study was analyzed with hierarchical regression, which allowed the researcher to enter the variables based on theoretical grounds. The data were analyzed utilizing SPSS Version 22.0 software.

This chapter presented study sample size, response rate, reliability of the summated scales, the theoretical rationale for each hierarchical regression step, the results of the hierarchical regression analyses, the sample demographic characteristics, and the results of the statistical analyses as guided by the four research questions.

CHAPTER SIX: DISCUSSION

The SAVER study explored whether age, education level, employment status, ethnicity, gender, health, income level, job satisfaction, marital status, nurse specialty, race, RN licensure year, vested status, years of full time employment, years of part time or per diem employment, and years spent out of the nursing workforce predicted FTP, RGC, SKFPR, and RPAL in employed U.S. RNs by analyzing responses to an online survey. Employed RNs from across the United States comprised the study sample. The purpose of this chapter is to discuss the study's results in the context of existing literature. Additionally, this chapter will discuss implications for nursing practice, theory, and future research.

Summary of Study Findings

The purpose of the SAVER study was to identify variables that predict RN retirement preparation for FTP, RGC, SKFPR, and RPAL. Demographic variables of the research study sample ($n = 706$) indicated the average participant was female, 48 years old, Caucasian, not of Hispanic or Latino ethnicity, and married. Professionally, the average participant was initially licensed as a RN in 1993, currently working full time, held a bachelor's degree, has worked 17 years full time during her RN career, 4 years part time or per diem, and spent 2 years out of the nursing profession, suggesting the average participant held more than job concurrently in her or her nursing career. The following were the most commonly occurring characteristics of the sample: an annual household income of $50,000 - $74,999, complete vesting in a retirement plan with a current employer, currently employed in an inpatient setting, with job satisfaction and health ratings both an "8" on a 1-10 scale (with 0 being "highly dissatisfied" and 10 being

"highly satisfied" in job satisfaction, and 0 being "poor health" and 10 being "excellent health" in health).

Hierarchical regression analyses were utilized to determine the predictors for FTP, RGC, SKFPR, and RPAL in employed U.S. RNs. Results revealed race and health predicted FTP; race, income, vesting, health, and nurse specialty predicted RGC; gender, income vesting and health predicted SKFPR; and gender, part time work, income, vesting and health predicted RPAL. Health was the only variable to make a statistically significant contribution for all four criterion variables. A detailed discussion of predictors is presented.

Gender

Males were found to make a more statistically significant contribution than females in predicting SKFPR and RPAL. These findings support previous gender retirement studies indicating women are less prepared than males for retirement (Glass & Kilpatrick, 1998; Noone, Alpass, & Stephens, 2010; USDL, 2007), which is concerning given the current demographics of the RN workforce. Further, men live an average of 17 years and women 20 years beyond typical retirement age (University of Michigan, 2007), suggesting female RNs may require additional funding when compared to their male counterparts as a factor of life expectancy. As previously noted, women are more likely to be employed in jobs that do not qualify for a retirement plan, are more likely to interrupt their careers to meet familial obligations, invest more conservatively than males, live longer than males, and have lower lifetime savings (USDL, 2007), suggesting there are significant strides that can be made to ensure adequate RN retirement preparation.

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The overriding concern with regard to gender is data do not indicate anything is changing in RN retirement preparation, particularly when compared with reported demographic data RN retirement studies completed in the early 1990's. Indeed, with the impact of the Great Recession during 2007-2009, RN retirement preparedness is worsening (Fidelity Investments, 2011). Thus, it appears female RNs remain at risk for retirement financial woes unless intervention occurs.

Race

Since the 1990's, the relationship between time orientation and propensity to participate in retirement planning activities has been more widely researched. Disparities between race and retirement preparation among other occupations have been previously documented (Behling & Merves, 1985; Julié, Kilty, & Richardson, 1995). Multiple studies indicate individuals with future outlook (or higher FTP) reported increased retirement planning practices (Hershey & Mowen, 2000; Jacobs-Lawson et al., 2004; Jacobs-Lawson & Hershey, 2005; Howlett, Kees, & Kemp, 2008). Indeed, a person's time orientation, past, present or future, has a dynamic influence on judgment, decision-making and action (Zimbardo & Boyd, 1999). According to Zimbardo and Boyd (1999), FTP suggests behavior is led by future goals and rewards. In contrast, the focus of past or present time perspective is vastly different than FTP. A person's time perspective is important in retirement planning because one of the most important components of saving and investing is the compounding effect of investing over time. Because time perspective often varies by race and cultural practice, these findings have significance in the scope of financial education.

In the SAVER study, the Asian race was positively associated with FTP and RGC. These findings support the need for cultural sensitivity in financial planning. Indeed, previous studies suggest the need for culturally competent financial planning services (Kermann, 1998; Marks, Dollahite, & Dew, 2009), but further studies on how to provide culturally competent financial planning and services are needed, particularly as the RN workforce seeks to become more diverse.

Income, Part Time Work, and Vesting

In previous studies, income has noted to be a significant predictor of retirement preparation (Bassett, Fleming, & Rodrigues, 1998; Kim, Kwon, & Anderson, 2005). The SAVER study uniquely described two variations in the income-retirement preparation relationship. In the SAVER study, annual income of less than $30,000 predicted RGC, SKFPR, and RPAL when compared to the income level of $30,000 - $39,999. Considering the average nursing salary nationally is $65,470 (Bureau of Labor Statistics [BLS], 2012), these data are perplexing. However, when these findings are observed with existing retirement literature, and current average RN age, a possible explanation appears.

A common concept in retirement literature is the bridge job, defined as employment held after a long-term job as a person phases into retirement. The bridge job allows a person to reduce their labor market commitment (Gustman & Steinmeier, 2000). It is likely these data represent RNs who continue to work part-time or per diem in a bridge job after reaching typical retirement age. Interestingly, by age 65, more than half of working women are employed in part time as opposed to full time positions (University of Michigan, 2007), which supports the idea of bridge employment.

Bridge job employment may be instrumental in deflecting retirement costs, particularly if part time employment offers medical, dental, and vision benefits, which can be costly expenses on a fixed retirement income. Additionally, RNs working bridge jobs may still be able to contribute to a company's 401(k) plan, if they meet employer requirements. RNs may utilize bridge jobs to increase retirement funding as individuals over age 50 may make an additional $5,500 contribution above the 2013 maximum annual contribution limit of $17,500 (Internal Revenue Service, 2014). Financially educated RNs may be utilizing bridge jobs to further fund retirement accounts, particularly if their spouse or significant other is retired. The average age of SAVER study participants was 48, and 9% of SAVER study participants were currently employed in a part-time capacity. In the SAVER study sample, part time employment made a statistically significant contribution to RPAL when compared to full time employment. It is possible those RNs employed part time are supplementing their household income or that the part time employment is bridge employment.

The impact of the 2007-2009 Great Recession is another reason RNs may be utilizing bridge jobs, which may be reflected in the income levels. Indeed, Buerhaus and Auerbach (2011) noted RNs 50 years of age and older constituted 60% of the RNs entering full time equivalent hospital employment from 2006-2008. Further, according to the U.S. Department of Health and Human Services [USDHHS], (2013) RNs aged 60 and older were working more hours in 2008-2010 when comparing data from 2008-2010 to 2000 data.

Another possible explanation for this finding is RNs with an annual income of less than $30,000 need to be more disciplined in how they utilize their income. Therefore,

they may also have a clearer sense of their retirement objectives. This would explain why incomes of less than $30,000 made a statistically significant contribution in RGC, SKFPR, and RPAL. Future research is needed to more clearly understand this finding.

The second variation of income-retirement preparation relationship noted in the SAVER study is while annual income levels of $100,000 - $124,999 and annual income levels of equal to or greater than $150,000 provided statistically significant contributions in RPAL when compared to annual incomes of less than $30,000, annual incomes of $125,000 - $149,999 did not. It is unclear why this annual income level did not reach statistical significance. One could speculate RNs in this annual household income are doing something different from their cohorts in the $100,000 - $124,999 and equal to or greater than $150,000 which hinders their retirement planning activities.

