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Job stress, mentoring, psychological empowerment, and job satisfaction among nursing faculty

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JOB STRESS, MENTORING, PSYCHOLOGICAL

EMPOWERMENT, AND JOB SATISFACTION

AMONG NURSING FACULTY

by

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Bachelor of Arts
The University of Iowa
1996

Master of Arts
The University of Iowa
1999

Bachelor of Science
The University of Iowa
2002

A dissertation submitted in partial fulfillment
of the requirements for the

Doctorate of Philosophy in Nursing

School of Nursing
Division of Health and Sciences
The Graduate College

University of Nevada, Las Vegas
December 2011

THE GRADUATE COLLEGE

We recommend the thesis prepared under our supervision by

Catherine Emily Ebersole Chung

entitled

Job Stress, Mentoring, Psychological Empowerment, and Job Satisfaction Among Nursing Faculty

be accepted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Nursing
Department of Nursing

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December 2011

ABSTRACT

The National League for Nursing (NLN) endorses mentoring throughout the nursing faculty career trajectory as the method to recruit nurses into academia and improve retention of nursing faculty within the academy (NLN, 2006). One way mentoring assists faculty is by easing socialization to the culture of the employing institution and decreasing faculty stress (Lewallen, Crane, Letvak, Jones, & Hu, 2003). Mentoring can also be a facilitating factor of an individual's psychological empowerment. Academia is an environment able to foster psychological empowerment, a state in which faculty may be self-directed, highly productive, confident, and find a meaningful connection to their work (Spreitzer, 1995a).

This research study was a descriptive cross-sectional quantitative design, conducted via online survey administered by Survey Monkey. A nationwide sample of 959 Commission on Collegiate Nursing Education (CCNE) accredited full-time nursing faculty completed the study. The survey was comprised of a researcher-created demographic questionnaire plus several psychometrically tested instruments: Dreher's mentoring scale, Gmelch's faculty stress index, Spreitzer's psychological empowerment scale, and the National Survey for Postsecondary Faculty's (NSOPF) job satisfaction scale.

The average subject ($N = 959$) is female, 53 years old, Caucasian, married, and is not presently supporting dependent children. Professionally the average subject was doctorally prepared, and does not hold additional employment to their full-time faculty job. In addition, the following were the most commonly occurring career characteristics of the sample; less than 10 years of experience as a full-time faculty member, less than 10

years of employment at the current institution, rank of assistant professor or clinical assistant professor, untenured, and an annual salary of $70,000 to $79,999.

Results showed that 40% of the sample had a current work mentor. Variables showed significant relationships to job satisfaction ($p < .01$): mentoring quality (.229), job stress (-.568), and psychological empowerment (.482). Multiple regression results indicated that job satisfaction was significantly influenced ($p < .01$) by the presence of a mentoring relationship ($\beta = .110$, $t = 3.477$, $p < .001$), salary ($\beta = .171$, $t = 4.582$, $p < .0005$), tenure status ($\beta = -.094$, $t = -2.722$, $p < .007$), psychological empowerment ($\beta = .305$, $t = 8.860$, $p < .0005$), and job stress ($\beta = -.426$, $t = -12.851$, $p < .0005$). The regression model explained 47% of the variance in job satisfaction for the sample.

Acknowledgements

First, to my committee: thank you for sharing your wisdom and for being so very supportive. Dr. Yucha, thank you for your pragmatism and encouragement. Dr. Clark, thank you for sharing your gift with conceptual framework and modeling. Dr. Rosser, your energy is infectious, and thank you for your methodology insights. Dr. Kowalski, I know that taking on the mantle of 'chairperson' ended up being a bigger job than you originally thought, and I can't express adequately how your kindness and positive support motivated me. I can only aim to give the same support to future graduate students as this committee has given to me.

Friends and co-workers, you have stood by through the years of coursework, research, and writing. You have listened to my stories and endured my mood swings. Near or far, you have lent support and helped me believe I could complete this dissertation even when I doubted myself. Thank you—Tammy, Kate, Catherine, Lara, Teri, JP, Jenny, Mandy, Stacy, Crystal, Amber, Jami-Sue, Krystal, Kellen, & Teresa.

Finally, to my family. To my in-laws, who assumed I would achieve this end goal from the day I received my admission letter. To my parents and brother, who helped so very much with childcare, transportation, and keeping us fed. To my children, Isabella, Gavin, and Aurora. Bella, you watching Rory and doing your chores helped me concentrate on my school work. Gavin, your fun-loving attitude and hugs kept me smiling. Rory, thank you for entertaining yourself by writing your 'dissewtation' while I wrote mine. Most importantly, to my #1 fan, my husband Jim. Without your hard work at home and your love and encouragement throughout this doctoral journey, I am not sure I would be here today. Thank you for helping me be my best self.

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CHAPTER 1: INTRODUCTION

Although there are over three million registered nurses in the United States there is a severe shortage of nurses with higher education who serve as faculty members. Approximately 12% of nurses hold a master's degree and fewer than 0.9% hold a doctoral degree (U.S. Department of Health and Human Services Health Resources Services Administration [HRSA], 2010). Overall, nursing faculty members, especially doctorally-prepared faculty members, expand and communicate the knowledge base of the nursing profession (American Association of Colleges of Nursing [AACN], 2010).

Within the academy, faculty members perform a variety of functions to serve the knowledge base of the nursing profession. The functions are conceptualized into three primary areas: teaching, scholarship, and service—the academic triumvirate (Honeycutt, Thelen, & Ford, 2010; Kaufman, 2007c; Kim, Twombly, & Wolf-Wendel, 2008). The academic triumvirate is the framework upon which faculty workloads are planned. Nursing faculty utilize the academic triumvirate to accomplish the goals of the nursing discipline: developing the science of nursing, being stewards to the discipline of nursing, and educating the next generation of nurses (AACN, 2010).

Examples of nursing faculty responsibilities within teaching include coordinating undergraduate programs and instructing undergraduates to meet the need for clinical practitioners who perform safe patient care (Allen, 2008). Teaching also encompasses creating and instructing evidence-based nurse practitioner curricula, which results in increased access to evidence-based primary care in the community (Considine & Fielding, 2010). Scholarship incorporates generating and disseminating knowledge to improve patient safety through projects such as the Quality and Safety Education for

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Nurses (QSEN) (Cronenwett, Sherwood, & Gelmon, 2009). Scholarship may include establishing programs of research to serve as mentoring opportunities for doctoral students to develop their own programs of research, such as via the National Institutes of Health (NIH) T32 National Research Service Award (NRSA) funding mechanism (Dixon et al., 2007). Faculty service activities include serving on department or university committees, or other unpaid professional volunteer activities, such as leadership positions at scholarly conferences (Honeycutt, et al., 2010).

The mission of the academic institution determines the workload balance of teaching, scholarship, and service that is required of a faculty member, but in most cases all faculty members are required to participate in all three areas. The academic institution's policies dictate the balance of teaching, scholarship, and service. Complicating this workload balance equation for nursing faculty is the expectation that clinical competence will be maintained. This means clinical practice outside of the faculty role which requires additional time and energy expenditure by the faculty member (AACN, 2010a; Kaufman, 2007c). Nursing faculty work has been shown to be highly stressful because of these various demands (Spurlock Jr., 2008).

Increasing the complexity of the faculty role further are the dramatic changes that healthcare environments are facing from organizational leaders in nursing education such as QSEN and the National League for Nursing (NLN). These organizational leaders have called for rapid and far-reaching nursing education reform in response to healthcare advancements, the Affordable Care Act, and patient safety data. The Robert Wood Johnson Foundation (RWJF) and the Institute of Medicine (IOM) recently published The future of nursing: Leading change, advancing health (2011) which calls for transforming

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nursing education. Recommendations include increasing the numbers of graduates at all educational levels, preparing nurses for the rapidly changing healthcare environment via updated, contemporary curricula, and increasing collaboration between disciplines. All of these reforms require increased numbers of faculty. Retaining experienced faculty and increasing numbers of new faculty is vital.

A unique characteristic of nursing academia is that many nurses work in the clinical setting for years, perhaps decades, before entering academia. Transitioning from a clinical culture to an academic culture has been described as a dramatic transition wherein the expert clinician becomes a novice educator (McDonald, 2010). New educators are not necessarily matriculating from their graduate studies into the faculty role; they may have been practicing in a completely different environment. Use of mentoring has been advocated to ease this transition (Smith & Zsohar, 2007).

Therefore, although nursing faculty members are vital to the future of nursing education in the United States, the complexity of the nurse educator role is multifaceted, often overwhelming, and stressful (Shirey, 2006). Moving from a clinical role in which expertise had been achieved to an academic role in which s/he is a novice may cause an overwhelming amount of job stress (McDonald, 2010). Job stress has been linked to decreased job satisfaction (Disch, Edwardson, & Adwan, 2004), decreased retention (Baker, 2010; Kaufman, 2007a) and even burnout (Shirey, 2006; Spurlock Jr., 2008). These negative outcomes will not serve nursing education. This generates an urgency to determine effective strategies for facilitating faculty job satisfaction and, in turn, retention.

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Background

There are insufficient numbers of nursing faculty, especially at the doctorally-prepared level. Currently, there are 1,088 vacant funded full-time nursing faculty positions in the United States and 940 of those seek doctorally-prepared faculty, but the supply of nurses meeting the criteria of these open positions is inadequate (AACN, 2010a; AACN, 2011; Fang & Li, 2011). These figures represent a 7.7% full-time faculty vacancy rate. Schools of nursing reported to AACN that the top reason that 54,686 entry-level bachelor of science in nursing (BSN) applicants, 1,452 RN-to-BSN applicants, 10,223 master's applicants, and 1,202 doctoral applicants are denied admission is a lack of qualified faculty (AACN, 2011). The demand for nursing faculty, especially doctorally prepared, far exceeds the supply. This problem is evidenced in the nursing literature as the nursing faculty shortage (Allen, 2008; AACN, 2011; Potempa, Redman, & Landstrom, 2009).

In addition to having insufficient faculty available to educate nurses at all levels the demand for clinical nurses at all educational levels is increasing. By 2025, the U.S. registered nurse workforce will be understaffed by 260,000 nurses (AACN, 2010a). Both the clinical nursing shortage and the nursing faculty shortage are due in part to the aging population of baby boomers. Baby boomers have begun to reach 65 years, and at this age, their use of health care is rising substantially (Davis & Roberts, 2010) which necessitates increased numbers of clinical nurses and primary care provider nurse practitioners. Additionally, it is unknown how the Affordable Care Act will affect nursing supply needs, but it is expected that demands on nursing at all levels of care will be increased (IOM, 2011).

The baby boomer generation is an influence in the supply of doctorally-prepared nursing faculty as well. The average age of doctorally-prepared nursing faculty is 60.5 years for professors, 57.1 years for associate professors, and 51.5 years for assistant professors (AACN, 2011). Nursing faculty, in recent history, have retired at 62.5 years (Berlin & Sechrist, 2002) and faculty have expressed their desire to retire at 62.4 years (Kowalski, Dalley, & Weigand, 2006). There have been 200-300 faculty members facing retirement each year from 2003-2012 and this number is expected to increase over the next decade (Berlin & Sechrist, 2002).

An important note regarding salaries of doctorally-prepared nursing faculty: on average, faculty salaries are no higher than staff nurses, and up to 150% lower than master's prepared nurse practitioner counterparts (Allen, 2008). The average annual salary for a full-time nurse practitioner is $98,760 (American Academy of Nurse Practitioners (AANP), 2011). Salaries are a major point of dissatisfaction and a retention problem for nursing faculty (Carlson, 2009; Kaufman, 2007a; Rouse, 2006; Smart, Pruitt, Cox, & Deane, 2008; Yucha & Witt, 2009).

The resulting intersection of the nursing faculty shortage, sweeping education changes advocated by the NLN and QSEN, and faculty salaries that are inadequate compensation for the educational preparation is increased stress and decreased job satisfaction of practicing faculty (Disch, et al., 2004; Shirey, 2006). Decreased job satisfaction has been linked to decreased retention among nursing faculty (Baker, 2010; Disch, et al., 2004; Kaufman, 2007a; Lambert, 1991; Tucker-Allen, 2000). Retaining faculty is essential in nursing education today. Therefore, strategies to maintain or increase faculty satisfaction are crucial.

Mentoring has been proposed as a solution to the nursing faculty shortage by both NLN (2006) and AACN (2005). The NLN position statement regarding mentoring of nursing faculty (2006) calls for mentoring as the "primary strategy to establish healthful work environments and facilitate the ongoing career development of nurse faculty" (p. 1). The AACN published a report regarding the faculty shortage and strategies to surmount the shortage in 2005. AACN acknowledges the rapid pace of change in both healthcare and education which is impacting nursing education dramatically. One of the main issues AACN discusses as facilitating an environment for growth of nurse educators is to maintain professional development and a mentoring relationship (AACN, 2005).

Mentoring is said to be benefit nursing faculty in multiple ways. Mentoring improves faculty socialization (McDonald, 2010), facilitates faculty role development (Jacelon, Zucker, Staccarini, & Henneman, 2003), increases scholarly production (Records & Emerson, 2003), decreases novice faculty stress (Lewallen, et al., 2003), and assists with recruitment and retention (Sawatzky & Enns, 2009). Benefits of mentoring are stated in the literature, but large-scale studies regarding mentoring and its outcomes are few.

One benefit of mentoring is believed to be improved psychological empowerment (Luna & Cullen, 1995). Psychological empowerment is defined as fundamental personal beliefs that employees have about their role in relation to the employing organization (Spreitzer & Quinn, 2001). The beliefs are organized into four dimensions: self-determination, meaning, competence, and impact (Spreitzer, 1995a). Psychological empowerment at work is developed within an individual; it is not granted by a superior or institution (Spreitzer & Quinn, 2001). However, the development of psychological

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empowerment may be enabled by appropriate work conditions, and the NLN has suggested mentoring as one way that faculty empowerment may be facilitated (NLN, 2006). Mentoring is a method to socialize faculty into their role and the institutional culture. Mentoring may assist faculty with psychological empowerment by, for example, allowing faculty to gain competence through understanding non-documented practices within the employing institution.