One explanation is the debt trap of living beyond one's means, which can affect even those making over six-figure salaries. High paying careers often require extensive secondary education, which comes at a price, usually resulting in student loan debt. Higher incomes may also be more variable because they are often based on bonuses, options, and commissions, which can fluctuate (Woodruff, 2014). It is possible respondents in the $125,000 - $149,999 cohort did not meet statistical significance for these reasons.

Finally, it would be imprudent not to recognize a statistical cause for the differences in findings between these three income levels. The $125,000 - $149,999 income bracket had nearly half the respondents of the other two income groups discussed. This difference could have affected statistical power. Future research should investigate this further to validate these results.

The SAVER study revealed an interesting finding with regard to vesting status. Those not vested in a retirement account through a current employer made a statistically significant contribution to RGC, SKFPR, and RPAL when compare to an unknown vested status. Although previous research indicates RNs are ill-prepared for retirement (Moore & Biordi, 1995; Fidelity Investments, 2011; WISER, 2012), the SAVER study indicates knowing one's vested status (even if it is not vested) indicates a greater preparedness than not knowing the vested status. This finding suggests retirement education programs may help improve retirement preparedness, particularly with respect to RGC, SKFPR, and RPAL.

The Nurses' Investor Education Project was a multi-year project aimed at providing financial education to nurses in Nebraska, Maine, Missouri, South Dakota and Virginia. Ten nurse trainees provided 29 state workshops, providing financial education to 700 RNs. Post workshop evaluations indicated participants demonstrated an increased knowledge of investing and financial planning (WISER, 2012). This information, in tandem with the SAVER study's findings, suggests retirement planning education and financial literacy can improve RN retirement preparation. Such programs could be implemented in employers' benefit programs or in continuing education programs through RN credentialing organizations to assist in improving RN retirement knowledge.

Clearly, there is still much research to be done to better understand how income, part-time work status and vesting status may influence RN retirement preparation. Income and vesting status helped to explain the variance of three criteria: RGC, SKFPR, and RPAL. Experimental research investigating pre and post financial knowledge

following educational programs, such as those previously mentioned, could add a greater understanding of these variables.

Specialty

When compared to RNs employed in education, RNs employed in the inpatient sector made a statistically significant contribution to RGC. There are no previous studies examining the differences in retirement preparation as a function of nurse specialty. This new knowledge is helpful, particularly considering the profound nurse educator shortage (Allen, 2008; American Association of Colleges of Nursing [AACN], 2011). The only study investigating nurse educator retirement noted as a whole, nurse educators do not plan to work beyond age 65 (Kowalski et al., 2006). The fact that educators are less clear in retirement goals when compared to their inpatient-employed cohort is concerning because retirement specialists emphasize the importance of developing clear goals for the future. Indeed, RGC has been found to predict savings contributions (Stawski, Hershey, & Jacobs-Lawson, 2007). Therefore, nurse educators should work toward well-defined retirement goals, such as considering the desired retirement quality of life, or establishing a clear vision of how life will be in retirement. Retirement specialists should ensure clear retirement goals are established when providing financial planning for retirement.

Health

Previous studies have documented health varies by socioeconomic status, race, and ethnicity. Further, health status may influence older people's ability to work, and poor health is a strong predictor of early retirement among persons ages 55 to 59 (University of Michigan, 2007). Health has been identified as both a retirement push factor (pushing employees out of the labor market) and pull factor (pulling employees to

retirement) (Oksanen & Virtanen, 2012). Previous studies have investigated how poor health leads to early retirement (Conley, 2005; De Preter, Van Looy, & Mortelmans, 2013) or how health impacts quality of life in retirement (Rijs, Cozijnsen, & Deeg, 2012; Van Solinge & Henkens, 2008). However, the SAVER study found the better a person ranks their health status positively predicted retirement preparation, which is new knowledge. Further, health was the only predictor to reach statistical significance for all four criteria. There is a paucity of research addressing the relationship of health to RTP, RCG, SKFPR, and RPAL in RNs. The implications of this finding will be discussed within the framework of the literature review's coding taxonomies.

Retirement preparation. The SAVER study findings supported prior RN retirement research. For example, although Kowalski et al. (2006) indicated the majority of nurse educators do not plan to work beyond age 65, the SAVER study suggested these nurse educators may need more specific retirement goals. The SAVER study also supported Klug's (2009) findings that RNs may benefit from financial education programs. Additionally, the SAVER study supported Valencia and Raingruber's (2010) concerns regarding health benefits in retirement.

It is critical for RNs to carefully consider retirement preparation as they make employment decisions throughout life. This is especially important given the frequency with which nurses enter and exit the nursing workforce. It is important to start preparing for retirement as early as possible. Important steps of retirement preparation include setting goals and looking realistically at how to prepare. Health issues to consider include the costs of Medicare premiums, long-term care costs, and health insurance (WISER, 2009). The pre-retirement phase may well present an appropriate opportunity for

preventative health actions. Addressing health issues prior to retirement may ensure the individual has time to adopt a healthier lifestyle. The results of a healthier lifestyle may translate into a healthier retirement plan. The SAVER study findings indicated a new focus of health status may be helpful in retirement planning.

Preretirement planning. Blakely and Ribeiro (2008) interviewed RNs and discovered health status ranked at the top of RNs priority list for retirement. Kelly and Swisher (1998) found RNs' health status impacted retirement, and frequently retirement concerns centered on health insurance. The SAVER study supported these previous studies. As health was a significant predictor for all four criterion variables, preretirement planning should include health assessment as part of financial planning.

Financial institutions often offer financial planning services. Employers partnering with financial institutions as an employee benefit should investigate the services provided. Staff meetings, in-services, and continuing education meetings are also a good place for preretirement planning education and services to be provided. Free retirement planning guides are available. Health should be included as a component of preretirement planning. RNs should be encouraged to follow up with primary care providers as part of preretirement planning. Primary care providers should monitor health, providing lifestyle, diet, and exercise advice as needed. According to a recent American Nurses Association [ANA] (2014) study, 70 percent of RN respondents were overweight or obese, and only 35% exercised four to five times a week. Often, RNs may care for others at the expense of their own health (Smith, 2013).

Policies and retention of mature RNs. The SAVER study supported Spetz and Adams' (2006) study, which recommended administrators consider benefit packages as

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there is no one size fits all benefit package. Spetz and Adams (2006) also identified

health insurance and wellness programs as an employment based benefit for RN

retention, which the SAVER study supported. Given the average age of the RN

workforce, policy strategies to retain a financially healthy, vibrant workforce should be

considered. Because financial health is intricately related to overall well-being, it is

important financial health interventions be incorporated. Financial pressures can seriously

impact relationships and health. Financial pressures can manifest through anxiety,

physical ailments (such as headaches and insomnia), guilt, and stressful interpersonal

relationships (Novotney, 2014). Financial counseling, budget and financial lessons can

help in educating nurses about finances. Debt management and credit counseling may be

helpful interventions.

Clearly, physical health and mental well-being cannot be separated from financial

well-being. The health risk factors of physical inactivity, tobacco use, and poor nutrition

are leading causes of chronic disease (American Public Health Association [APHA],

2014), a concern because data indicate a growing number of RNs are overweight or

obese, do not exercise, and have poor nutritional habits (ANA, 2014). Stress, shift work,

and the physicality of patient care can be problematic to nurses' health, and may

contribute to chronic illnesses. Future research should investigate the relationships

between chronic illness, health care costs, and RN retirement. Policies and retention

benefits with health-related measures, such as ongoing programs in health and wellness,

fitness programs, safe patient handling, and ergonomic interventions, may be beneficial

to improving nurses' health, and warrant investigation.

Because of their education, it is likely RNs already understand the importance of health and general well-being. Blakely and Ribeiro (2008) found four out of the top five pre-retirement strategies considered to be top priorities for nurses centered on health maintenance and general well-being. However, RNs may not be caring for themselves as they should in the physical, social, mental, spiritual, emotional, and environmental realms of health. Additionally, RNs may be overlooking their financial health as a function of overall health.

The SAVER study's new knowledge of health as a predictor of FTP, RGC, SKFPR, and RPAL suggested retirement planning should include maximizing health status. Future studies should further investigate the relationship between health and retirement preparation.