Statement of the Problem

The association between job stress among nursing faculty, psychological empowerment at work, and job satisfaction has not been examined in relation to the presence of a mentoring relationship. The present study aimed to fill this gap by assessing the differences in levels of job stress among nursing faculty, psychological empowerment at work, and job satisfaction for mentored versus non-mentored nursing faculty. Additionally, mentoring relationships were examined to determine how the quality of the relationship affected job stress, psychological empowerment, and job satisfaction. Current faculty mentoring relationships in relation to psychological empowerment, job stress, and job satisfaction is an innovative research area.

Purpose of the Dissertation

The purpose of this research study was to examine mentoring relationships among nursing faculty in order to understand their possible impact upon job stress and psychological empowerment, and whether these variables ultimately affect job satisfaction. Demographic variables were also investigated for their possible explanation of job satisfaction.

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Study of the presence or absence of a mentoring relationship among nursing faculty in relation to psychological empowerment and job stress is necessary to determine whether current mentoring efforts effectively increase job satisfaction. Measuring the quality of mentoring relationships will give further detail about how mentoring affects faculty on the concepts of job stress, psychological empowerment, and job satisfaction. Once these relationships are known appropriate interventions may be developed and utilized to assist nursing faculty in their management of the faculty role with the assistance of a mentor, which may result in greater faculty satisfaction and retention.

Overview of Conceptual Framework

The conceptual framework for this study uses four theories to provide theoretical support and understanding of the relationships among the study concepts. This eclectic conceptual framework draws upon Gmelch's stress theory, Dreher and Ash's mentoring theory, Spreitzer's psychological empowerment theory, and Herzberg's job satisfaction theory as applied to nursing faculty.

Gmelch's stress theory defines stress as a psychological response to any "stressor" (Gmelch, 1993, p. 6): the stressor occurs, the individual copes, and then the individual needs a period of recovery. If the individual does not feel they have adequate coping skills, or if recovery doesn't occur due to consecutive stressors, the system will break down. The individual will become ill, ineffective, or burned out. If the mentoring relationship is present to model positive coping strategies and give social support stress may be decreased (Kram, 1983; Kram & Hall, 1989). These positive coping strategies give the mentee a feeling of increased competence which increases psychological empowerment and job satisfaction (Luna & Cullen, 1995).

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Mentoring relationships affect both career and psychosocial spheres in the workplace which apply to the gamut of work life. Career functions include coaching, challenging assignments, sponsorship, and protection. Psychosocial functions include role modeling, friendship, and counseling (Dreher & Ash, 1990; Kram, 1983; Kram & Hall, 1989). Mentoring relationships contribute to these work areas by facilitating increased social networks for the mentee that could not be accessed without the mentor, and modeling of successful behaviors by the mentor. Mentoring can decrease stress by modeling work/life balance and positive coping techniques, as well as introducing the mentee to social networks which offer social support and access to information about the work environment (Dreher & Ash, 1990).

Psychological empowerment theory states that psychological empowerment is an internal process that occurs in the workplace via four dimensions: meaning, self-determination, competence, and impact (Spreitzer & Quinn, 2001). The positive behaviors and interactions a mentor models are able to be internalized by the mentee, thus increasing the mentee's self-determination and competence. These qualities promote an increase in psychological empowerment which may further decrease stress and increase job satisfaction.

Finally, job satisfaction is the individual's affective appraisal of their job—the overall feeling an individual has toward their work. Herzberg's theory of job satisfaction focuses on two criteria: intrinsic factors which deal with the work itself and extrinsic factors which deal with the environment the work is performed within. Ultimately work serves the desire to develop talents and the desire to avoid pain (Lyons, 2007).

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Faculty job satisfaction is linked to retention (Rosser, 2004). Increased job satisfaction means that the faculty member would feel the characteristics of the job itself are positive and the environment in which work takes place is positive as well. Mentoring serves both the work environment and the mentee's own work: the mentor serves as a source of information and support which create a positive environment, and the mentee internalizes the mentor's modeled behaviors toward the work itself. The social networks and modeling provided by the mentor theoretically reduce the mentee's job stress, increase psychological empowerment, and increase job satisfaction.

Research Questions

The following research questions provided direction for the study:

1. What percentage of nursing faculty are being mentored?

2. What is the quality of nursing faculty mentoring relationships?

3. How do mentored versus non-mentored nursing faculty differ by levels of job stress, psychological empowerment and job satisfaction?

4. What is the relationship among the dimensions of mentoring quality, job stress, psychological empowerment, and job satisfaction among nursing faculty?

5. Do demographic characteristics, mentoring status, job stress, and psychological empowerment explain job satisfaction among nursing faculty?

Research Design

The study is a descriptive cross-sectional quantitative design. Data were collected at one point in time via an online survey and the relationships between variables being measured were analyzed using appropriate statistical analytic techniques. Statistical

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Package for the Social Sciences (SPSS), version 19.0 (2010), was utilized for data analyses including descriptive statistics, Pearson product-moment correlations, one-way multiple analysis of variance (MANOVA), and standard multiple regression.

Definition of Terms

Several terms are defined in the context of the research study. These include the four main constructs: workplace mentoring, psychological empowerment, job stress, and job satisfaction of nursing faculty.

Nursing faculty: full-time faculty members in a department or school of nursing teaching in a BSN program or higher who hold a master's degree in nursing or a related discipline, or a terminal degree. Part-time faculty were excluded from this study.

Mentoring relationship: A current relationship between a mentor and mentee at the same academic institution. This was measured by a question on the researcher created demographic instrument asking whether the participant presently has a faculty mentor at the employing institution.

Mentor: A mentor is a faculty member who is comfortable with their role(s) in the employing academic institution and is currently helping the mentee with aspects of career development and achievement that facilitate success as nursing faculty member (Garbee & Killacky, 2008).

Mentee: A mentee is the person who is being mentored in the mentoring relationship.

Mentoring relationship quality: The mentee's perception of how much guidance the mentor gives with aspects of career development, achievement, and success in the

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mentee's career as a faculty member. This was measured using Dreher's mentoring scale (Dreher & Ash, 1990).

Psychological empowerment: Fundamental personal beliefs that employees have about their role in relation to the employing organization. The beliefs are organized into four dimensions: meaning, self-determination, competence, and impact (Spreitzer, 1995b). Psychological empowerment was measured by Spreitzer's psychological empowerment scale. The terms psychological empowerment and empowerment are used interchangeably in this document.

Job stress: One's anticipation of his or her inability to respond adequately to a perceived demand, accompanied by the anticipation of negative consequence(s) as the result of the inadequate response to work demand(s) (Gmelch, Wilke, & Lovrich, 1986). Job stress was measured by Gmelch's faculty stress index.

Job satisfaction: ''an overall affective orientation on the part of individuals toward work roles which they are presently occupying'' (Seifert & Umbach, 2008). Job satisfaction was measured with eight survey items from the instrument "National Survey of Postsecondary Faculty" created and psychometrically tested by the U.S. Department of Education Institute of Education Sciences National Center for Education Statistics (Heuer et al., 2006).

Assumptions and Limitations

Assumptions. It is important to identify assumptions early in the research process (Polit & Beck, 2008). A general assumption for survey-based research studies is that participants will respond truthfully, and that their responses will be affected by

various internal and external factors that the study cannot control, such as time, or critical world events.

Additional assumptions for this research study include:

1. The formation of relationships is a natural component of the human condition, and such relationships can have an impact on the quality of life for those involved in the relationship.

2. All individuals experience a fluctuating level of stress in their lives, which may vary from facilitating to hindering optimal functioning.

3. Human beings have free choice which may be used to make decisions that can influence their sense of empowerment.

4. An individual's sense of satisfaction is influenced by numerous internal and external factors.

5. Background and demographic characteristics can influence an individual's reality and perceptions.

Limitations. Limitations often affect the generalizability of a study (Polit & Beck, 2008). The participant responses limit the generalizability of this study to similar groups. This study is limited to nursing faculty who are employed in CCNE accredited programs, and the findings will only be generalizable to such faculty. This study measured the relationships between the concepts of mentoring, psychological empowerment, job stress, and job satisfaction at one point in time only, which does not allow for determination of causality.

The survey invitation was emailed to the entire target population. A limitation of inviting the entire target population to participate is that the results were from a sample

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who selectively chose to respond to the survey invitation—not a random sample. The sample may then be biased because the sample may be homogenous on confounding variables unknown to the researcher.

Significance of the Study

Mentoring is recommended by the NLN (2006) and AACN (2005) for nursing faculty to promote job satisfaction and productivity, yet large-scale national studies of nursing faculty's mentoring status (presence or absence of a mentoring relationship) and quality are few. This study fills that gap while developing knowledge regarding job satisfaction in nursing academia. This line of inquiry aims to promote nursing faculty retention. Job satisfaction has been linked to job retention among nursing faculty (Sawatzky & Enns, 2009).

This study may benefit nursing students at all levels as well. Graduate students focused on becoming faculty members can form mentoring relationships that benefit the graduate student who may adopt positive behaviors modeled by the mentor (AACN, 2010b). Undergraduate students are better served by faculty who have mentor support or who have higher levels of job satisfaction due to a mentoring relationship (Dunham-Taylor, Lynn, Moore, McDaniel, & Walker, 2008).

Ultimately this study aims to serve nursing education through a better understanding of nursing faculty job satisfaction. Nursing education is the foundation from which practitioners are created to serve the health of the community. Community members—whether frequent or infrequent health care consumers—deserve and need safe care. If current nursing faculty cannot adequately produce and retain enough nurses and

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future faculty members, then the nursing discipline and patient safety are at risk (IOM, 2011; Records & Emerson, 2003).

Chapter Summary

This chapter presented the research study by introducing and explaining the background of the topic, stating the problem and purpose of the study, giving an overview of the conceptual framework, research questions, research design, definition of terms, assumptions, limitations, and significance of the research study.

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CHAPTER 2: REVIEW OF THE LITERATURE

To understand the scope of mentoring research and its relationship to job stress, psychological empowerment, and job satisfaction among nursing faculty, a literature review was conducted. A documented link between job stress, mentoring, psychological empowerment, and job satisfaction was sought. There are a variety of studies that link two or even three of these concepts, but no studies were found that link all four concepts within one framework.

A literature search was conducted via the University of Nevada Las Vegas (UNLV) libraries utilizing PubMed, CINAHL, PsycInfo, Scopus, ERIC, and ProQuest electronic databases. Literature from the last ten years was the focus of the search to understand the state of the science of mentoring research in relation to job stress, psychological empowerment, and job satisfaction. Prior literature also is included in this review to understand the historical context of mentoring research.

The research study focuses on mentoring as a strategy to achieve job satisfaction and retention among nursing faculty via increased psychological empowerment and decreased job stress. Literature regarding job stress in general and in academia will be discussed first as it is viewed as a contributing source of job dissatisfaction as assessed in this study.

Job Stress

Job stress has been discussed in the literature at length and has been defined in multiple ways. Gmelch's definition of stress, "a demand on the body, physically or mentally, that exceeds the person's ability to cope" (1993, p. 6) is reflective of other generally accepted definitions such as those used by the National Institute for

Occupational Safety and Health and the European Agency for Safety and Health at Work. Therefore, job stress is any perceived demand at work that is too great for the person to manage. The importance of job stress can be summarized from the work of Nash:

> According to the American Institute of Stress, stress in the workplace affects four out of five American workers and costs U.S. businesses an estimated $300 billion a year from accidents on the job, absenteeism, employee turnover, diminished productivity, medical expenses, increased insurance premiums, workers compensation awards and lawsuits. (2010, p. 43)

Job stress has been assessed in multiple occupations, including truck drivers, engineers, military nurses, and academic faculty. Job stress has also been assessed in many countries around the world; it is not a problem exclusive to the United States. Paillé (2011) examined truck drivers and engineers in Quebec. The researcher compared truck drivers and engineers as these jobs are considered highly stressful (Paillé, 2011). They were compared on levels of job stress, job satisfaction, intent to leave the employer, and citizenship behavior. The study was performed with a questionnaire. Correlations showed that both truck drivers ($n = 294$) and engineers ($n = 138$) did perceive their work as stressful and job stress was negatively related to job satisfaction for both groups (engineers, $r = -.297$, $p < .01$; truck drivers, $r = -.167$, $p < .01$). Interestingly, among engineers stress was not related to intention to leave ($r = .160$, ns), but it was positively related for truck drivers ($r = .152$, $p < .01$). This study is an example that demonstrates job stress exists among occupations that have very different responsibilities, tasks, and educational requirements.

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Staff nursing has been assessed as a highly stressful occupation in recent years due to the increased acuity of patients, poor staffing ratios, and time pressures stemming from productivity requirements in acute care facilities. Bhatia, Kishore, Anand, and Jiloha (2010) surveyed 87 staff nurses at two tertiary care hospitals in New Delhi. Of the respondents, 87.4% reported significant job stress. The highest ranked stressor was "time pressure". This study is an example of bedside nurses experiencing job stress outside of the United States, but there are multiple examples of nurses experiencing stress within the U.S. as well (Duvall & Andrews, 2010; S. P. Thomas, 2009). Duvall and Andrews (2010) examined the literature to determine why staff nurses left the bedside in the context of the nursing shortage and the faculty shortage. The primary reasons were: "management issues, job design, job stress, physical demands, and the failure to nurture new nurses" (p. 309). Job stress has been associated with negative physical and mental health outcomes (Nash, 2010), poor job satisfaction (Hassell, Archbold, & Stichman, 2011), and eventually to burnout and turnover (Jamal, 2010).