Nonstatistically Significant Findings

Historically, one of the most significant predictors of retirement preparation is age (Anderson, Li, Bechhofer, McCrone, & Stewart, 2000; Morgan & Eckert, 2004). However, in the SAVER study, age was not a significant predictor for any criterion. However, in previous studies with different sample populations, age was found to be a significant predictor of FTP (Padawer, Jacobs-Lawson, Hershey, & Thomas, 2007), RGC, and financial planning activity level (Stawski, Hershey, & Jacobs-Lawson, 2007). The lack of significant findings for age in this sample of employed RNs further supports the argument RNs are not prepared for retirement.

It should be noted the regression models as a whole did not explain a great percentage of the respective criterion variables. The most complete regression model was

SKFPR, which explained 22% of the variance. This data suggest there may be unassessed factors with predictive value yet to be evaluated in employed RNs.

Demographic Discussion

The SAVER study demographics mirrored national HRSA (2013) U.S. nursing workforce data. (Table 14). The SAVER study sample was predominantly female, Caucasian, and over 40 years of age. These findings suggest nursing remains very homogenous. As such, it is very easy for employers to simply offer one-size-fits all retirement benefit plans. However, diverse individual cultural needs may not be met by this approach. Recruiters, administrators and leadership should take note of the demographic characteristics and unique individual needs when offering benefits, which can be challenging given the laws governing retirement benefits. As family structure, emotional landscape, expectations and experiences differ amongst even the most seemingly homogenous of groups, RNs may need to develop strong negotiating skills or advocate their needs to union representatives.

Table 14

Demographic Comparison of SAVER Study Versus HRSA Data

Individual Characteristic	SAVER Study	HRSA
Average RN Age	48 years	44.6 years
Gender		
Female	88.4%	90.9%
Male	11.5%	9.1%
Race		
Black/African American	4%	23.6%
American Indian/Alaska Native	0.6%	0.4%
Asian	7.6%	8.3%
White/Caucasian	82.2%	75.4%
Ethnicity		
Hispanic or Latino	5.7%	4.8%
Education		
Associate degree	24.2%	37.9%
Bachelor's degree	37.8%	44.6%
Master's and Doctoral degree	8.5%	10.6%
Nursing Specialty		
Inpatient	62.9%	63.2%
School Nurse	1%	2.2%
Education	16.9%	0.6%

Note. Data comparison based on HRSA (2013) workforce data.

Sustainability

Sustainability refers to meeting the demands of today without jeopardizing the ability to meet future needs and includes physical, economic and social environments (St. Pierre Schneider, et al., 2009). In the context of the SAVER study, sustainability has reference to the personal financial sustainability of RNs -- the ability of RNs to meet today's financial obligations without compromising their retirement. Within the SAVER study, the physical environment includes the physical entities involved in supporting financially sound retirement preparation and preretirement planning, such as access to

financial education, counseling, and resources. The economic environment includes both personal and societal economic influences, such as employment rates, the 2007-2009 Great Recession, investor psychology, debt to income ratio, stock market fluctuation, and the large cohort of Baby Boomer retirees. The social environment includes social support networks, culture, social unions (e.g., marriage, divorce), income, education, genetics, and health. Together, this dynamic myriad influences personal financial sustainability for retirement.

These personal elements of financial sustainability for retirement have relevance to RN workforce sustainability. There are extensive dynamic challenges in maintaining a functional nursing workforce (Fox & Abrahamson, 2009). Clinically, the RN workforce sustainability directly impacts patient care because patient safety is directly linked to nursing expertise (Buerhaus, Staiger & Auerbach, 2000; RWJF, 2006; Hill, 2010). As one third of the current RN workforce is predicted to retire in the next twenty years, retention and recruitment of experienced RNs is imperative to quality patient care (RWJF, 2006). Suggested retention measures include health benefits for part-time workers, phased retirement, alternate roles for older workers, catch up retirement contribution programs, personalized retirement preparation programs, financial education programs, estate planning, health prevention, and wellness education programs (RWJF, 2006). These retention measures not only have potential to retain mature workers, but may also improve the personal financial sustainability of RNs.

Retirement studies will continue to have relevancy as the RN workforce ages. From a sustainability perspective, retirement studies should investigate how RNs are able to meet today's financial obligations without depleting tomorrow's resources. Additional

studies investigating psychological factors of RN retirement are needed. Other

investigations could include average debt to income ratios, financial knowledge, and

defined contribution plan participation of identified RN cohorts. Longitudinal RN

workforce studies would be helpful in investigating RN workforce participation, and the

needs of RNs for potential retention measures based on age-specific needs. Retention

studies would be useful in considering which particular RN retention measure best

reduces RN turnover. Long-term results and implications of RN retirement research may

positively impact patient care and health care outcomes providing new knowledge to

guide practice and policy in RN retention efforts.

Implications for Theory

The SAVER study identified significant predictors of FTP, RCG, SKFPR, and

RPAL. The SAVER study also demonstrated the importance of these constructs on

retirement preparation. Further, the study supported Hershey's Conceptual Model of the

Factors that Influence Investor Behavior (Hershey, 2004) through investigation of

psychological influences of investor behavior, namely; FTP, RGC, SKFPR, and RPAL.

The SAVER study identified health as a significant predictor of all four criteria for RNs,

which is new knowledge. While significant predictors were found, the variance explained

suggests there are other unknown influential factors to be investigated.

Implications for Practice

The SAVER study indicated retirement preparation remains a key issue for RNs.

The SAVER study identified gender, health, income, race, nursing specialty, and vesting

status as predictors of psychological influences of nursing investor behavior. Of the

significant predictors, health was the only predictor that made a statistically significant contribution to all four criteria.

Several implications may be drawn from this study. Health care providers should be cognizant of the interrelationship between finances and health. Primary care visits may be utilized as a setting for financial health discussions. Financial check-ups should be considered an important part of regular health maintenance. As health care providers, RNs should also include finances as part of the complete client assessment. Appropriate referrals can then be made to financial counselors.

In education, nurse educators should also be mindful what nursing retirement preparation literature is revealing. As a whole, RNs continue to be ill-prepared for retirement. An appropriate arena to include financial education may be within the schools of nursing. For example, nurse educators at Boise State University incorporated retirement preparation into their nurse leadership module. To complete the retirement module, the nursing students are divided into small discussion groups. In these groups, they illustrate their base knowledge by filling out a glossary of terms, such as defined contribution retirement plan, and vesting. The students also complete a personalized retirement worksheet including a forecast of annual expenses, and retirement based income. A final project includes a group case study where with the given information, the students determine if the fictitious individual can retire at 59.5, 62, or 65 years of age. Feedback from this retirement module has been overwhelmingly positive (Strohfus & Schrader, 2009).

Recommendations for Future Research

RN retirement is a critical issue with many avenues for potential research. Although the literature has addressed some aspects of RN retirement, longitudinal studies have not been performed. Evaluating labor-force participation would provide additional insights not available in the current literature.

The SAVER study indicated there are unknown factors that influence RN retirement preparation. Future studies should consider investigating what other predictors might explain variance of FTP, RGC, SRKFPR, and RPAL. Predictors for examination may include optimism, number of dependents, self-discipline, faith, work-ethic, quality of life, perseverance, retirement savings, and previous exposure to financial education.

The striking significance of health on retirement preparation should also be further investigated to determine those specific factors within health contributing to its significance. The six components of health (physical, social, environmental, spiritual, emotional, and mental) would be helpful in providing a context for such research. Additionally, theories to consider as a basis for future health and retirement research could include *Newman's Health as Expanding Consciousness Theory*, the *Health Belief Model*, or *Simon's Decision Making Model*. Research studies could investigate the relationships of exercise, body mass index, or spirituality on financial health.

Experimental studies comparing retirement planning knowledge, or financial literacy of RNs who receive financial education to an RN control group would provide extensive new knowledge regarding RN financial literacy. The Financial Literacy Questionnaire, which includes items regarding managing money, saving and investing, and budgeting (Organization for Economic Cooperation and Development, 2011) may be

an appropriate measure for such a study. Other measures to consider include Johnson's Retirement Success Profile, which is an inventory of 15 universal factors of retirement life helping to illustrate a person's readiness for retirement (Geiger, 2013).

Retirement preparation is clearly a key concern for the RN workforce. The SAVER study demonstrated RN workforce demographics to be similar to those of the 1990's, when some of the first RN retirement studies were completed. Further the SAVER study indicated there are significant predictors for FTP, RCG, SKFPR, and RPAL with health status being the only predictor to reach statistical significance for all four criterion. Further research is needed to determine what other factors predict retirement preparation, investigate personal and professional sustainability, and track RN workforce longitudinally.

Conclusion

Multiple factors impact the sustainability of the RN workforce. The SAVER study made several unique contributions to the understanding of RN retirement preparation, a factor to be considered in RN workforce sustainability. The SAVER study represented the first study investigating predictive factors of psychological influences in the RN retirement planning process, adding to the growing area of RN retirement planning decision-making and retirement preparation research. The SAVER study also identified significant predictors of RN retirement preparation. Health was found to be the only significant predictor in retirement preparation for all four criteria, a finding that may have significance in future RN retirement studies. Further research is needed to determine other predictors of RN retirement preparation and to investigate the longitudinal impact of workforce entrances and exits on RN financial health.

UNLV
UNIVERSITY OF NEVADA LAS VEGAS

Biomedical IRB – Exempt Review
Deemed Exempt

DATE: May 9, 2013
TO: **Dr. Patricia Alpert,** Nursing
FROM: Office of Research Integrity – Human Subjects
RE: Notification of IRB Action
                Protocol Title: Retirement and the Registered Nurse: The SAVER Study
                Protocol # 1305-4453

_____

This memorandum is notification that the project referenced above has been reviewed as indicated in Federal regulatory statutes 45CFR46 and deemed exempt under 45 CFR 46.101(b)2.

PLEASE NOTE:
Upon Approval, the research team is responsible for conducting the research as stated in the exempt application reviewed by the ORI – HS and/or the IRB which shall include using the most recently submitted Informed Consent/Assent Forms (Information Sheet) and recruitment materials. The official versions of these forms are indicated by footer which contains the date exempted.

Any changes to the application may cause this project to require a different level of IRB review. Should any changes need to be made, please submit a **Modification Form**. When the above-referenced project has been completed, please submit a **Continuing Review/Progress Completion report** to notify ORI – HS of its closure.

If you have questions or require any assistance, please contact the Office of Research Integrity - Human Subjects at IRB@unlv.edu or call 895-2794.

Office of Research Integrity – Human Subjects
4505 Maryland Parkway • Box 451047 • Las Vegas, Nevada 89154-1047
(702) 895-2794 • FAX: (702) 895-0805

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This document contains the information provided on page one of the online survey. This page will serve as informed consent for this study. If the participant wishes to proceed to the study after reading the informed consent, they will simply click the BEGIN at the bottom of website.

My name is Shanna Keele, and I am a doctoral candidate at the University of Nevada, Las Vegas. I invite you to participate in my dissertation research regarding predictors of Registered Nurse (RN) retirement preparation.

STUDY TITLE: Retirement and the Registered Nurse: The SAVER Study

INVESTIGATORS: Dr. Patricia Alpert and Shanna Keele

CONTACT PHONE NUMBER: (702) 895-3810

STUDY PURPOSE: The study purpose is to identify those variables that predict preparation in registered nurse retirement.

PARTICIPANTS: You are being asked to participate in a research study if you meet the inclusion criteria below:

(a) You have an active U.S. RN license.
(b) You are actively employed in a capacity that requires a RN license for employment.
(c) You have the technological skills to complete online survey questions.
(d) You are at least 21 years of age and willing to give informed consent.

PROCEDURE: If you volunteer to participate in this study, you will be asked to complete the online retirement planning preparation questionnaire and a researcher developed questionnaire.

BENEFITS OF PARTICIPATION: There may be no direct benefits to you as a participant in this study. However, you will be contributing to knowledge about RN retirement preparation. The study results will help describe the current RN financial retirement preparation status, and identify factors that distinguish RNs who are financially prepared for retirement. Study findings have the potential to impact retirement marketing strategies which may positively impact RN workforce sustainability. This reduction in RN turnover may ultimately improve patient care outcomes, satisfaction, and safety.

RISKS OF PARTICIPATION: There are risks involved in all research studies, but this study may include only minimal risks in that you may feel uncomfortable answering some of the questions.

COST/COMPENSATION: This study will take approximately 20-30 minutes of your time. There is no financial cost to you to participate in this study. You will not be compensated for your time

CONTACT INFORMATION:
If you have any questions or concerns regarding this study, you may contact Dr. Patricia Alpert (PI and Faculty Dissertation Chair) at: patricia.alpert@unlv.edu or (702) 895-3810. For questions regarding the rights of research subjects, any comments or complaints regarding the manner in which the study is being conducted, you may contact the UNLV Office of Research Integrity-Human Subjects at (702) 895-2794 or toll free at (877) 895-2794, or via email at IRB@unlv.edu.

VOLUNTARY PARTICIPATION: Your participation is voluntary. You may refuse to participate in this study. You also have the ability to skip answers on the survey questions and/or submit the survey without answering all the questions. You are encouraged to ask questions about this study at the beginning or at any time during the research study. If you would like a copy of the study results, please email your request to Shanna Keele at keeles@unlv.nevada.edu.

CONFIDENTIALITY: All information gathered in this study will be kept completely confidential. No referenced will be made in written or oral materials that could link you to this study. The Internet Protocol address you utilize will not be collected. All records will be stored on a password protected computer or in a locked facility at UNLV for 3 years after study completion. After the storage time, the gathered information will be destroyed.

PARTICIPANT CONSENT: If you have read the above information, meet the inclusion criteria and wish to participate in this study, please proceed by clicking the "BEGIN" icon at the bottom of the screen.

APPENDIX B: RESEARCHER DEVELOPED QUESTIONNAIRE

1. What is your age? _____

2. What is your gender?
   Male
   Female

3. What is your marital status?
   Never married
   Married
   Widowed
   Divorced
   Nonspousal partnership

4. What is the highest educational level you have completed?
   Associate's degree
   Bachelor's degree
   Master's degree
   Doctoral degree

5. Using a scale with 0 being "poor" and 10 being "excellent," how would you currently rate your physical and mental health?

0   1   2   3   4   5   6   7   8   9   10

Poor   Excellent

6. Using a scale with 0 being "highly dissatisfied" and 10 being "highly satisfied," how would you rate your job satisfaction with your current employer?

0   1   2   3   4   5   6   7   8   9   10

Highly Dissatisfied   Highly Satisfied

7. What is your race?
   Black/African-American
   American Indian/Alaska Native
   Asian
   Pacific Islander
   White/Caucasian
   Other

8. What is your ethnicity?

       Hispanic or Latino

       Not Hispanic or Latino

9. What year did you become licensed as an RN? _____

10. Since graduating from your basic nursing program, how many years have you worked full time as an RN? _____

11. In addition to any full time work, how many years have you worked part time or per diem as a RN since graduating from your basic nursing program?_____

12. During your RN career, how many years have you spent out of the nursing workforce?

  _____

13. How would you classify your current employment as an RN?

       Full time

       Part time

       PRN/Per Diem

14. What is your current annual household income level?

       < $30,000

        $30,000 to $39,999

        $40,000 to $49,999

        $50,000 to $74,999

        $75,000 to $99,999

        $100,000 to $124,999

        $125,000 to 149,999

        $150,000 or over

15. Employers often provide contributions to a retirement account on your behalf. Your ownership in the funds is typically dependent on years of service. If you are vested in your retirement plan, you can take all of it with you when you leave the company. If you are 50% vested, you can take 50% of it with you when you leave the company, etc. Which describes your retirement account status with your current employer?