Job stress in academia. Academia is certainly not excluded from the job stress epidemic—job stress in academia has been a problem for decades (Gmelch, 1993; Gmelch, et al., 1986; Richard & Krieshok, 1989). Faculty workload and the complexity of the faculty role has been a challenge for many disciplines (Gmelch, et al., 1986). Schuldt and Totten (2008) administered Gmelch's faculty stress index (FSI) to 54 business faculty respondents at two universities in one southern state (57% response rate). The FSI contains 45 specific faculty job-related tasks or responsibilities and asks the respondent how much pressure the respondent feels as a result of each item on a 5-point scale. The results of the study showed that the business faculty experienced

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moderate to excessive pressure on a variety of items; the level of stress varied when correlated with demographic variables. For example, professors between the ages of 41 and 45 reported moderate pressure with regard to "having inadequate time for teaching preparation" versus those younger than 36 or older than 60 (4.0 vs. 1.667 or lower, $F = 2.035$, $p = .067$). Three items differed significantly in regard to the faculty member's gender, such as the item "being interrupted frequently by telephone calls and drop-in visitors" (2.846 vs. 1.774, $t = 3.202$, $df = 42$, $p = .003$). Both of these examples may relate to nursing faculty job stress: nursing faculty's average ages are 52 – 59 years, depending on rank, and 89% of nursing faculty are women (AACN, 2010a).

Totten and Schuldt (2009) continued their research of faculty stress via the FSI and included the impact of technology in a study of 86 marketing faculty primarily from the U.S. The results corroborated with the results from their previous study. The researchers found marketing faculty members were stressed, and women faculty were more stressed on a number of items than men. Higher stress levels were found among non-tenured and tenure track faculty than among tenured faculty.

Academia is attempting to keep pace with society's rapid technological advancements by utilizing new technologies and offering education via distance programs. McLean (2006) utilized a modified Delphi technique approach to the study of job stress and job satisfaction among 14 full-time faculty who taught only through distance education. The resulting mixed-method study utilized Gmelch's FSI and the Abridged Job Descriptive Index as quantitative measures and panel discussions with the participants to assess their job stress and satisfaction. The faculty members expressed stress and frustration with unprepared students, attempting to remediate in an

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asynchronous environment, and the incompatibility of their work with teaching/scholarship/service academic model as these faculty members were not close to home campuses. Faculty identified themselves as having job satisfaction. Ranked only on yes/no responses, faculty felt fulfilled with the work they were doing. Areas of mixed responses were salary, opportunities for promotion, and evaluation by supervisors. Finally, the twenty-four hour pull of technology was a challenge for these faculty, with the participants each determining their own work/life balance in this area. Nursing education is rapidly expanding in the distance education environment (Jones & Wolf, 2010), and this may add another set of stressors to the already stressed and understaffed nursing departments.

Job stress in nursing academia. Nursing academia is considered one of the academic disciplines with higher levels of job stress. The range of proficiencies required to perform well as a nursing faculty member begins with the academic triumvirate of teaching, scholarship, and service. However, nursing faculty are often expected to maintain clinical competence (AACN, 2010a; Kaufman, 2007b) which is in addition to all faculty responsibilities. Workload is a major issue in nursing academia—the demand for nursing graduates coupled with the faculty shortage present workload challenges for many programs (Kaufman, 2007b).

Nursing is a discipline whose practice is rapidly changing, and producing knowledgeable and skillful graduates through classroom instruction is a challenge (Lewallen, et al., 2003). Clinical coursework is unlike many other academic disciplines: long hours at the clinical site are required where the support of faculty colleagues is not readily available. The workload calculation for clinical often does not account for the

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actual number of hours faculty are required to expend at the clinical site to fulfill the course requirements (Brady, 2010; S. E. Campbell & Filer, 2008). For example, occupational stress in female BSN faculty was studied by Goldenberg and Waddell (1990). A convenience sample of 70 Ontario faculty members from eight universities (50% return rate) completed a stress-coping anxiety inventory which explored what parts of the faculty's job created occupational stress and how those faculty members coped with the stress. The highest ranked stressor was "heavy workload with its clinical component" (1990, p.541).

These roles of nurse educators are performed for significantly less pay than master's educated nurse practitioner counterparts earn (Allen, 2008). The resulting nursing faculty shortage often leaves an overwhelming work load and job stress for those who continue to educate (Lewallen, et al., 2003; Spurlock Jr., 2008). Unfortunately in this environment the outcome of job stress experienced by nursing faculty may be burnout, in which case nursing faculty are ineffective or leave the profession (Sarmiento, Spence Laschinger, & Iwasiw, 2004; Shirey, 2006; Spurlock Jr., 2008).

Job stress and mentoring. Mentoring has been utilized in business and in academia to decrease job stress (Kram & Hall, 1989; Monk, Irons, Carlson, & Walker, 2010). The social support offered by a mentor, the social networks a mentor introduces the mentee to, and modeling positive coping behaviors have been shown to decrease stress for the mentee (Dreher & Ash, 1990).

Mentoring

Mentoring has a long history in the workplace. Mentoring in business organizations has become a popular professional development tool in recent decades

(Zellers, Howard, & Barcic, 2008). While business organizations have long viewed their workforce as financial assets—human capital—academic institutions are only beginning to view their faculty members in the same manner. The faculty represents significant intellectual capital and is a differentiator between universities (Zellers, et al., 2008).

Kram studied mentoring processes in business organizations in order to understand how mentoring operated and the developmental phases of mentoring (1983, 1985a, 1985b; 1989). Kram developed a theoretical foundation which serves mentoring research in all types of organizations and professions. Mentoring, at the most basic level, is a relationship between two co-workers in which a more experienced mentor educates, orients, trains, and coaches a less experienced worker (Kram, 1985b). The developmental phases of mentoring relationships include the initiation phase in which the building of the interpersonal relationship between the mentor and mentee occurs, which lasts approximately six to twelve months. Next is the cultivation phase which encompasses years two through five of the mentoring relationship (Kram, 1983).

Mentoring is able to produce positive benefits through the mentor's behavioral role modeling and introducing the mentee to social networks that the mentee would not be able to access on their own (Dreher & Ash, 1990). The mentor models stress management techniques and work/life balance. The mentor models empowered behaviors such as competence in their role and self-determination with their research program. The mentor models job satisfaction. Additionally, the mentor offers social support and introduces the mentee to social networks at the academic institution. These networks are further sources of social support and information about the institution, easing the adjustment to the organizational culture. Kram's mentoring phases allow high

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frequency interactions to occur between the mentor and mentee, allowing the mentoring relationship functions of educating, orienting, and facilitating career growth to become available to the mentee.

Mentoring relationship functions have been studied in various professional environments, including providers at county mental health agencies (Lee & Montiel, 2011), law enforcement officials (Hassell, et al., 2011), medical faculty (Ogunyemi, Solnik, Alexander, Fong, & Azziz, 2010), and faculty across disciplines (Monk, et al., 2010).

Mentoring in academia. Universities have long expected their faculty to cultivate the next generation of the faculty workforce (Zellers, et al., 2008). However, the current economy and increased opportunities outside of academia have challenged this process. Today, mentoring programs must be given priority as part of faculty development and a focus on retention within the academy. Mentoring has been linked to increased scholarship productivity (Maas, Conn, Buckwalter, Herr, & Tripp-Reimer, 2009), job satisfaction (Race & Skees, 2010), and retention among faculty (Dunham-Taylor, et al., 2008; Gormley & Kennerly, 2011; Rosser, 2004).

The importance of mentoring in academia has been noted by multiple disciplines. Haynes and Petrosko (2009) performed a cross sectional study of law faculty in the United States comparing socialization to the academic institution based on gender and mentoring relationships. The researchers sent 1,176 surveys and had a 30% response rate ($n = 298$). The results showed that while 55.1% of respondents had informal mentoring relationships, only 3.1% had formal mentoring relationships that were facilitated by their academic institution, and 21.8% had no mentoring. The researchers were trying to

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determine whether mentoring relationships significantly affected organizational socialization for new faculty, however the data did not allow for analysis of this question. The lack of formal mentoring relationships among the participants led the authors to question whether this has led to an exclusion of women and minorities from the law professoriate.

Mentoring has been publicized as the choice method of orienting new faculty to the academy (Smith & Zsohar, 2007). Research in this area has mixed results as to the true benefit of mentoring to novice faculty. Monk, Irons, Carlson, and Walker (2010) administered a qualitative online quantitative and qualitative survey to 86 faculty members in U.S. institutions of higher education (6% return) regarding their experiences being mentored within the academy. The sample was described as being faculty in the areas of counseling, education, psychology, or human services; female; 31-40 years old; Caucasian; with 3-4 years teaching experience. Results detailed a mixed review of mentors and mentoring relationships: some of the participants had supportive, collaborative mentoring relationships. Others felt frustrated and as if they were still "floundering" (p. 129) in their faculty role after three years of experience with a lack of mentoring support and guidance. The researchers discussed the possibility that mentors were not able to support the mentees adequately if they did not receive release time in order to do so.

Mentoring has also been considered necessary to guide faculty through the tenure process (Borders et al., 2011; Brown, 1999). A longitudinal qualitative study of a junior faculty cohort in counselor education occurred over the first three years of faculty work and addressed their experiences as mentees (Borders, et al., 2011). The cohort consisted

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of five junior faculty members seeking promotion and/or tenure. The department

structured mentoring experiences for the junior faculty that followed Sorcinelli's

"Principles of Good Practice: Supporting Early Career Faculty" (2000). The participants

reported positive experiences as new faculty and feelings of job satisfaction.

Sorcinelli (2000) documented ten principles of good practice for early career

faculty encompassing three areas: improving review and tenure processes, encouraging

positive relations with colleagues and students, and easing stresses of time and balance.

The principles are especially notable because several specifically recommend mentoring.

The ten principles are:

1. Good practice communicates expectations for performance.

2. Good practice gives feedback on progress.

3. Good practice enhances collegial review processes.

4. Good practice creates flexible timelines for tenure.

5. Good practice encourages mentoring by senior faculty.

6. Good practice extends mentoring and feedback to graduate students
   who aspire to be faculty members.

7. Good practice recognizes the department chair as career sponsor.

8. Good practice supports teaching, particularly at the undergraduate
   level.

9. Good practice supports scholarly development.

10. Good practice fosters a balance between professional and personal life.

Mentoring in nursing academia. Mentoring in nursing began with Florence

Nightingale. Nightingale mentored other nurses with the principle that the best interests

of the mentee are the mentor's primary concern (Lorentzon & Brown, 2003). Mentoring continues to be a popular principle in nursing education today. Dunham-Taylor, Lynn, Moore, McDaniel, and Walker (2008) state that "mentoring is the single most influential way to successfully develop new nursing faculty, reaping the benefits of recruitment, retention, and long-term maturation of future nurse educators" (p. 337).

Mentoring has been proposed as a solution to the nursing faculty shortage by both NLN (2006) and AACN (2005) due to the link between mentoring and increased job satisfaction (Baker, 2010) and improved retention (Tucker-Allen, 2000). The NLN position statement regarding mentoring of nursing faculty (2006) calls for mentoring as the "primary strategy to establish healthful work environments and facilitate the ongoing career development of nurse faculty" (p. 1). Therefore, although mentoring may be thought of most often as occurring early in one's faculty career, the NLN advocates for mentoring to continue throughout the faculty trajectory.

The AACN published a report regarding the faculty shortage and strategies to surmount the shortage in 2005. One of the main issues AACN discusses as facilitating an environment for growth of nurse educators is to maintain professional development and a mentoring relationship (AACN, 2005). Mentoring is said to be benefit nursing faculty in multiple ways. Mentoring improves faculty socialization (McDonald, 2010), facilitates faculty role development (Jacelon, et al., 2003), increases scholarly production (Records & Emerson, 2003), decreases new faculty stress (Suplee & Gardner, 2009), and assists with recruitment and retention (Sawatzky & Enns, 2009).

The multiple benefits of mentoring are stated in the literature, but large-scale studies about the outcomes of mentoring among nurse educators are few. Personal

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accounts and small scale studies about mentoring in nursing academia are common in the literature. These publications often focus on the process or experience of mentoring novice faculty and the positive results for those involved, especially the mentees (Brown, 1999; Smith & Zsohar, 2007; Suplee & Gardner, 2009; Wroten & Waite, 2009). Wilson, Brannan, and White (2010) studied the benefits of the mentoring relationship to the mentor via an interpretive phenomenological research study among 11 nursing faculty mentors. The mentors felt the process of mentoring benefitted them as experienced faculty as well as benefitting the faculty new to their institution.

The literature lacks large-scale national studies of mentoring in nursing academia. Without such studies assessing the amount and quality of mentoring occurring in nursing education today it is difficult to determine whether this strategy is beneficial to all faculty or only to those who choose to publish their personal accounts. Yet the literature asserts that mentoring is necessary to nurture faculty within the academy, and that its outcomes include increased job satisfaction and empowerment for novice and experienced faculty (Luna & Cullen, 1995).

Psychological Empowerment

Psychological empowerment is a concept that has been studied primarily in business and organizational management. The concept of psychological empowerment is gaining popularity in academia and nursing because the result of empowerment is maximized productivity and job satisfaction (Spreitzer & Quinn, 2001). When psychological empowerment is maximized, an individual displays behaviors considered leadership behaviors—innovativeness, increased effectiveness and less resistance to change—regardless of job rank or position (Spreitzer & Quinn, 2001). Psychological

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empowerment is an individual's self-orientation about the work environment and the individual's relationship to that environment. Although it is an individual construct, psychological empowerment can be developed in the context of a mentoring relationship due to the modeling of positive behaviors and the increased competence and self-determination that an effective mentoring relationship contains (Luna & Cullen, 1995).

Psychological empowerment beliefs are organized into four dimensions that are developed independently: meaning, self-determination, competence, and impact (Spreitzer, 1995a). Self-determination is the amount of freedom and discretion people have in the workplace, meaning is having a personal connection to work, competence is the confidence about one's abilities to perform work responsibilities, and impact is the ability to make a difference in the work organization (Spreitzer, 1995a).