       Not Vested

       Somewhat Vested

       Completely Vested

       I do not know my vested status

       I do not have a retirement account with my current employer

       Other

16. What is your nursing specialty?
      Inpatient (hospital)
      Outpatient (e.g., home health, physician's office)
      Public Health
      School Nurse
      Education
      Research
      Other

APPENDIX C: HERSHEY ET AL.'S (2007) RETIREMENT PLANNING

PREPARATION QUESTIONNAIRE

Future Time Perspective
      1. I enjoy thinking about how I will live years from now in the future.
      2. I like to reflect on what the future will hold.
      3. I look forward to life in the distant future.
      4. It is important to take a long-term perspective on life.
      5. My close friends would describe me as future oriented.
Likert response seven point format (1 = never like me, 7 = always like me)

Retirement Goal Clarity
      1. I set clear goals for gaining information about retirement.
      2. I have thought a great deal about quality of life in retirement.
      3. I set specific goals for how much will need to be saved for retirement.
      4. I have clear vision of how life will be in retirement.
      5. I have discussed retirement plans with spouse, friend or significant other.
Likert response seven point format (1 = strongly disagree, 7 = strongly agree)

Self-rated Knowledge of Financial Planning for Retirement
      1. I am very knowledgeable about financial planning for retirement.
      2. I know more than most people about retirement planning.
      3. I am very confident in my ability to do retirement planning.
      4. When I have a need for financial services, I know exactly where to obtain
         information on what to do.
      5. I am knowledgeable about how Social Security works.
      6. I am knowledgeable about how private investment plans work.
Likert response seven point format (1 = strongly disagree, 7 = strongly agree)

Retirement Planning Activity Level
During the past 12 months, I have:
      1. Frequently read articles/brochures on investing or financial planning.
      2. Read one or more books on investing or financial planning.
      3. Frequently visited financial planning sites on the World Wide Web.
      4. Gathered or organized my financial records.
      5. Regularly tuned into television/radio shows on investing or financial planning.
      6. Conducted a thorough assessment of my net worth.
      7. Identified specific spending plans for the future.
      8. Discussed financial planning goals with a professional(s) in the field.
      9. Discussed financial retirement plans with an employer's benefits specialist.
     10. Discussed retirement plans with a knowledgeable friend or acquaintance.
Likert response seven point format (1 = strongly disagree, 7 = strongly agree)

From Hershey et al. (2007). Reprinted with permission from the author.

From: shanna keele [shannakeele@yahoo.com]
Sent: Thursday, February 07, 2013 4:19 PM
To: Hershey, Doug
Subject: Keele-PhD Research Query

Hello, Dr. Hershey,
I know you probably get many queries regarding your research. I contacted you in 2011 as I was thinking of pursuing research in retirement among registered nurses (RNs). I am a third year PhD student at the University of Nevada, Las Vegas. I am just preparing to write for my written comprehensive exam and have met with my dissertation committee,who have approved the premise for my research. For my dissertation, I would like to investigate predictors of retirement preparation in RNs and then link this to workforce sustainability (that is, discuss how employers can use these predictors to structure retirement benefit packages for RNs). My specific research question is:

Do age, gender, marital status, education level, health, job satisfaction, race, ethnicity, employment status, income level, vested status, and nurse specialty (i.e. nurse educator vs. medical surgical vs. nurse practitioner) predict future time perspective, retirement goal clarity, self-rated knowledge of financial planning for retirement and retirement planning activity level in registered nurses?

I wanted to make sure I could obtain permission to use the measure cited in your 2007 manuscript Psychological Foundations of Financial Planning for Retirement in *The Journal of Adult Development*.

Thank you for your consideration of my request.

Sincerely,
Shanna

Shanna Keele, MSN, APRN, FNP-BC

shannakeele@yahoo.com
775-622-8680

From: "Hershey, Doug" <douglas.hershey@okstate.edu>
To: shanna keele <shannakeele@yahoo.com>
Sent: Friday, February 8, 2013 6:49 AM
Subject: RE: Keele-PhD Research Query

Hi Shanna--

 Exciting times for you! On the verge of a new data collection--I always find that exciting.

To answer your question, YES, by all means, feel free to use the measures you mention below. The goal clarity, knowledge, and planning activity level scales are all quite solid. That said, we've used the FTP measure numerous times and have always had a bit of an issue with somewhat low levels of internal consistency (i.e., coefficient alpha values). For this reason we've recently revised it, removing the reverse coded items and the one item that states "I'm the type of person who saves for a rainy day," because that item would always cross-load with the planning activity level scale or the financial knowledge scale when analyzed in a factor analysis. Our new version of the FTP measure, which has been tested on over 3,000 individuals aged 18-93, works much better now. It has better predictive capabilities, a stronger degree of internal consistency, and no reverse coded items to contend with. Here is what it looks like:

Future Time Perspective Scale (5 Items) (7-Point Likert Scale Response Format)
I enjoy thinking about how I will live years from now in the future.
I like to reflect on what the future will hold.
I look forward to life in the distant future.
It is important to take a long-term perspective on life.
My close friends would describe me as future oriented.

We don't have this revised scale out as a "regular" journal publication yet (that should happen sometime this year), but in the meanwhile, you could use the following two citations as the source for this measure:

Koposko, J. L. (2012). *Parental and social influences on understanding of financial planning for retirement.* Master's thesis completed at Oklahoma State University. Department of Psychology.

Gerrans, P., & Hershey, D. A. (2013). The role of financial literacy and financial adviser anxiety in older Australians advice seeking. Technical report published by the National Seniors Australia Productive Ageing Centre. Melbourne, Australia. Available:
http://www.productiveageing.com.au/userfiles/file/Final%20version%20Financial%20Literacy.pdf

If you've already produced hard-copy questionnaire booklets using the old version of the FTP scale, I can reassure you that measure will still work. I wouldn't redo the booklets. I would expect that older scale to have a good level of predictive ability; the only downside is that you may find it to have somewhat low levels of coefficient alpha (in the .55 to .68 range).

Hope this helps. Give me a jingle if you have any questions. Again, I'd be most interested in seeing a copy of your final report when you've finished up. Best of luck with your empirical effort!!!

Kind regards,

Doug

Douglas A. Hershey, PhD
Professor of Psychology &
Faculty Associate, School of International Studies

Mailing Address:
Department of Psychology
Oklahoma State University
Stillwater, Oklahoma 74078 USA
voice: 405/744-4594
fax: 405/744-8067

 Shanna:

In a recent thesis conducted by one of my graduate students, Janet Koposko, the Chronbach's alpha level for the new five-item FTP scale was .89 and the mean inter-item correlation was .63--far superior to the values I had been getting with the old version of the scale. These psychometric properties were also replicated on a sample of some 2,200 Australian working adults. When referencing the scale you can use the citation to Janet's thesis which is found in an earlier email (below). We also have a working copy of a manuscript from Jan's thesis, which I've attached. We're planning to send it out for review to Developmental Psychology this coming week and will keep fingers crossed. As it's still a draft, please don't cite it without permission. I've copied Jan on this message so that she's aware I've shared it with you.

Also, I'm passing along a review chapter that recently came out in the Oxford Handbook of Retirement that sums up a great deal of work on our shared research interest. Forgive me if I sent it to you previously and forgot. It summarizes a good deal of empirical research on retirement (most of which you're probably aware of), but it also presents (i) a nice conceptual model of influences on individuals when it comes to planning and saving (see figure at end), and (ii) a summary of different types of planners and non-planners (see Table 1). Even though it was published in late 2012, I still don't have a pdf version of the paper, which is why I'm sending it to you in manuscript form. Perhaps your library has a "real" copy of the book.

Doug

From: shannakeele@yahoo.com [shannakeele@yahoo.com]
Sent: Sunday, April 07, 2013 11:50 AM
To: Hershey, Doug
Subject: Re: Keele-PhD Research Query

Thank you so much, Dr. Hershey. I had one last thought come to me...did the item correlation change from .38 and the coefficient alpha from .76 on the revised Future Time Perspective you sent below? I just want to make sure I reflect the correct values in any discussion I present to my committee.

Again, many thanks and I will definitely keep you posted. Shanna :-)

Sent from my iPad

On Apr 7, 2013, at 8:17 AM, "Hershey, Doug" <douglas.hershey@okstate.edu> wrote:

Hi Shanna--

Congrats on your accomplishment! Now the real work begins ;-)

On point one, below, certainly. feel free to use the conceptual model from the 2004 publication.

On point two...in that study as I recall we measured planning activities and goal clarity over the course of a year. On the first occasion of measurement we asked about their attitudes and opinions (i) during the past 12 months, (ii) a second time six months into the investigation, and (iii) at one year after the baseline measure we asked them about their intentions for the next 12 months. So the intro to the questions in this study was very specific about the time frame they considered for their response. But usually, in most studies, as part of the instructions just before presenting the questions I write: "On the following pages you will find a number of statements and questions. Please respond to each of the statements by marking one option for each item that indicates how it best relates to your **thoughts, attitudes, or opinions**." In that case I don't find it necessary to begin each item with "I have." People get it, without the "I have" part. Under these circumstances people are responding, in general, how clear their goals are, how much they have done in the way of planning, etc.