Nursing faces challenges with developing psychological empowerment across the discipline. It has been postulated that this challenge is due to a history of professional subservience and being an underdeveloped resource in the health care system (Brancato, 2007; S. L. Campbell, 2003). It has also been suggested that there are organizational differences between academia and health care organizations that facilitate higher levels of empowerment in academia (S. L. Campbell, 2003; Laschinger, Finegan, & Shamian, 2001). While the ultimate goal is to increase psychological empowerment across all areas of nursing, academia is a suggested starting point so that empowered educators can model and teach empowering practices to students (S. L. Campbell, 2003).

Psychological empowerment in academia. The concept of psychological empowerment in nursing academia has a limited research base—however; nursing seems to be at the forefront of the psychological empowerment construct as defined by

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Spreitzer. A literature search for ("psychological empowerment" AND academia) resulted in only two documents—one of which was an editorial from a nursing journal. Although a search for (empowerment AND academia) lead to increased results, they were not specific to the model of psychological empowerment followed in this research study, and therefore were excluded from this review.

Ghani, Hussin, and Jusoff (2009) assessed psychological empowerment and innovative behaviors via a survey of 312 lecturers from 25 private higher education institutions in Malaysia (response rate = 73%). Using Spreitzer's psychological empowerment scale and an innovative behavior scale the researchers first validated Spreitzer's four factors of psychological empowerment: meaning, competence, self-determination, and impact, as well as validated the instrument for use with academics. The researchers then determined that psychological empowerment had a moderate positive relationship with innovative behavior ($r = .33$, $p < .01$) and their regression analysis showed that psychological empowerment had a significant relationship with innovative behavior among the lecturers ($F_{1,310} = 38.94$, $p < .001$) with "psychological empowerment explaining 11% of the variance in innovative behavior after taking into account the fixed-effects model" (Ghani, et al., 2009, p. 59). This finding is helpful for academia as innovative behavior includes creating new ideas, using new work methods, and using a variety of work techniques—all of these concepts of innovative behavior are useful for the academic (Ghani, et al., 2009).

Psychological empowerment in nursing academia. Brancato (2007) conducted a descriptive correlational study of full-time baccalaureate nursing faculty in the United States. The random sample consisted of 531 faculty (response rate = 75%) teaching in

NLNAC-accredited programs. Faculty members were surveyed regarding empowering teaching behaviors and psychological empowerment. Brancato was attempting to determine if faculty members' level of psychological empowerment correlated with the utilization of empowering teaching behaviors. Instruments used in this study were Spreitzer's psychological empowerment instrument, the status and promotion of professional nursing practice questionnaire, part II, and a researcher-created demographic instrument. The survey assessed how many empowering teaching behaviors the faculty members used out of a total of 40 empowered teaching behaviors. The average number of empowering teaching behaviors used was 19.5 ($SD = 9.01$). The most commonly used empowering teaching behaviors included: "use your own clinical experiences to explicate nursing care problems" and "praise positive efforts made by students on both individual and group levels". The least commonly used empowering teaching behaviors included: "help students analyze the workings of complex organizations" and "discuss strategies to gain support of administration for attainment of goals". Study participants' psychological empowerment scores were skewed at 92.38 ($SD = 14.7$) out of a possible 112. The impact subscale scored the lowest in this study with 24.5% of participants scoring less than or equal to four (neither agree nor disagree). This indicates that of the faculty participating in this study, approximately one-quarter had lower psychological empowerment on this subscale which indicates they do not believe they have an influence on program-level decisions. Nursing faculty members' lower scores on the impact subscale are especially interesting. The accrediting bodies' (NLNAC and CCNE) standards direct nursing program curriculum and quality governance to be directed by

faculty which should contribute to faculty feelings of institutional impact (CCNE, 2009; NLNAC, 2008).

Sarmiento (2004) and Johnson (2009) studied psychological empowerment in nursing faculty teaching in associate degree programs. Johnson (2009) examined how organizational culture influenced the empowerment of nursing faculty in associate degree programs. The researcher conducted a descriptive correlational study utilizing a convenience sample of 407 nursing faculty in the southeastern United States teaching in programs that are NLNAC accredited. Johnson found that rank and years employed were significantly correlated with higher levels of empowerment for faculty (numeric results not published). Curriculum revision was the only internal program factor significantly related to faculty empowerment ($F = 5.53$, $p < 0.01$).

Sarmiento, et al. (2004) conducted a descriptive correlational study to examine nursing educators working at community colleges in Ontario, Canada. Eighty-nine full-time nurse educators were surveyed to measure their empowerment, burnout, and job satisfaction levels. Nurse educators surveyed perceived their work environment as only "somewhat empowering ($M = 12.18$, $SD = 2.27$)" (Sarmiento, et al., 2004, p. 139). The results showed empowerment was significantly inversely related to all burnout dimensions ($p < 0.01$), and significantly correlated with job satisfaction. While this is a small group of participants, the relationships demonstrate the importance of empowerment to nurse educators.

Empowerment's positive effects on nursing educators work lives have been illustrated through a review of the literature. Although studies of nursing faculty psychological empowerment are few, the existing literature shows positive relationships

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between empowerment and job satisfaction, and inverse relationships between empowerment and stress or stress constructs such as burnout. Mentoring has been shown to be a strategy that models positive empowering behaviors to nursing faculty mentees (Bauer, 1990; Snelson et al., 2002). Therefore, mentoring and psychological empowerment serve nursing faculty by decreasing job stress via a variety of mechanisms. These interactions ultimately aim to increase faculty job satisfaction and, therefore, retention.

Job Satisfaction

Job satisfaction is ''an overall affective orientation on the part of individuals toward work roles which they are presently occupying'' (Seifert & Umbach, 2008). Job satisfaction has a deep knowledge base and theoretical foundation. There is a multitude of variables that have been tested in relation to job satisfaction; however, many of the variables may be explained by Herzberg's Two Factor Theory (1966) of job satisfaction. The theory asserts that intrinsic factors ('motivators') and extrinsic factors ('hygienes') affect job satisfaction. Intrinsic factors deal with the job itself. Extrinsic factors concern the environment where the job is performed.

Job satisfaction in academia. In a study of community college faculty's intent to leave in relation to worklife and job satisfaction, Rosser and Townsend (2006) utilized data from the NSOPF-99 study conducted by National Center for Educational Statistics and the National Science Foundation ($n = 968$). Job satisfaction contained the dimensions of decision making authority, advising and workload, and benefits and security. These dimensions were significantly associated with job satisfaction (.53, .68, .84 respectively, $p < .05$). The study's final structuring equation model determined that

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the faculty's worklife was significantly associated with job satisfaction (.46, $p < .05$) and that the model accounted for 25% of the variance in job satisfaction.

McLean (2006) found that although the 14 faculty who participated in the study did have stressors within their exclusively distance education jobs (noted previously), the participating faculty also felt their work was satisfying and they felt a positive sense of accomplishment performing the work.

Job satisfaction in nursing academia. Nursing faculty have been shown to have a deep sense of meaning and commitment to the discipline of nursing and the faculty members' contributions to the future of the discipline (Disch, et al., 2004). Yet the complexities of the faculty role, the salaries, and the workload have led many nursing faculty to lower job satisfaction.

Job satisfaction has an inverse relationship to job stress in the nursing literature. For example Spurlock, Jr. completed a dissertation assessing the relationship between work stress, hardiness, and burnout in nursing faculty (Spurlock, Jr., 2008). His quantitative, descriptive, correlational study utilized a web-based questionnaire. Participants were nursing faculty at all levels of nursing programs, $n = 423$. His results showed moderate levels of stress and burnout, with hardiness functioning as a buffering agent toward burnout. Work stress inversely predicted job satisfaction and intent to leave current job among faculty in this study (Spurlock, Jr., 2008).

The large-scale study administered by the NLN in conjunction with the Carnegie Foundation resulted in 8,498 nursing faculty participating in a web-based survey (25% return rate) (Kaufman, 2007b). Excessive workload was reported by 44% of the

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participants. Even during school breaks and vacations, educators reported working 24 hours/week. The study also linked overwork to decreased retention.

Brookman (1989) studied job satisfaction of BSN nursing faculty in Southern Regional Education Board (SREB) states for her dissertation. She surveyed 358 full-time nursing faculty members using a researcher-created demographic instrument and the job descriptive index, a job satisfaction tool. The highest mean satisfaction scores were linked to promotional opportunities, and the lowest mean satisfaction scores were linked to pay.

Job satisfaction and mentoring. The data regarding mentoring and job satisfaction among nurses is mixed. Mariani (2011) surveyed nurses in clinical practice, education, and administration ($N = 173$) using demographic questions and the Mariani Career Satisfaction Scale ($\alpha = .94$). Results showed no statistically significant difference between the mentored and non-mentored group of nurses on career satisfaction.

Prevosto (2001) compared mentored and non-mentored U.S. Army Reserve nurses ($N = 171$) on job satisfaction and intent to stay with Dreher's Mentoring Scale, Price's Intent-to-Stay Scale, and Hoppock's Job Satisfaction Scale. The mentored nurses reported a significantly higher level of job satisfaction and intent-to-stay than the non-mentored nurses ($p < .001$).

Garbee and Killacky (2008) studied nursing faculty in the SREB states to determine how mentoring, organizational commitment, and leadership behaviors influenced job satisfaction and intent to stay. A random cluster sample of 39 nursing schools totaling 782 faculty members was drawn and asked to complete the survey instrument which was a quantitative instrument but included areas for comments that

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were analyzed as qualitative data for common themes. The resulting 316 responses (response rate = 40.4%) completed the survey. The quantitative data did not show significant correlations between mentoring and intent to stay, but it did show "moderate positive correlations that were significant between intent to stay one year (r (313) = .401, $p < 0.001$), intent to stay five years (r (313) = .358, $p < .001$), and job satisfaction" (Garbee & Killacky, 2008, p. 8). The qualitative comments indicated that faculty members teach because they wish to influence the future of the nursing profession in a positive manner and maximize student success. The author notes that faculty who worked 40 hours per week had a higher intent to stay than faculty working 60 hours per week and that mentoring could be a method used to assist new faculty to better balance work demands which would increase intent to stay and job satisfaction.

While the majority of literature discusses mentoring as a positive process with a positive impact on nursing faculty, Race (2010) gives a clear explanation of challenges facing new faculty mentoring relationship development, which include: lack of time management, toxic mentoring, mentor-mentee mismatch, and a lack of teaching basics. This critical appraisal of mentoring should be kept in mind when appraising literature that touts mentoring as a cure-all.

Mentoring is one method that academic institutions may use to facilitate a faculty member's psychological empowerment. Mentoring may promote development of psychological empowerment by assisting in socialization to the department or school (Dunham-Taylor, et al., 2008) and modeling empowerment (Thorpe & Kalischuk, 2003).

Chapter Summary

In summary, the variables in the research study: job stress, mentoring, psychological empowerment, and job satisfaction have been studied in some capacity in the nursing literature. While linkages between these variables are present in the literature a study has not been performed that incorporates all of the variables into a shared model.

Job stress among nursing faculty is a problem for the discipline (Spurlock Jr., 2008). Overwhelming workload (Kaufman, 2007b), a faculty shortage (Potempa, et al., 2009), and the academic triumvirate plus the expectation of clinical competency result in high stress levels (Kaufman, 2007c).

Mentoring has been proposed as a strategy to reduce nursing faculty stress (Borders, et al., 2011; Brown, 1999; Smith & Zsohar, 2007). Mentoring has been successfully used to reduce stress within other professions and academic disciplines, including academic medicine (Ogunyemi, et al., 2010), corporate business (Kram & Hall, 1989), and law enforcement (Hassell, et al., 2011).

Mentoring is able to facilitate increased psychological empowerment and job satisfaction. Job satisfaction ultimately leads to retention (Rosser, 2004). Mentoring facilitates increased psychological empowerment for both the mentee and mentor by supporting professional growth (Luna & Cullen, 1995). The mentor models positive behaviors and introduces the mentee to social networks (Dreher & Ash, 1990). The mentee then has the ability to utilize the positive behaviors that were modeled and gain organizational information and social support from social networks, thus increasing psychological empowerment (Spreitzer & Quinn, 2001). Therefore, job satisfaction and retention are increased (Smith & Zsohar, 2007). Large-scale research about the state of

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mentoring in nursing academia is sparse. The research study aims to increase the

knowledge base of nursing via a large-scale, national study of nursing faculty mentoring

processes.

CHAPTER 3: CONCEPTUAL FRAMEWORK

This chapter addresses the conceptual framework that is used as the theoretical foundation for the research study. The conceptual framework uses four theories to provide support for understanding relationships among the study concepts. This eclectic conceptual framework draws upon Gmelch's stress theory, Dreher and Ash's mentoring theory which is influenced by the work of Kram, Spreitzer's psychological empowerment theory, and Herzberg's job satisfaction theory.

Gmelch's Stress Theory

The NLN-Carnegie national survey of nursing faculty, conducted in 2006, illustrated that a major dissatisfier for nursing faculty is the lack of work/life balance due to heavy faculty workloads (Kaufman, 2007b). Faculty members are experiencing high stress levels due to the workload, and new faculty were not only stressed by the workload, they were also surprised by and unprepared for the workload amount (Kaufman, 2007b).

Job stress in the research study is based on Gmelch's interpretation of Selye's systemic stress theory (Selye, 1978). Gmelch's (1993) definition of stress is "a demand on the body, physically or mentally, that exceeds the person's ability to cope" (p. 6). Whether or not an event is positive or negative depends upon the individual's perception of the event, not on the actual event itself. The experience of stress occurs via a process. A life event occurs which is identified by the individual as being stressful, this event is then a "stressor" (p. 6). The individual attempts to act on the situation to resolve the stressor, and then needs to take time to recover and bring the body and mind back into balance. Gmelch acknowledges that some amount of stress is inherent to the human

condition, and that stress can be perceived as positive or negative—some stress encourages maximal performance and productivity, but an overload of stress leads to paralysis and anxiety. Therefore, a moderate amount of stress must be present for most people to accomplish workplace goals and projects. Gmelch (1993) illustrates this concept with a bell curve: the left tail of the bell curve represents too little stress, the middle of the curve represents moderate stress, and the right tail of the bell curve represents too much stress. The number and type of stressors may be different for individuals operating at each level of stress because it is not the stressors that cause the feelings of overwhelm, it is the individual's perception of those stressors.

Gmelch's model of stress applied to university faculty shows that university faculty members are most productive when they have a moderate amount of stress (Gmelch, 1993). If understimulated, faculty become dissatisfied and bored; if overstimulated, faculty become exhausted, ill, and unable to cope with daily demands (Gmelch, 1993). Having a moderate amount of stress means that the faculty member is able to be productive, meet the demands of teaching, scholarship, and service, and occasionally take on new challenges.

Involvement in a mentoring relationship can lower the mentee's stress level (Lewallen, et al., 2003). An experienced mentor who manages the workload without the perception of high stress can assist the mentee by behavior modeling of their personal practices of coping with workload, functioning in the academic setting, and methods of stress management. The result for the mentee is lower stress and increased job satisfaction (Smith & Zsohar, 2007). The mentor also facilitates a lower stress level for the mentee by involving the mentee in social networks that would otherwise be difficult

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to access (Kram & Hall, 1989). The mentee may utilize the social networks for social support and information in order to increase the mentee's competence in the workplace (Sawatzky & Enns, 2009).

Via social networks and behavior modeling, mentoring facilitates stress management for the mentee—the mentee can follow the mentor's example. With a manageable stress level mentee is then able to focus on career growth as a faculty member by taking on new challenges and functioning productively in the academic environment. These are key components of increased psychological empowerment (Spreitzer & Quinn, 2001). The increased psychological empowerment then increases the mentee's feeling of job satisfaction. An upward spiral of success can be created.

Mentoring Theories by Kram, and Dreher and Ash

Mentoring is the core concept of the newly developed model for the research study entitled "Interaction Theory of Mentoring, Job Stress, Psychological Empowerment and Job Satisfaction". Mentoring has a direct relationship with all the variables presented in the model. The definition of a mentor for the research study is: a faculty member who is comfortable with their role(s) in the employing academic institution and is currently helping the mentee with aspects of career development and achievement that facilitate success as nursing faculty member.

The works of Kram (1983) and Dreher and Ash (1990) address the mentoring concept, with Kram's framework explaining how mentoring relationships are formed and function to benefit the careers of both the mentor and mentee. Kram purports that while the mentoring relationship has a life cycle of formation, function, and eventual ending, a

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mentoring relationship can occur throughout one's career, not only in the early career phase (1983).

Kram's research illustrates that mentoring relationships affect 'career' and 'psychosocial' domains of work. Career domain functions of the mentor include coaching, challenging assignments, sponsorship, and protection. Psychosocial domain functions of the mentor include role modeling, friendship, and counseling. However, in the research study particular attention is focused on introducing the mentee to the appropriate and helpful social networks and modeling beneficial behaviors for success. The work of Dreher and Ash become critical in explaining and measuring these two concepts.

Dreher and Ash distilled Kram's theoretical work to specify mentoring relationship functions in the workplace. Dreher and Ash (1990) specify two processes by which mentoring relationships benefit the mentee. The mentor can offer special entry into workplace social networks for the mentee. These informal networks contain valuable information about the institution and its practices. Through informal networks mentees strengths can also become visible to higher-level administrators (Dreher & Ash, 1990). The mentor can also model positive workplace behaviors and vicarious reinforcement for the mentee. The mentee incorporates the modeled behaviors that resulted in successful outcomes into their own repertoire via observing the mentor as model.

In nursing education mentoring may work as it does in the business world. The mentor may increase the faculty member's sense of competence by orienting them to institutional policies, procedures, and norms. Often new faculty members have a difficult

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time determining norms if they are not stated, and these norms make a great difference in adjustment to the institution (Dunham-Taylor, et al., 2008; Garbee, 2006; Snelson, et al., 2002). The mentor is able to introduce the mentee to social networks that would be unable to be accessed otherwise. This can integrate the mentee into the culture of the institution. The mentor may serve as a behavioral model for processes such as empowered interactions, work/life balance that avoids overwhelming job stress, and satisfaction with faculty work.

Spreitzer's Psychological Empowerment Theory

Psychological empowerment is defined as: fundamental personal beliefs that employees have about their role in relation to the employing organization. The beliefs are organized into four dimensions: meaning, self-determination, competence, and impact (Spreitzer, 1995a).

The word 'empowerment' has been trivialized and misconstrued in popular culture. The primary misconception that occurred in the business environment is that business tried to define psychological empowerment as something the organization can give to the individual worker. According to Spreitzer and Quinn (2001) psychological empowerment at work is developed within an individual; it is not granted by a superior or institution. While the institution may facilitate the development of psychological empowerment, it may not award psychological empowerment. The member of the organization must develop the four dimensions of psychological empowerment independently.

The four dimensions of psychological empowerment are meaning, self-determination, competence, and impact. All four dimensions are necessary for

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psychological empowerment to occur. The four dimensions are defined in the psychological empowerment framework as:

(a) Meaning- "the degree to which people care about their work and feel that it is important to them" (Spreitzer & Quinn, 2001, p. 16)

(b) Self-determination- "the degree to which people are free to choose how to do their work" (p. 14).

(c) Competence- ability to do work well…including knowledge, technical capabilities, and "no outside causes will prevent them from attaining the required level of performance" (p. 17).

(d) Impact- "the degree to which people can influence their surroundings and to which their work units and organizations listen to their ideas" (p. 19).

The four dimensions of psychological empowerment theory have been correlated with various work behaviors and affective outcomes at work (Spreitzer, Kizilos, & Nason, 1997). Meaning has been most strongly associated with job satisfaction, an affective outcome (K. Thomas & Tymon, 1994). Self-determination is also associated with job satisfaction. Impact is related most strongly to work effectiveness. Competence is inversely related to job stress and positively related to work effectiveness (Spreitzer & Quinn, 2001).

Mentoring can model empowering behaviors to the mentee (Vance & Bamford, 1998). Once modeled, the mentee can incorporate the behaviors into their own repertoire. In this way the mentoring relationship can modify the mentee's internal dimensions of empowerment. For example, nursing faculty often feel deep meaning

toward their faculty work because of the teamwork involved in educating the next generation of nurses (Gazza, 2009). If a mentor behaviorally models the personal meaning of the faculty role, the mentee can incorporate that dimension of psychological empowerment into their own faculty work attitude. Mentoring can model competence and self-determination as well (Vance & Bamford, 1998).

Social networks facilitated by the mentor can model impact to the mentee—in academic institutions there is impact on the institution by faculty committees such as a faculty senate. The mentee can, by being introduced to social networks across the institution, understand how their role has impact on the larger institution (Chandler, 2011). The mentoring relationship serves the mentee by demonstrating increased psychological empowerment by means of Spreitzer's four dimensions. The mentee's own empowerment can then be increased.

Job satisfaction and psychological empowerment are closely linked. Using mentoring the psychological dimensions are increased, and the result of increased feelings of competence, meaning, self-determination, and impact is increased job satisfaction (Spreitzer, et al., 1997). Job satisfaction can also be increased via decreased stress. If a mentee experiences increased social support in the mentoring relationship, the mentee's feelings of stress can be decreased. The decreased stress may lead to increased empowerment by increasing the mentee's feeling of meaning—their emotional link to the workplace (Spreitzer, et al., 1997).

Herzberg's Job Satisfaction Theory

Job satisfaction is defined as ''an overall affective orientation on the part of individuals toward work roles which they are presently occupying'' (Seifert & Umbach,

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2008). Herzberg's theory of job satisfaction is psychologically based and focuses on two criteria: work serves the desire to develop talents and the desire to avoid pain (Lyons, 2007). These two criteria are organized into two sets of factors: motivators and maintenance (also called 'hygiene'). Motivator factors include: the work itself, achievement, recognition, responsibility, and advancement. Maintenance factors are: company and administrative policies, supervision, salary, interpersonal relations, and working conditions (Syptak, Marsland, & Ulmer, 1999).

Job satisfaction is a complex concept with multiple contributing interacting factors that the individual ultimately interprets to formulate their own affective appraisal of their job. The importance of job satisfaction goes beyond the employee's feelings; job satisfaction is important to understand because it has been linked to retention among faculty members in the U.S.(Rosser, 2004).

Job satisfaction among nursing faculty has been linked to a number of individual and institutional factors (Disch, et al., 2004; Gormley, 2003; Kennerly, 1989). Individual factors include work/life balance, commitment to the nursing profession, role conflict, and role ambiguity. It is posited that a mentoring relationship will assist faculty in achieving these factors and decrease their level of stress as they develop within their professional role. Institutional factors include organizational climate, leadership behaviors and expectations, program structure, tenure structure, and pay scale. Increased psychological empowerment can assist faculty in achieving leadership behaviors which increase job satisfaction and decrease stress (Spreitzer, et al., 1997). These individual and institutional factors of job satisfaction as described also are congruent with Herzberg's theory of job satisfaction which organizes these factors into motivators and

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maintenance factors. Job satisfaction has been linked to retention among faculty (Garbee & Killacky, 2008; Gormley & Kennerly, 2011; Lambert, 1991).

Theoretical Model for Research Study

Multiple factors have been associated with job satisfaction among nursing faculty members. The research study's model links the benefits of a mentoring relationship, including modeling of positive work behaviors and enhanced socialization within the institution, to the mentee's improved capacity to decrease job stress to a moderate (optimal) level through the assistance of a mentor. Functioning within a moderate level of job stress then allows the mentee to increase his/her psychological empowerment by improving feelings of competence, self-determination, meaning, and impact. This cyclic process then promotes job satisfaction for the mentee. The mentoring relationship by itself also has an effect on job satisfaction. While these relationships have been demonstrated separately through research, they have not been examined in an interactive model such as in the present research study. The research study aims to quantify these relationships among nursing faculty.

A representation of the study concepts and their theoretical relationships is presented in Figure 1. To summarize, the proposed model poses that mentoring (the center concept) can have a direct and independent effect on each of the other three concepts of the model: job stress, psychological empowerment, and job satisfaction. It is propositioned that mentoring can decrease stress, mentoring can increase psychological empowerment, and mentoring can improve job satisfaction. The model also illustrates that each of the other three concepts (presented in the outer ring) can have a multidirectional relationship with the other concepts. For example, the following

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relationships are possible: 1) an optimal level of job stress can improve one's psychological empowerment, and/or increase job satisfaction, 2) the amount of psychological empowerment possessed by a faculty member can decrease stress, and/or increase job satisfaction, and 3) a high level of job satisfaction will promote healthy stress levels, and/or feelings of psychological empowerment. Lastly, the model presents the synergistic or cascading effects that are possible when one concept is affected by another concept. For example, the presence of a positive mentoring relationship may decrease one's level of stress, and the absence of a negative stress level may promote stronger psychological empowerment, and a higher level of psychological empowerment can increase job satisfaction.
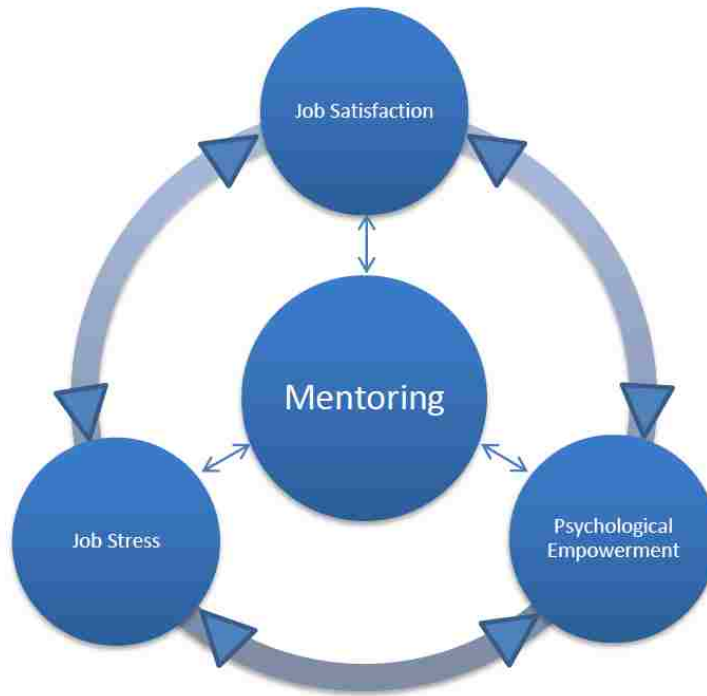
Figure 1. Theoretical Model of Mentoring, Job Stress, Psychological Empowerment, and Job Satisfaction (C. Chung, 2011).

CHAPTER 4: METHODOLOGY

This chapter will present the methods utilized in this quantitative study. The study's design, participants, procedure and setting, variables and instrumentation, operational definitions, pilot study, research questions, statistical analysis, validity and reliability, and ethical considerations are presented.

Study Design

Using a descriptive cross-sectional quantitative study design, an online survey was used to collect data from full-time nursing faculty members regarding the status of their current mentoring relationship and the quality of that relationship, job stress, psychological empowerment at work, and job satisfaction. A pilot study was employed preceding the research study to assess the use of the online survey and to validate the clarity and understandability of the survey questions.

Strengths of design. Cross-sectional designs are advantageous because they are economical, both in terms of time and cost (Polit & Beck, 2008). Cross-sectional studies are a practical method to build a research base in a timely manner (Houser, 2008). Since potential relationships among the study variables have not been compared before, the descriptive cross-sectional quantitative design is appropriate. The study's design is meant to examine the relationships between job stress, the quality of mentoring, psychological empowerment, and job satisfaction in nursing faculty. This study is a one-step survey so there is no risk of attrition.