Regarding scoring--yes, I usually use a seven-point Likert-type scale such as the one you have below. Although, I typically just put "strongly disagree" over the number 1, and "strongly agree" over the number 7. But I've used anchor terms (such as those you have below) as well. I'd say that you could go either way (i.e., using two anchor terms or seven of them). Also, I've been known to use a five point scale, particularly in cases where I'm working with other scales as part of a study (not my own) that utilize a five-point response format. It doesn't much matter, as there is a literature to show that you pretty much get exactly the same results using a five-point or seven-point response format. I personally prefer the seven point format, however.

Hope this helps. Best of luck on your pending data collection. Glad to hear your committee thought the study was worthy of carrying out! Be sure to stay in touch. I'd love to hear how things turn out.

Best,

Doug

Hello again, Dr.Hershey-
I wanted to let you know that I had my Written and Oral Comprehensive Exams (our School of Nursing does both Written and Oral Comprehensive Exams prior to Proposal [Prospectus] Defense) and passed. I just had some minor questions for you.

1) May I also have your permission to use your Conceptual Model of the Factors that Influence Investor Behavior and the Model figure included in your 2004 publication?

2) In your 2007 Retirement Planning Preparation Questionnaire, I have the previous email you sent about the Future Time Perspective Scale, but with regards to Retirement Goal Clarity and Retirement Planning Activity Level measures, is there supposed to be a preceding statement such as "I have..."? I believe you stated that for Retirement Planning Activity Level, this measure referred to activities performed over the past twelve months. Is the preceding statement for that "In the past twelve months, I have..."? Below are how the statements are worded in the publication. I just wasn't sure if that is how they should be worded for all uses or if there is a preceding statement.

Retirement Goal Clarity

      1. Set clear goals for gaining information about retirement.

      2. Thought a great deal about quality of life in retirement.

      3. Set specific goals for how much will need to be saved for retirement.

      4. Have clear vision of how life will be in retirement.

      5. Discussed retirement plans with spouse, friend or significant other.

Retirement Planning Activity Level

      1. Frequently read articles/brochures on investing or financial planning.

      2. Read one or more books on investing or financial planning.

      3. Frequently visited financial planning sites on the World Wide Web.

      4. Gather or organized your financial records.

5. Regularly tuned into television/radio shows on investing or financial planning.

6. Conducted a thorough assessment of your net worth.

7. Identified specific spending plans for the future.

8. Discussed financial planning goals with a professional(s) in the field.

9. Discussed financial retirement plans with an employer's benefits specialist.

10. Discussed retirement plans with a knowledgeable friend or acquaintance.

3) I also want to make sure the Likert Scale format is appropriate. Is this the type you use?

Level of Agreement

1 – Strongly disagree

2 – Disagree

3 – Somewhat disagree

4 – Neither agree nor disagree

5 – Somewhat agree

6 – Agree

7 – Strongly agree

Is there any other type of scoring information that I should be aware of?

Dr. Hershey, thank you so much for your help and for the use of your materials. I greatly appreciate you.
Kind Regards,

Shanna Keele

From: Donni Alvarenga <donni.meltingpounds@gmail.com>
To: shanna keele <shannakeele@yahoo.com>

Sent: Monday, June 25, 2012 3:41 PM

Subject: Re: Permission to use Qualitative and Quantitative Study Critique Forms

Hello Shanna!

Thank you for bringing this article to my attention! You may absolutely use the study critique form! Good luck with your project.   I would love to see your final product!

Adonirei Alvarenga, MSN, C-PNP
Certified Health Coach

On Mon, Jun 25, 2012 at 6:10 PM, shanna keele <shannakeele@yahoo.com> wrote:

Hi Ms. Alvarenga,

Thank you for getting back with me. I'm attaching the article that referenced you and your work (please see page 311-at least I believe it may be you), along with Word copies of the study critique forms. I hope that helps. Sorry, I should have included them with the earlier email. Thanks again for your consideration. Shanna :)

References

Agnes, M. (Ed.). (2000). *Webster's new world college dictionary* (4th ed.). Foster City, CA: IDG Books Worldwide, Inc.

Allen, L. (2008). The nursing shortage continues as faculty shortage grows. *Nursing Economic$, 26*(1), 35-40.

Alvarenga, A. (2005). *Factors that influence breastfeeding duration in low-income women in the United States*. Orlando, FL: Major scholarly work presented to the University of Central Florida.

American Association of Colleges of Nursing (AACN). (2011). *2011 annual report: Shaping the future of nursing education.* Retrieved from http://www.aacn.nche.edu/aacn-publications/annual-reports/AR2011.pdf

American Nurses Association. (2014, January 18). *The American nurse: An issue of weight*. Retrieved from http://www.theamericannurse.org/index.php/2013/03/01/an-issue-of-weight/

American Public Health Association. (2014). *Public health and chronic disease*. Retrieved from http://www.apha.org/NR/rdonlyres/9A621245-FFB6-465F-8695-BD783EF2E040/0/ChronicDiseaseFact_FINAL.pdf

American Research Group, Inc. (2012). *Margin of error calculator*. Retrieved from http://americanresearchgroup.com/moe.html.

Anderson, K. N. (1994). *Mosby's medical, nursing & allied health dictionary* (4th ed.). St. Louis, MO: Mosby-Year Book, Inc.

Anderson, M., Li, Y., Bechhofer, F., McCrone, D., & Stewart, R. (2000). Sooner rather than later? Younger and middle-aged adults preparing for retirement.

Aging and Society, 20, 445-466.

Bassett, W. F., Fleming, M. J., & Rodrigues, A. (1998). How workers use 401(k) plans: The participation, contribution, and withdrawal decision. *National Tax Journal, 51*, 263-289.

Behling, J. H., & Merves, E. S. (1985). Pre-retirement attitudes and financial preparedness: A cross-cultural and gender analysis. *Journal of Sociology and Social Welfare*, *12*(1), 113-128.

Benchmark. (2014). *Frequently asked questions*. Retrieved from http://www.benchmarkemail.com/help-FAQ/answer/what-is-a-typical-survey-response-rate

Blakeley, J., & Ribeiro, V. (2008). Early retirement among registered nurses: Contributing factors. *Journal of Nursing Management, 16*, 29-37.

Boyle, D. K., Miller, P. A., Gajewski, B. J., Hart, S. E., Dunton, N. (2006). Unit type differences in RN workgroup job satisfaction. *Western Journal of Nursing Research, 28*(6), 622-640.

Buerhaus, P. I. (2009). The shape of the recovery: Economic implications for the nursing workforce. *Nursing Economic$, 27*(5), 336-340.

Buerhaus, P. I., & Auerbach, D. I. (2011). The recession's effect on hospital registered nurse employment growth. *Nursing Economic$*, *29*(4), 163-167.

Buerhaus, P., Staiger, D., & Auerbach, D. (2000). Policy responses to an aging registered nurse workforce. *Nursing Economic$, 18*(6), 278.

Bureau of Labor Statistics. (2012). *Occupation employment and wages, May 2012; 29-1141 Registered Nurses.* Retrieved from http://www.bls.gov/oes/current/oes291141.htm

Burns, N., & Grove, S. K. (2009). Selecting a quantitative research design. *The practice of nursing research* (6th ed.) St. Louis, MO: Saunders Elsevier.

Conley, V. M. (2005). Demographics and motives affecting faculty retirement. *New Directions for Higher Education, 132,* 9-30.

Cyr, J. (2005). Retaining older hospital nurses and delaying their retirement. *Journal of Nursing Administration*, *35*(12), 563-567.

De Preter, H., Van Looy, D., & Mortelmans, D. (2013). Individual and institutional push and pull factors as predictors of retirement timing in Europe: A multilevel analysis. *Journal of Aging Studies*, *27*(4), 299-307.

DeVellis, R. F. (2012). *Scale development: Theory and applications* (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Ekerdt, D. J. (2004). Born to retire: The foreshortened life course. *Gerontologist*, *44*(1), 3-9.