Weaknesses of design. The concepts identified as job stress, mentoring quality, psychological empowerment, and job satisfaction can change over time. The cross-sectional design is designed to assess these variables at one point in time due to the time

and cost limitations of a longitudinal study. When data are collected at one point in time causality of relationships between variables cannot be determined (Polit & Beck, 2008).

Participants

The target population for the research study is full-time nursing faculty in the United States working for nursing programs accredited by CCNE. In order to participate in the study, the nursing faculty must meet the following inclusion criteria: (a) earned masters or terminal degree in nursing or a related field; (b) employed in a full-time nursing faculty position; (c) licensed registered nurse in at least one state or other jurisdiction; (d) teaching in a baccalaureate of nursing program or higher level nursing program; and (e) have a work email address that is able to be obtained via the internet.

CCNE is an autonomous accrediting body that accredits nursing programs starting at the bachelor's degree level and continuing through the terminal degree level. CCNE accreditation standards, section II-D, direct programs to employ faculty who have a graduate degree and an active RN license (CCNE, 2009). Therefore, faculty working in CCNE accredited programs would work in baccalaureate programs and graduate programs, would likely maintain activity in all three roles of the academic triumvirate: teaching, scholarship, and service. These faculty best fit the inclusion criteria of this study. The researcher compiled a list of 6,762 individual faculty members from the 660 CCNE accredited programs in the United States. The list of CCNE accredited programs was obtained from CCNE's website, (www.aacn.nche.edu). This was a convenience sample as all faculty members on the list were emailed the participation invitation. Recruitment of the sample was via email invitation, which included the inclusion criteria,

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a request to participate, and a link to the online survey. This method was utilized to obtain data from the largest sample possible.

Sample size and power analysis. Sample size is an important consideration for any research study, yet the guidance in the literature regarding sample size varies widely. Polit and Beck (2008) state "most quantitative studies are based on samples of fewer than 200 participants" (p. 349). Houser (2008) agrees: "samples with more than 200 subjects generate only marginal improvements in power" (p. 226). An online calculator (http://www.stattools.net/SSizmreg_Pgm.php) was used for power analysis to determine the required sample size. Results indicated that the sample for this study should have consisted of at least 263 participants for 0.8 power and 342 participants for 0.9 power in a multiple regression analysis. Adequate power in a study means that there are enough participants in the study to detect a significant difference in the dependent variable. If power is not sufficient, a Type II error is common: the results may not show significance that is present because the sample size is too small. Large sample sizes are desirable to avoid Type II error and because the data are more likely normally distributed (Houser, 2008).

Online surveys are challenged with low response rates (Dillman, 2007; Garbee, 2006). Response rates for online surveys including nursing faculty vary widely. Examples of response rates for online surveys of nursing faculty are 40.4% (Garbee, 2006) and 22% (Spurlock Jr., 2008). The research study invitation was directly emailed to 6,762 faculty. The goal for the study was 350 participants in order to have adequate power in the multiple regression analysis which would only be a 6% response rate.

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Procedure and Setting

The procedures for the research study began with emails to the potential participants that described the purpose of the study, a statement regarding benefits of the research to the nursing profession, and a hyperlink to access the online questionnaire on Survey Monkey. The email also noted that the study had been approved by the Institutional Review Board (IRB) at UNLV. No material or financial rewards were offered. See Appendix B for the UNLV IRB approval documentation.

When the participant visited the website to take the survey, they were greeted with an informed consent letter that indicated that completion of the survey was agreement to participate in the study. The information reiterated that: they were voluntary participants in a nursing research study; no identifying data was used in the study or subsequent publications in order to protect participant privacy and anonymity; the cost to the participant was limited to the time (approximately 15-20 minutes) taken to answer the survey; there were no risks (above and beyond those present in everyday life) to the participants arising from participation in the study, and that the participants would be contributing to the body of nursing knowledge, but there were no material rewards for participation in the study.

Although the researcher was prepared to send a reminder email one week after the initial communication, as that was considered the optimal reminder time (Dillman, 2007), it was not necessary to do so due to a high initial response rate. The research study followed the pattern recognized by Dillman (2007): the majority of online surveys are responded to within four days of initial invitation. Faculty who participated in the study did so in a naturalistic setting—they completed the survey in an environment natural to

them such as their office or home. While naturalistic settings do not allow for control of the setting, they do allow the participant to be comfortable with the research setting (Houser, 2008). The survey closed after two weeks. After the survey closed, Survey Monkey stated that the study was closed and the survey was no longer accessible. The data were accessed and compiled by the researcher in Microsoft Excel format for use in the Statistical Package for the Social Sciences (SPSS) software, version 19.0 (2010).

Variables and Instrumentation

The variables in this study include the presence of a current workplace mentor, the amount of psychological empowerment, and the amount of job stress and job satisfaction. For those faculty involved in a current work mentoring relationship the quality of that relationship is an additional variable.

The researcher used four instruments plus a researcher-created demographic instrument compiled to form one survey on Survey Monkey, a commercial internet survey tool. The four psychometrically tested instruments used were: Dreher and Ash's (1990) mentoring scale, Spreitzer's (1995b) psychological empowerment instrument, Gmelch, Wilke, and Lovrich's (1986) faculty stress index, and the U.S. Department of Education Institute of Education Sciences National Center for Education Statistics' (NCES) National Survey of Postsecondary Faculty (NSOPF) 2004 job satisfaction scale.

Specific statistical tests to analyze the quantitative data from the survey are discussed in the subsequent section of this dissertation. Instruments selected have been assessed for reliability and validity. Reliability is the repeatability of the measure; that is, does the instrument consistently measure the target attribute (Polit & Beck, 2008). For example, the internal reliability for an instrument can be tested with Cronbach's alpha.

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Results should exceed .7 at a minimum and >.9 is considered strong reliability (Houser, 2008). Validity is the degree to which an instrument measures the attribute it is supposed to measure; the degree to which the instrument captures the meaning of the concept that it was intended to capture (Polit & Beck, 2008).

Demographic questionnaire. The researcher created fifteen demographic and profile characteristics that include questions regarding the participant's age, gender, race, marital status, number of dependent children, highest degree earned, number of years as a faculty member, number of years in the current position, whether the participant is enrolled in a terminal degree program, faculty rank, tenure status, salary, whether the participant holds paid employment outside of their faculty position, and if the participant has a current mentor in their faculty job. See Appendix A to review the researcher-created demographic questionnaire.

Faculty stress index. The Faculty Stress Index (FSI) was developed by Gmelch, Wilke, and Lovrich (1986). The index is based on both items from the Administrative Stress Index (Koch, Tung, Gmelch, & Swent, 1982) and items suggested via stress logs kept by twenty faculty for a week (Gmelch, et al., 1986). The resulting 45-item FSI examines five dimensions. The index underwent two pilot studies to determine content validity, face validity and clarity (Gmelch, et al., 1986)—content validity was not quantified. Internal consistency, or coefficient alpha, was determined for the index with the test-retest method and is reported as 0.83 (Gmelch, et al., 1986).

The instrument reflects five dimensions: reward and recognition, time constraints, departmental influence, professional/identity, and student interaction. A sample item for each dimension is:

"Indicate to what extent each is a source of pressure":

1. Receiving insufficient institutional recognition for research performance.
2. Being interrupted frequently by telephone calls and drop-in visitors.
3. Not knowing how my chair evaluates my performance.
4. Imposing excessively high self-expectations.
5. Resolving differences with students.

Scoring for the instrument was on a five-point scale: 1= rarely or never stressful, 2= occasionally stressful, 3= sometimes, 4= often stressful, 5= always or frequently stressful. The total score range is 45 (score 1 each item * 45 items) to 225 (score 5 each item * 45 items). The author labels means of 1-2 as "slight pressure", means of 3 as "moderate pressure", and means of 4-5 as "excessive pressure". A mean score for the entire instrument was computed as well as a mean score for each item. The scale also offered the participant a "not applicable" (NA) option if the participant did not feel that item pertained to their job. The NA items were coded as zeros for use in SPSS which are not computed in composites and means as SPSS interprets zero as having no value (Field, 2009).

The FSI is meant to convey the level of stress the participant is feeling at the time of instrument administration in relation to their faculty work. Item 46 is "assess the level of stress you experience in your job" which allowed the participant to rate their perception of job stress on the five-point scale and data analysis allowed the researcher to compare the mean of the 45-item FSI to the self-rated assessment of job stress. Finally,

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item 47 is "assess the level of stress you experience in your daily life" which is rated on the five-point scale and functions as a control item: some participants may function with a very high level of daily stress which leads them to interpret work stress as very high, whereas others function with a lower level of daily stress that frames their work stress. It is the *perception* of the stress that is important, not the actual activities or schedule the faculty member participates in each day (Gmelch, et al., 1986). The instrument is presented in Appendix A. Permission to use this instrument was obtained from the author, see Appendix D.

Mentoring scale. If the participant answered "no" to the demographic question asking whether the participant had a current mentor at their faculty job, this portion of the survey was skipped. If the participant answered "yes" they have a current mentor at their faculty job, they were asked to respond to this portion of the survey.

The mentoring scale was developed by Dreher and Ash (1990) and is based on the work of Kram (1985b). Kram's work in the areas of career and psychosocial functions of mentoring formed the foundation for Dreher and Ash to develop this global measure of mentoring experiences. Dreher's mentoring scale consists of 18 items. Responses are given on a five-point scale: 1=not at all, 2=to a small extent, 3=to some extent, 4=to a large extent and 5=to a very large extent. Items include: "to what extent has your mentor gone out of his/her way to promote your career interests?" and "to what extent has your mentor encouraged you to talk openly about anxiety and fears that detract from your work?" and "To what extent has your mentor given or recommended you for challenging assignments that present opportunities to learn new skills?".

The total score for the scale ranges from 18 (score 1 on each item * 18 items) to 90 (score 5 on each item * 18 items). Means for each question were calculated to give a mentoring score specific to the item. The authors reported internal consistency, or coefficient alpha, for the scale as 0.95 (Dreher & Ash, 1990; Prevosto, 2001). The authors also reported face validity as being present from an expert review. Garbee (2006) utilized this instrument in a dissertation study and had an expert panel of seven doctorally-prepared nursing faculty review the instrument for content validity. The panel had a favorable review of Dreher's mentoring scale. The instrument is presented in Appendix A. Permission to use this instrument was obtained from the author and from the American Psychological Association, see Appendix D.

The respondents also self-assessed their mentoring relationship quality via a researcher-created question. The question asked: what do you feel is the quality of the mentoring relationship you have now; the response choices for those with mentors are (a) good, (b) fair, (c) poor. These three categories had numbers and percentages of responses calculated. This allowed for comparison between the respondent's self-assessment of mentoring quality and the scores on Dreher's mentoring scale.

Psychological empowerment scale. The psychological empowerment scale was developed by Spreitzer (1995b) to assess psychological empowerment of individuals in a work context. The scale addresses the four dimensions of psychological empowerment: meaning, competence, self-determination, and impact. The four dimensions interact in a multiplicative manner, therefore, for psychological empowerment to be maximized all four dimensions must be present to a significant degree (Spreitzer, 1995b). The scale contains 12 items scored on a seven-point scale: 1=very strongly disagree, 2=strongly

disagree, 3=disagree, 4=neutral, 5=agree, 6=strongly agree, 7=very strongly agree. The scoring range is 12-84. The mean of the total scale represents the level of psychological empowerment experienced at work. The instrument's 12 items testing the four dimensions of psychological empowerment and studies have shown reliability results (Cronbach's alpha) of 0.87-0.92 for the four dimensions. (Laschinger, et al., 2001). Instrument reliability was also examined with test-retest coefficients (Spreitzer, 1995b) which suggested moderate stability over time.

The authors reported face validity per a review by an expert panel (Laschinger, et al., 2001). Spreitzer tested the instrument for convergent and discriminant validity (Spreitzer, 1995b). The study utilized two samples: a random sample of 393 mid-level managers in a *Fortune 50* industrial organization and a stratified random sample of 128 lower-level employees from an insurance company. The data collected from these two samples were evaluated for convergent and discriminant validity with confirmatory factor analysis, including adjusted goodness-of-fit index (AGFI) which should meet or exceed 0.9, root-mean-square residual (RMSR) which should be less than 0.05, and the non-centralized normed fit index (NCNFI) which should meet or exceed 0.9 (Spreitzer, 1995b). Results showed excellent fit for the industrial sample (AGFI=.93, RMSR=.04, NCNFI=.97) and modest fit for the insurance sample (AGFI=.87, RMSR=.07, NCNFI=.98), with each of the items loading strongly on the appropriate factor and significant correlations between the four factors in both samples (Spreitzer, 1995b; Spreitzer, et al., 1997).

This instrument has been used in over 50 studies with many different types of workers; Spreitzer has been able to track a large amount of data on the total scale scores

as well as mean scores on each of the four dimensions. The instrument is presented in Appendix A. Permission to use this instrument was obtained from the author, see Appendix D.

Job satisfaction scale. Nursing faculty job satisfaction has been linked with multiple factors, including faculty workload, administrative support, peer support, and salary (Disch, et al., 2004). Increased faculty job satisfaction has also been linked to increased retention (Lambert, 1991). The research study aimed to determine what level of job satisfaction nursing faculty experience in relation to the other variables: mentoring presence and experience, job stress, and psychological empowerment. The National Survey of Postsecondary Faculty (NSOPF) was conducted by NCES in 1988, 1993, 1999, and 2004. These were large scale studies of faculty across all disciplines at both public and private postsecondary institutions in the United States. Sample sizes were approximately 30,000 per administration of the instrument. Each time the instrument was utilized it was analyzed for content validity and face validity prior to the next administration. The validity of the parent instrument was determined by field test comparisons of institution-reported and self-reported data. Validity was reported as high, as "data were consistent in more than 90 percent of the sample cases" (U.S. Department of Education Office of Educational Research and Improvement, 1997, p. 123).

NSOPF data have been utilized both in primary analysis by the U.S. Department of Education Institute of Education Sciences and in several secondary analyses (Hoyt, Howell, & Eggett, 2007; Kim, et al., 2008; Seifert & Umbach, 2008). The job satisfaction items were classified as testing three domains of job satisfaction including: satisfaction with job autonomy and authority over the work itself, satisfaction with

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financial compensation and career advancement, and satisfaction. Reliability, or

Cronbach's alpha, was .85 for this scale (Hoyt, et al., 2007).

The NSOPF instrument consists of eight items rated on a four-point scale. The

participant is asked to rate their level of job satisfaction on eight items, including salary,

authority to make decisions about content and methods in instructional activities, and

overall job satisfaction. In order to remain consistent with the low to high scoring of the

other instruments these items were also rated low to high which is the reverse of the

original instrument. Score 1=very dissatisfied, 2=dissatisfied, 3=satisfied, and 4=very

satisfied. The total score range that a participant could obtain is eight (8 items * 1 score

on each) to 32 (8 items * 4 score on each). Means may be calculated for the overall

instrument and for individual items. The instrument is presented in Appendix A. This

instrument is part of the public domain and, therefore, author permission is not necessary

to utilize these items. However, this researcher did verify this with NCES personnel; see

the verification of public domain in Appendix D.

Operational Definitions

The research study variables were operationalized using the following definitions.

Mentoring status: The presence or absence of a mentoring relationship. Assessed

via a yes/no question on the researcher created demographic instrument asking whether

the participant has a job mentor at the present time.

Mentoring relationship quality: Assessed via scores from Dreher's 18-item

mentoring scale (Dreher & Ash, 1990).

Psychological empowerment: Assessed via scores from Spreitzer's 12-item

psychological empowerment scale (Spreitzer, 1995b).

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Job stress: Assessed via scores from Gmelch's 45-item faculty stress index (Gmelch, et al., 1986).

Job satisfaction: Assessed via eight survey items from the instrument "National Survey of Postsecondary Faculty" created and psychometrically tested by the U.S. Department of Education Institute of Education Sciences National Center for Education Statistics (Heuer, et al., 2006).

Pilot Study

Pilot study participants. A pilot study was conducted prior to the research study. The pilot study was administered to a sample of ten full-time nursing faculty in Nevada. The participants were a convenience sample as they were recruited through personal relationships with the researcher. While sampling bias is a limitation of utilizing convenience samples (Houser, 2008), the objective of the pilot study was to obtain feedback regarding the survey procedure, therefore pilot study sampling bias did not interfere with the research study.

Pilot study procedure. Approval from the Institutional Review Board (IRB) of the University of Nevada, Las Vegas (UNLV) was obtained before proceeding with data collection for the pilot study. The survey was administered online using Survey Monkey, a commercially available internet survey tool (www.SurveyMonkey.com). The pilot study presented the survey on Survey Monkey exactly as it would appear to the research study participants, including the research study invitation with the hyperlink and the informed consent letter prior to starting the survey. The difference between the pilot study and the research study was that the pilot study participants were asked specific

questions about the clarity of directions, ease of completion of the survey, and the time taken to complete the survey.

Pilot study objectives. The pilot study aimed to determine the feasibility of the research study— to inform the research study of any potential issues or shortcomings in the survey procedure (Houser, 2008). The study design was then assessed for confounding variables, instrument design, and any technical problems. The participants of the pilot study also served as an expert review panel to endorse the content validity of the instrumentation.

The researcher assessed the pilot study procedure to determine if any revisions to the online survey and/or directions were needed. The specific revisions will be discussed in Chapter 5. Following pilot study revisions, the research study was executed. Data collected via the pilot study was not compiled with data from the research study, as the participants were known to the researcher and their responses would lend sampling bias to the study.

Research Questions

The following research questions provided direction for the study:

1. What percentage of nursing faculty are being mentored?

2. What is the quality of nursing faculty mentoring relationships?

3. How do mentored versus non-mentored nursing faculty differ by levels of job stress, psychological empowerment, and job satisfaction?

4. What is the relationship among the dimensions of mentoring quality, job stress, psychological empowerment, and job satisfaction among nursing faculty?

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5. Do demographic characteristics, mentoring status, job stress, and

   psychological empowerment explain job satisfaction among nursing faculty?

Statistical Analysis

Statistical analysis was conducted using SPSS software, version 19.0 (2010). There was a risk of subjects not fully completing the entire questionnaire. Survey Monkey allows data to be sorted by completed surveys versus non-completed surveys. Only completed surveys were included in the data analysis for this study.

One of the benefits of using statistical software such as SPSS is the ease of computing statistics which allows for analysis of large sets of data over multiple variables in a short amount of time (Polit & Beck, 2008). SPSS allows for separation of the data by variable or by item so that the researcher will be able to determine if there are items that have greater differences between groups. Statistical significance was set at .05. An additional benefit of utilizing SPSS software is that if a result is significant at the .01 or .001 level the software generated results at these levels of significance with appropriate notations. A statistical consultant was utilized to confirm statistical analysis procedures after the researcher ran the data analysis.

It was necessary for the data to be examined to ensure that underlying assumptions were met. The statistical analyses of the data that evaluate the underlying assumptions, such as testing for normality and linearity, are addressed in Chapter 5. Descriptive statistics, including mean, standard deviation (SD), and median were computed for all items that did not have dichotomous responses. Items that had dichotomous responses had numbers and percentages for each response calculated, such as in Question #1. Question #2 is an analysis of one instrument with descriptive statistics

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as well as a question with three categories which had numbers and percentages calculated.

Research question #3 was answered with a MANOVA test. To utilize the MANOVA the data are assumed to be normally distributed, independent observations, and have variances of normal distributions that are equal (Field, 2009). However, MANOVA is a robust statistical test that tolerates the violation of normality well (Stevens, 2002). The collected data were tested for these assumptions.

Question #4 utilized Pearson product-moment correlations to represent the relationships between variables. The data were continuous, and had a linear relationship. The desired outcome is for the concepts being compared to be significantly related, but not to the point of multicollinearity. Multicollinearity occurs when two constructs are correlated >.9 and means that the two constructs may actually be representing only one underlying construct (Field, 2009). The strength of correlational relationship can be interpreted as follows: very low (.01 - .1), low (.2 - .3), moderate (.4 -.5), substantial (.6 - .7), and very high (.8 - .9) (Field, 2009). To utilize multiple regression (research question #5) the data are assumed to be normally distributed, have at least 20 cases per independent variable, and have an assumption of linearity (Tabachnick & Fidell, 2007). Multiple regression determines which independent variable(s) best explain the dependent variable but does not determine causation.

Research Question 1: What percentage of nursing faculty are being mentored? The first research question addresses what portion of nursing faculty members have current work mentors. This question was answered using "yes" or "no" dichotomous responses to the researcher-created demographic instrument question: do

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you have a current mentor at your faculty workplace? The percentages of faculty with and without a current work mentor were computed. In order to clarify the demographic question, the definition of 'mentor' was included for the participant.

Research Question 2: What is the quality of nursing faculty mentoring relationships? The second research question addresses the quality of mentoring relationship assessed by current mentees. This question was answered both by (1) responses to a question on the researcher-created demographic instrument and (2) scores from Dreher's 18-item mentoring scale (Dreher & Ash, 1990).

The researcher-created demographic instrument question asked: what do you feel is the quality of the mentoring relationship you have now; the response choices for those with mentors are (a) good, (b) fair, (c) poor. These three categories had numbers and percentages of responses calculated. This question aimed to add to the validity of the mentoring scale as the researcher could compare the response on this question to the score on the mentoring scale and see if those responding "good" had higher scores on the mentoring instrument, and vice versa. The responses to Dreher's 18-item mentoring instrument were statistically analyzed using descriptive techniques.

Research Question 3: How do mentored versus non-mentored nursing faculty differ by levels of job stress, psychological empowerment, and job satisfaction? This question was answered using a MANOVA test. The MANOVA was an appropriate statistical test for this question because there were two groups being compared as the independent grouping variable: mentored versus non-mentored nursing faculty. The two groups were compared on three dependent variables: job stress, psychological empowerment, and job satisfaction. MANOVA results allow the

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dependent variables to be evaluated as a composite variable and then determine whether the grouping variable, mentoring status, explained a significant amount of variance in the composite variable (Tabachnick & Fidell, 2007). MANOVA is chosen rather than running three separate ANOVAs because multiple ANOVAs increase the chance of Type I error.

Research Question 4: What is the relationship among the dimensions of mentoring quality, job stress, psychological empowerment, and job satisfaction among nursing faculty? This question was addressed by all of the instruments in the study (with the exception of the demographic questions). This question used Pearson product-moment correlations to compare the mean scores on each instrument for statistically significant relationships. The expectation was that mentoring quality would correlate positively with psychological empowerment and job satisfaction, and correlate negatively with job stress.

Research Question 5: Do demographic characteristics, mentoring status, job stress, and psychological empowerment explain job satisfaction among nursing faculty? The data from the participants on the full survey was used to answer this question. Multiple regression was used to determine which of the independent variables (mentoring status, psychological empowerment, or job stress) and demographic variables best explain the dependent variable, job satisfaction.

A number of demographic variables were dummy coded to allow for statistical analysis in a multiple regression model (Tabachnick & Fidell, 2007). For example, the variable 'mentoring status' is dichotomous and therefore the data from that question was dummy coded as 'no mentor'=0 and 'mentor'=1.

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Validity and Reliability

It is important to examine study designs for threats to validity and reliability in order to maximize the validity and reliability of a research study (Houser, 2008; Polit & Beck, 2008). Threats to external validity or the generalizability of the findings that may be present in the research study include selection effects. Selection effects occur if the sample is not representative of the population. This researcher is attempting to control for selection effects by inviting all CCNE faculty to participate, however, this results in participant self-selection which can threaten the generalizability of results. Selection effects that occur as a result of self-selection may result in a homogenous group of respondents which may not reflect the larger target population. The research study calculated the margin of error for the study in order to assist in the determination of generalizability for this study. Margin of error results will be discussed in Chapter 5.

Internal validity was addressed by asking the subjects in the informed consent letter not to discuss the research during the data collection period until data collection is closed. This aspect of the study is difficult to control as it relies on compliance of all participants.

Historical effects may affect the internal and external validity—this researcher is uncertain about any affect the current economic recession has on this study. Economic stress may affect the study variables job stress, psychological empowerment, and job satisfaction. The nursing faculty member may blame the faculty job salary as being insufficient, which affects job satisfaction, as nursing faculty salaries are less than the clinical market value for a graduate educated nurse (Allen, 2008).

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Reliability in a research study is improved with procedures that are repeatable. This researcher aims to maximize repeatability of this study by having a clear, well-documented research plan and utilizing instruments that are widely available. Data collection using an online commercial survey tool (Survey Monkey) contributes toward reliability of results and the ability to repeat this study in the future. Reliability was also addressed by running Cronbach's alphas on each instrument used in this study.

Factor analysis. An exploratory factor analysis was performed on each of the instruments. Factor analysis is not always performed when a study uses established valid and reliable instruments such as this study did. However, the aim of the factor analysis was to examine any sets of instrument items that brought more specific components of the construct to light.

Ethical Considerations

Ethical considerations regarding the survey and its use of human subjects were initially addressed by having the study receive approval to be conducted by the UNLV's IRB review process. UNLV requires all researchers to have completed the Collaborative Institutional Training Initiative (CITI) tutorial for the protection of human subjects.

The UNLV IRB also outlined all of the necessary components for inclusion in the informed consent letter, including: purpose of the study, participant inclusion criteria, study procedures, risks and benefits of participation, costs and compensation, participation is voluntary, confidentiality, and acknowledgement of consent, as well as contact information of the researcher(s) and the UNLV Office of Research Integrity (University of Nevada Las Vegas Research and Graduate Studies, 2011). All of this information was delineated on the first page of the Survey Monkey survey at the

beginning of the online survey. Further, the participant was informed that when s/he clicked the "start" button for the survey s/he was giving informed consent.

Another ethical concern related to this study was keeping the subjects' responses anonymous. Since the survey is web-based, the data had to be transmitted in a secure format that did not identify the subject. This was done by using encryption software embedded in the commercial internet survey tool (Survey Monkey) where the survey was hosted. Participation in this study was voluntary. Since the study was confined to participants completing a survey, there is no physical risk to the subjects.

If the data collected from the online questionnaire was not secure, the participants' anonymity would be threatened. The survey utilized web links delivered directly to the email addresses of the sample population, and the email addresses and web links were protected by encryption software. The questionnaire was developed to collect data that limited identifying information to general demographics such as age and gender. The internet protocol address where the survey was input from was not recorded with the data, which is an additional safeguard for the participants. Participants were able to skip any question(s) s/he was not comfortable answering, or those believed to be identifying.

Security of data continues with appropriate storage. All records are and will continue to be stored in a locked facility at UNLV for three years after completion of the study. After the three year storage time the information gathered will be destroyed in a secure manner.

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Chapter Summary

In summary, this research study is a cross-sectional quantitative study of mentored and non-mentored nursing faculty's job stress, psychological empowerment at work, and job satisfaction. The researcher hoped to determine whether current mentoring relationships promote psychological empowerment, reduce job stress, and increase job satisfaction. By performing a national large-scale study this researcher hopes to begin a program of research regarding psychological empowerment and mentoring in nursing faculty with this study serving as an initial foundation.

This chapter addressed the study design, participants, procedure and setting, variables and instrumentation, operational definitions, the pilot study, research questions, statistical analysis, validity and reliability, and ethical considerations.