Employee Benefit Research Institute. (2012). *The 2012 retirement confidence survey: Job insecurity, debt weigh on retirement confidence, savings*. Retrieved from http://www.ebri.org/publications/ib/index.cfm?content_id=5017&fa=ibDisp

Fidelity Investments. (2011). *Nurses study: Executive summary of key findings*. Retrieved from https://communications.fidelity.com/tem/2012/hospitals/docs/Fidelity_Nurses_Study_September_2011.pdf

Fox, R., & Abrahamson, K. (2009). A critical examination of the U.S. nursing shortage: Contributing factors, public policy implications. *Nursing Forum*, *44*(4), 235-244.

Friedman, S. L., & Scholnick, E.K. (1997). An evolving "blueprint" for planning: Psychological requirements, task characteristics, and social-cultural influences. In S. L. Friedman & E. K. Scholnick (Eds.), *The developmental psychology of planning: Why, how, and when do we plan?* (pp. 3-22). Mahwah, NJ: Erlbaum.

Friedrich, L. A., Prasun, M. A., Henderson, L., & Taft, L. (2011). Being a seasoned nurse in active practice. *Journal of Nursing Management*, *19*(7), 897-905. doi:10.1111/j.1365-2834.2011.01294.x

G*Power Analysis. (n.d.). *G power 3.1*. Retrieved from www.psycho.uni-duesseldorf.de/aap/projects/gpower/

Geiger, R. L., (2013). *The RSP: What it is, what it isn't and specifics*. Retrieved from http://creativeretirementnow.com/retirement-success-profile/

Gerrans, P., & Hershey, D. A. (2013). *The role of financial literacy and financial adviser anxiety in older Australians advice seeking*. Technical report published by the National Seniors Australia Productive Ageing Centre. Melbourne, Australia. Retrieved from http://www.productiveageing.com.au/userfiles/file/Final%20version%20Financial%20Literacy.pdf

Giger, J. N. (2013). *Transcultural nursing: Assessment and intervention*. St. Louis, MO: Elsevier Mosby.

Glass, J. R., & Kilpatrick, B. B. (1998). Financial planning for retirement: An imperative for baby boomer women. *Educational Gerontology*, *24*(6), 595-617. doi:10.1080/0360127980240606

Griffin, B., Loh, V., & Hesketh, B. (2013). Age, gender, and the retirement process. In M. Wang (Ed.), *The Oxford handbook of retirement* (pp. 202-214). New York, NY: Oxford University Press.

Gustman, A. L., & Steinmeier, T. L. (2000). Retirement outcomes in the health and retirement study. *Social Security Bulletin*, *63*(4), 57.

Hanisch, K. A., & Hulin, C. L. (1990). Job attitudes and organizational withdrawal: An examination of retirement and other voluntary withdrawal behaviors. *Journal of Vocational Behavior, 37*(1), 60-78.

Health Resources and Services Administration Bureau of Health Professionals. (2013). *The U.S. nursing workforce: Trends in supply and education*. Retrieved from http://bhpr.hrsa.gov/healthworkforce/reports/nursingworkforce/nursingworkforcefullreport.pdf

Hershey, D. A. (2004). Psychological influences on the retirement investor. *Certified Senior Advisor, 22,* 31-39.

Hershey, D. A., Jacobs-Lawson, J. M., McArdle, J. J., & Hamagami, F. (2007). Psychological foundations of financial planning for retirement. *Journal of Adult Development, 14*, 26-36. doi:10.1007/s10804-007-9028-1.

Hershey, D. A., & Mowen, J. C. (2000). Psychological determinants of financial preparedness for retirement. *The Gerontologist*, *40*(6), 687-697.

Hill, K. S. (2010). Improving quality and patient safety by retaining nursing expertise. *Online Journal of Issues in Nursing, 15*(3), 1-10.

Hill, T. (2011). *The economic recession: Impact on employment trends and retirement patterns*. Retrieved from http://www.towerswatson.com/united-states/newsletters/insider/5086

Hinkle, D. E., Wiersma, W., & Jurs, S. G. (2003). *Applied statistics for the behavioral sciences* (5th ed.). Boston, MA: Houghton Mifflin Company.

Howlett, E., Kees, J., & Kemp, E. (2008). The role of self-regulation, future orientation, and financial knowledge in long-term financial decisions. *Journal of Consumer Affairs*, *42*(2), 223-242.

Internal Revenue Service. (2014). *Retirement topics: Catch up contributions*. Retrieved from http://www.irs.gov/Retirement-Plans/Plan-Participant,-Employee/Retirement-Topics-Catch-Up-Contributions

Jacobs-Lawson, J. M., & Hershey, D. A. (2005). Influence of future time perspective, financial knowledge, and financial risk tolerance no retirement saving behaviors. *Financial Services Review*, *14*(4), 331-344.

Jacobs-Lawson, J. M., Hershey, D. A. & Neukam, K. A. (2004). Gender differences in factors that influence time spent planning for retirement. *Journal of Women & Aging, 16* (3/4), 55-69.

Jevitt, C.M., & Beckstead, J.W. (2004). Retirement among Florida's certified nurse-midwives: An impending workforce crisis. *Journal of Midwifery & Women's Health*, *49*(3), 272-273.

Johnson, T. P., & Wislar, J. S. (2012). Response rates and nonresponse errors in surveys. *The Journal of the American Medical Association, 307*(17), 1805-1806.

Julié, M., Kilty, K. M., & Richardson, V. (1995). Social worker preparedness for retirement: Gender and ethnic considerations. *Social Work*, *40*(5), 610-620.

Keele, S., & Alpert, P. T. (2013). Retirement financial planning and the RN. *Journal of Nursing Administration, 43*(11), 574-580.

Kelly, N., & Swisher, L. (1998). The transitional process of retirement for nurses. *Journal of Professional Nursing*, *14*(1), 53-61.

Kermann, B. C. (1998). Motivation and stages of change in financial counseling: An application of a transtheoretical model from counseling psychology. *Financial Counseling and Planning, 9*, 13-20.

Kim, J., Kwon, J., & Anderson, E. A. (2005). Factors related to retirement confidence: Retirement preparation and workplace financial education. *Financial Counseling and Planning, 16*(2), 77-89.

Klug, S. H. (2009). Recruit, respect, and retain: The impact of baby boomer nurses on hospital workforce strategy-A case study. *Creative Nursing*, *15*(2), 70-74.

Knowles, J. (2010). Establishing a sustainable nursing workforce. *Nursing Management - UK*, *17*(4), 34-36.

Koposko, J. L. (2012). *Parental and social influences on understanding of financial planning for retirement.* Master's thesis completed at Oklahoma State University. Department of Psychology.

Kossek, E. E., & Berg, P. (2012). *Sustainable workforce*. Retrieved from http://www.thesustainableworkforce.org/index.php/sustainable-workforce

Kowalski, S., Dalley, K., & Weigand, T. (2006). When will faculty retire?: Factors influencing retirement decisions of nurse educators. *Journal of Nursing Education*, *45*(9), 349-355.

LaLanne, J., Rettick, M. J., & Linkletter, A. (2008). *Fiscal fitness: 8 steps to health and wealth from America's leaders in fitness and finance.* Franklin Lakes, NJ: Career Press.

Leatt, P., & Schneck, R. (1980). Difference in stress perceived by head nurses across nursing specialties in hospitals. *Journal of Advanced Nursing, 5*(1), 31-46.

Letvak, S. (2002). Retaining the older nurse. *Journal of Nursing Administration*, *32*(7/8), 387- 392.

Marks, L. D., Dollahite, D. C., & Dew, J. P. (2009). Enhancing cultural competence in financial counseling and planning: Understanding why families make religious contributions. *Journal of Financial Counseling and Planning, 20*(2), 13-26.

McHaney, D., & Varner, J. (2006). Accommodating the needs of the aging registered nurse workforce. *Alabama Nurse*, *33*(3), 24-25.

Mion, L., Hazel, C., Cap, M., Fusilero, J., Podmore, M., & Szweda, C. (2006). Retaining and recruiting mature experienced nurses: A multicomponent organizational strategy. *Journal of Nursing Administration*, *36*(3), 148-154.

Moore, K. A. (1992). *Nurses' economic preparation for retirement*. Ann, Arbor, MI: University Microfilms International.

Moore, K., & Biordi, D. (1995). Nurses' retirement preparation. *Journal of Nursing Administration, 25*(6), 62-67.

Morgan, L. A., & Eckert, J. (2004). Retirement financial preparation: Implications for

      policy. *Journal of Aging & Social Policy*, *16*(2), 19-34.

National Council of State Boards of Nursing. (2013). *A profile of 2013 nursing licensure*

      in the U.S. Retrieved from https://www.ncsbn.org/3871.htm

Noone, J., Alpass, F., & Stephens, C. (2010). Do men and women differ in their

      retirement planning? Testing a theoretical model of gendered pathways to

      retirement preparation. *Research on Aging*, *32*(6), 715-738.

Nooney, J. G., Unruh, L., & Yore, M. M. (2010). Should I stay or should I go? Career

      change and labor force separation among registered nurses in the U.S. *Social*

      Science & Medicine, *70*(12), 1874-1881. doi:10.1016/j.socscimed.2010.02.037

Norman, L. D., Willis, G., Donelan, K., Williams, M., Buerhaus, P. I., Ulrich, B., &

      Dittus, R. (2005). The older nurse in the workplace: does age matter? *Nursing*

      Economic$, 23(6), 282-289.

Novotney, A. (2014). *Facing up to debt*. Retrieved from

      https://www.apa.org/gradpsych/2013/01/debt.aspx

Oksanen, T., & Virtanen, M. (2012). Health and retirement: A complex relationship.

      European Journal of Ageing, *9*(3), 221-225.

O'Brien-Pallas, L., Alksnis, C., Wang, S., Birch, S., Murphy, G.T., Roy, F. A., & Sajan,

      P. (2003). Early retirement among RNs: Estimating the size of the problem in

      Canada. *Longwoods Review 1*(4), 2-9.

O'Brien-Pallas, L., Duffield, C., & Alksnis, C. (2004). Who will be there to nurse?

      Retention of nurses nearing retirement. *Journal of Nursing Administration*, *34*(6),

      298-302.

Orbell, S., Perugini, M., & Rakow, T. 2004. Individual differences in sensitivity to health communication: Consideration of future consequences. *Health Psychology, 23*(4): 388–396.

Organization for Economic Cooperation and Development. (2011). Measuring financial literacy: Core questionnaire in *Measuring financial literacy: Questionnaire and guidance notes for conducting an internationally comparable survey of financial literacy.* Paris: OECD. Retrieved from http://www.oecd.org/finance/financial-education/49319977.pdf

Padawer, E., Jacobs-Lawson, J., Hershey, D., & Thomas, D. (2007). Demographic indicators as predictors of future time perspective. *Current Psychology, 26*(2), 102-108.

Pallant, J. (2007). *SPSS survival manual. A step by step guide to data analysis using SPSS for Windows* (3rd ed.). Berkshire, England: McGraw-Hill House.

Palumbo, M., McIntosh, B., Rambur, B., & Naud, S. (2009). Retaining an aging nurse workforce: Perceptions of human resource practices. *Nursing Economic$*, *27*(4), 221.

Quinn, J. F. (1977). Microeconomic determinants of early retirement: A cross-sectional view of white married men. *The Journal of Human Resources, 12*(3), 329-346.

Raosoft. (2004). *Sample size calculator*. Retrieved from http://www.raosoft.com/samplesize.html

Rijs, K. J., Cozijnsen, R., & Deeg, D. H. (2012). The effect of retirement and age at retirement on self-perceived health after three years of follow-up in Dutch 55–64-year-olds. *Ageing & Society*, *32*(2), 281-306.

114

Rosenfeld, P. (2007). Workplace practices for retaining older hospital nurses: Implications from a study of nurses with eldercare responsibilities. *Policy, Politics & Nursing Practice*, *8*(2), 120-129.

Robert Wood Johnson Foundation. (1998). *Academic advancement: Women, minority medical faculty lag behind their male, white colleagues*. Retrieved from http://www.rwjf.org/reports/grr/019600s.htm

Robert Wood Johnson Foundation. (2006). *Wisdom at work: The importance of the older and experienced nurse in the workplace.* Retrieved from http://www.rwjf.org/files/publications/other/wisdomatwork.pdf

Rosnick, D. & Baker, D. (2009). *The wealth of the baby boom cohorts after the collapse of the housing bubble*. Washington D.C.: Center for Economic and Policy Research. Retrieved from http://www.cepr.net/documents/publications/baby-boomer-wealth-2009-02.pdf

Smith, Y. How to love and care for yourself unconditionally. *American Nurse Today, 8*(1), 30-33.

Spetz, J., & Adams, S. (2006). How can employment-based benefits help the nurse shortage? *Health Affairs*, *25*(1), 212-218. doi:10.1377/hlthaff.25.1.212

St. Pierre Schneider, B., Menzel, N., Clark, M., York, N., Candela, L., & Xu, Y. (2009). Nursing's leadership in positioning human health at the core of urban sustainability. *Nursing Outlook*, *57*(5), 281-288.

Stawski, R. S., Hershey, D. A., & Jacobs-Lawson, J. M. (2007). Goal clarity and financial planning activities as determinants of retirement savings contributions. *The International Journal of Aging and Human Development, 64*(1), 13-32.

Strohfus, P., & Schrader, V. (2009). Spotlight on. Assisting nursing students to plan for

    retirement. *Nurse Educator*, *34*(2), 54-55.

SurveyMonkey. (n.d.). *Survey sample size*. Retrieved from

    https://www.surveymonkey.com/mp/sample-size/

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston,

    MA: Pearson Education, Incorporated.

The Free Dictionary. (2013). *Job satisfaction* [Def. 1]. Retrieved from

    http://www.thefreedictionary.com/job+satisfaction

United States Census Bureau. (2012). *Measuring America: People, places and our

    economy*. Retrieved from http://www.census.gov/population/age/

United States Department of Health and Human Services (USDHHS). (2004). *What is

    behind HRSA's projected supply, demand, and shortage of registered nurses?*

    Retrieved from http://dwd.wisconsin.gov/healthcare/pdf/behind_the_shortage.pdf

United States Department of Labor. (2007). *Women and retirement savings*. Retrieved

    from http://www.dol.gov/ebsa/publications/women.html

United States Department of Labor. (2014). *Frequently asked questions about retirement

    plans and ERISA*. Retrieved from

    http://www.dol.gov/ebsa/faqs/faq_compliance_pension.html

University of Michigan. (2007). *Growing older in America: The health and retirement

    study*. Retrieved from

    http://hrsonline.isr.umich.edu/sitedocs/databook/HRS_Text_WEB_intro.pdf

Valencia, D., & Raingruber, B. (2010). Registered nurses' views about work and

    retirement. *Clinical Nursing Research, 19*(3), 266-288.

Van Solinge, H., & Henkens, K. 2008. Adjustment to and satisfaction with retirement: two of a kind? *Psychology and Aging, 23*(2), 422-434.

Wang, M. (2013). Retirement: An introduction and overview of the handbook. In M. Wang (Ed.)., *The Oxford handbook of retirement* (pp. 3-8). New York, NY: Oxford University Press.

Wang, M., & Shi, J. (2014). Psychological research on retirement. *Annual Review of Psychology*, *65*(1), 209-233.

Whittemore, R. & Knafl, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing 52*, 546-553.

Wiggins, S. D., & Henderson, C. M. (1996). Preretirement planning of female registered nurses. *Western Journal of Nursing Research, 18*, 580-594.

Women's Institute for a Secure Retirement. (2009). *Nurses retirement decision-making guide*. Retrieved from https://www.wiserwomen.org/images/imagefiles/wiserNursesDecisionMkingGuide10.09v2.pdf

Woodruff, M. (2014, January 16). *Four people who earn six figures and still feel broke* [Blog post]. Retrieved from http://finance.yahoo.com/blogs/daily-ticker/i-earn-six-figures-and-still-feel-broke-215546862.html

Zimbardo, P. G., & Boyd, J. N. (1999). Putting time in perspective: A valid, reliable, individual-differences metric. *Journal of Personality and Social Psychology, 77*(6), 1271-1288.

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Keele, S., & Alpert, P. T. (2013). Retirement financial planning and the RN. *Journal of Nursing Administration, 43*(11), 574-580.

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