CHAPTER 5: RESULTS

The present research study examines relationships among mentoring, job stress, psychological empowerment, job satisfaction, and demographic characteristics among full-time nursing faculty. This chapter presents the results of the pilot study, descriptive statistics of the research study's survey sample demographic characteristics, and results for each of the study's five research questions.

Pilot Study Results

The pilot study was administered to a convenience sample of ten full-time nursing faculty. The pilot sample responded to all of the survey items and to items regarding length of time to complete the survey, ease of understanding of the survey questions, function of the survey website, and suggestions for modifications of the survey procedure. The pilot sample took an average of 14 minutes to respond to the survey questions and stated there were no difficulties with the function of the survey website or with understanding of the survey items. The only suggestion for modifications of the survey procedure was to add a "survey completion bar". The researcher did add a survey completion bar to the online survey prior to administering the research study.

Study Sample Size and Response Rate

The survey invitation was emailed to 6,762 full-time faculty working in CCNE accredited nursing programs. A total of 6,621 emails were deliverable according to Survey Monkey. Due to a high number of initial responses only one email communication was sent by the researcher to the pool of eligible faculty members. There were 985 surveys returned, with 959 surveys completed and usable for the study. The resulting response rate was 14.5%.

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Exploratory Factor Analyses

Several exploratory factor analyses using the common factor extraction methods of maximum likelihood (ML) and principal axis factoring (PAF) were conducted for each scale—job stress, mentoring quality, psychological empowerment, and job satisfaction—to determine how well the survey items corresponded to the theoretical constructs. Because the theoretical frameworks from which these scales derived specified a correlated factor structure, oblique rotations, more specifically promax rotations, were used instead of orthogonal rotations which specify mutually exclusive factors.

Mentoring quality. Ascertaining the factor structure of the mentoring scale was particularly relevant to the present study because the authors of this measure reported no validity information. Comparisons among the PAF and ML with oblique rotation solutions on the ratings of nursing faculty on mentoring quality demonstrated that the solutions were strikingly similar, with minor differences reflected in the explained variance and the loadings of several items between the solutions. Interestingly, the ML and PAF solutions on the entire 18 items were not as interpretable as those of the 16-item-solutions (with the mentor5 and mentor6 items excluded) for both the ML and PAF solutions. Item mentor5 was "To what extent has your mentor helped you finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete" and item mentor6 was "To what extent has your mentor protected you from working with other administrators or departments before you knew about their likes/dislikes, opinions on controversial topics, and the nature of the political environment". Moreover, the solutions specified a two-factor structure. The mentor5 and mentor6 items exhibited a low communality value with the factors (.35 for both), and

hence, they demonstrated low factor loadings (< .35) after the oblique rotation, which is why they were excluded from all subsequent analyses.

The solutions indicated that the two factors were correlated, with the sizes of the two coefficients ranging from .57 to .58. Nevertheless, the two-factor ML solution yielded more interpretable factors than the PAF rotated solution. Therefore, the two-factor ML solution with oblique rotation is reported rather than the PAF solution. The two-factor 16-item ML solution accounted for 62% of the variance among the mentoring quality items. Table 1 presents the pattern matrix for the ML 16-item solution. The names of the two empirical factors in the solution are: Relationship and Tasks.

Table 1

Pattern Matrix of the Maximum Likelihood Oblique 2-Factor Solution for Modified Dreher's Mentoring Scale- Using Ratings of Nursing Faculty Sorted by Size of Factor Loadings

Item	F1	F2
Mentor11	.92	
Mentor10	.92	
Mentor12	.87	
Mentor18	.84	
Mentor17	.77	
Mentor14	.76	
Mentor13	.75	
Mentor9	.73	
Mentor15	.70	
Mentor7	.49	
Mentor8	.47	
Mentor16	.40	
Mentor3		.98
Mentor2		.94
Mentor4		.79
Mentor1		.64
Label[a]	Relationship	Tasks

Note. Eigenvalues of the two factors prior to rotation were 8.73 and 1.93. This matrix presents the loadings without items mentor5 and mentor6, which did not load on any factor. Loadings greater than .35 are reported.

[a] Label indicates the suggested factor (i.e., extracted factor) name.

Job stress. Comparisons among the PAF and ML with oblique rotation solutions on the ratings of nursing faculty on job stress demonstrated that the solutions were somewhat similar, with differences reflected in the factor loadings of several items between the solutions. The ML and PAF solutions on the entire 45 items were not as interpretable as those of the 35-item-solutions (with the items stress4, 5, 7, 13, 18, 24, 25, 31, 36, and 38 excluded) for both the ML and PAF solutions. These items pertained to a variety of subjects: work facilities, job rules/regulations, community service requests,

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competition among colleagues, teaching preparation, and reduced enrollment. Item stress31 asked about reduced enrollment being a stressor. This item clearly does not fit as a stressor for nursing faculty, as the supply of nursing students has greatly outpaced the available positions in nursing programs (AANC, 2010a). Items stress18, 24, 25, 36, and 38 had low mean item scores, representing low stress levels caused by these items, including community service requests, adequate teaching preparation, peer competition, and conflicts with the department chair. Items stress4, stress5, 7, and 13 regarded job/institution rules and regulations.

Moreover, both the ML and PAF solutions specified a five-factor structure. The excluded items exhibited a low communality value with the factors ($\leq .25$), and hence, they failed to load on any factor after the oblique rotation, which is why they were excluded from all subsequent analyses.

The solutions indicated that the five factors were correlated, with the sizes of the two coefficients ranging from .39 to .73. Nevertheless, the five-factor ML solution yielded more interpretable factors than the PAF rotated solution. Therefore, the five-factor ML solution with oblique rotation is reported rather than the PAF solution. This solution accounted for 44% of the variance among the job stress items. Table 2 presents the pattern matrix for the ML 35-item solution. The names of the five empirical factors in the solution are: Workload Activities, Department Culture, Recognition, Teaching, and Scholarship.

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Table 2

Pattern Matrix of the Maximum Likelihood Oblique 5-Factor Solution for the Modified Gmelch's Faculty Stress Index Using Ratings of Nursing Faculty Sorted by Size of Factor Loadings

Item	F1	F2	F3	F4	F5
Stress29	.70				
Stress30	.63				
Stress16	.60				
Stress44	.59				
Stress1	.55				
Stress2	.52				
Stress26	.52				
Stress23	.50				
Stress15	.50				
Stress28	.43				
Stress12	.40				
Stress3	.33				
Stress41		.75			
Stress34		.72			
Stress45		.70			
Stress11		.65			
Stress40		.59			
Stress37		.49			
Stress21		.42			
Stress35		.35			
Stress22			.94		
Stress32			.86		
Stress9			.73		
Stress42			.48		
Stress14			.32		
Stress10				.85	
Stress6				.61	
Stress27				.43	
Stress33				.40	
Stress8				.39	
Stress19				.37	
Stress17					.84
Stress39					.69
Stress20					.65
Stress43					.65
Label[a]	Workload activities	Department culture	Recognition	Teaching	Scholarship

Note. Eigenvalues of the five factors prior to rotation were 11.31, 2.25, 1.70, 1.53, and 1.36. This matrix presents the loadings without items stress4, stress5, stress7, stress13, stress18, stress24, stress25, stress31, stress36, and stress38, which did not load on any factor. Loadings greater than .30 are reported.
[a] Label indicates the suggested factor (i.e., extracted factor) name.

Psychological empowerment. Comparisons among the PAF and ML with oblique rotation solutions on the ratings of nursing faculty on psychological empowerment demonstrated that the solutions were quite similar, with minor differences reflected in the explained variance and the loadings of several items between the solutions. The ML and PAF solutions on the entire 12 items were clear and interpretable. Moreover, the solutions specified a four-factor structure which coincides with the hypothesized structure expected based on the theoretical framework of the scale.

The solutions indicated that the four factors were correlated, with the sizes of the coefficients ranging from .31 to .63. Nevertheless, the four-factor ML solution yielded slightly more interpretable factors than the PAF rotated solution. Therefore, the four-factor ML solution with oblique rotation is reported. The four-factor ML 12-item solution accounted for 77.5% of the variance among the empowerment items. Table 3 presents the pattern matrix for the ML 12-item solution. The names of the four empirical factors in the solution are: impact, self-determination, competence, and meaning. This factor solution and the factor names are the same results as originally conceptualized by Spreitzer.

Table 3

Pattern Matrix of the Maximum Likelihood Oblique 4-Factor Solution for Spreitzer's Psychological Empowerment Scale Using Ratings of Nursing Faculty Sorted by Size of Factor Loadings

Item	F1	F2	F3	F4
Empower11	.99			
Empower6	.92			
Empower4	.78			
Empower8		.94		
Empower7		.93		
Empower3		.70		
Empower12			.88	
Empower9			.86	
Empower1			.79	
Empower10				.98
Empower5				.82
Empower2				.75
Label[a]	Impact	Self-Determination	Competence	Meaning

Note. Loadings greater than .40 are reported.

[a] Label indicates the suggested factor (i.e., extracted factor) name.

Job satisfaction. Comparisons among the PAF and ML with oblique rotation solutions on the ratings of nursing faculty on job satisfaction demonstrated that the solutions were again very similar, with minor differences reflected in the explained variance and the loadings of several items between the solutions. It is noteworthy that the ML and PAF solutions on the entire 8 items yielded a one-factor structure.

For this study, the ML solution yielded more interpretable factor loadings, and therefore, it is reported rather than the PAF solution. The one-factor 8-item ML solution accounted for 36% of the variance among the job satisfaction items. Table 4 presents the factor matrix (the pattern matrix was not produced due to a single factor) for the ML 8-item solution.

Table 4

Factor Matrix of the Maximum Likelihood Oblique 1-Factor Solution for NSOPF Job Satisfaction Scale Using Ratings of Nursing Faculty Sorted by Size of Factor Loadings

Item	F1
Satisfaction8	.76
Satisfaction4	.67
Satisfaction5	.64
Satisfaction2	.60
Satisfaction3	.56
Satisfaction6	.53
Satisfaction7	.51
Satisfaction1	.48

Note. Loadings greater than .40 are reported.

Testing Data Assumptions

Prior to completing statistical analysis relating to the research questions the data were tested for normality. The data were explored and examined with histograms, Q-Q plots for linearity, and the Kolmogorov-Smirnov (K-S) test. The variables mentoring quality, job stress, psychological empowerment, and job satisfaction were tested for normality and linearity. All of the variables had linear results. However, the variables job stress and job satisfaction were not normally distributed, as indicated by significant K-S tests. The benefit of the large sample size in this study ($N = 959$) is that although the data were not normally distributed, parametric statistics may still be used (Field, 2009). Non-parametric tests are most useful when sample sizes are less than 100 (Stevens, 2002).

The data set was analyzed for missing data. The mentoring quality items had 60% missing data, which was expected because only the 40% of the sample who reported current mentors responded to those items. However, this presented a challenge for SPSS,

and SPSS was unable to analyze the entire data set to determine the pattern of missing data. Individual item responses were randomly analyzed for missing data to ensure that all data were usable. Items: age, marital status, gender, stress31, stress43, empower5, empower7, satis1, and satis8 had amounts of missing data ranging from 1.1%-5.8%. An analysis of missing data regarding oncology patient data found that 12-20% missing data did not affect the statistical outcomes of the results (Dueck, Atherton, Tan, & Sloan, 2006). Therefore, missing data is not problematic for this study.

The margin of error was calculated for the research study using an online calculator (http://americanresearchgroup.com/moe.html). The population size and sample size were input, the result was a margin of error of 2.93%. This result indicates that this study is highly generalizable to the target population of CCNE-accredited full-time nursing faculty.

Instrument Reliability

The instruments utilized in the study had been shown valid and reliable in previous studies. Verification of reliability of the instruments was analyzed with the data in this study. Table 5 includes the internal consistency reliability information for all of the measures.

Table 5

Cronbach's Alphas for Scales Used in Present Study

Scale	Cronbach's Alpha
Gmelch's Faculty Stress Index	.93
Dreher's Mentoring Scale	.94
Spreitzer's Psychological Empowerment Scale	.90
NSOPF Job Satisfaction Scale	.81

Mentoring Scale N = 377
All other variables N = 957

Study Demographic Characteristics

The following demographic characteristics are divided into individual characteristics and career-related characteristics. Statistical computations were accomplished through use of SPSS 19.0 (2010).

Individual characteristics. Individual characteristics are defined as the demographic characteristics that are unique to the individual and unrelated to the individual's job or employing institution. Several individual characteristics were collected from the sample, including gender, race, age, marital status, and number of dependent children currently supported.

The sample of 959 reported their gender as 91.8% (880) female and 7.1% (68) male. The average age of the sample was 53 years ($SD = 8.69$) with an age range of 26-73 years. The majority of the sample, 91.1% (874), reported their race as white/Caucasian. With regard to marital status, 74.6% (715) indicated they are married. No dependent children are supported by 51.6% (495) of the sample. See Table 6 for further detail of the individual characteristics of the sample.

Table 6

Demographic and Frequency Statistics of Sample Individual Characteristics

Individual Characteristic	*N*	%
Gender		
Female	880	91.8%
Male	68	7.1%
Not Reported	11	1.1%
Age		
21-30	3	0.3%
31-40	104	10.8%
41-50	205	21.4%
51-60	430	44.8%
61-70	177	18.5%
>70	6	0.6%
Not Reported	34	3.5%
Race		
White or Caucasian	874	91.1%
Black or African American	30	3.1%
Hispanic or Latino	13	1.4%
Asian	10	1.0%
American Indian or Alaska Native	8	0.8%
More than one race	8	0.8%
Other	7	0.7%
Native Hawaiian or Other Pacific Islander	1	0.1%
Not Reported	8	0.8%
Marital Status		
Married	715	74.6%
Separated, divorced, or widowed	126	13.1%
Single and never married	59	6.2%
Living with partner or significant other	40	4.2%
Not Reported	19	2.0%
Dependent Children		
None	495	51.6%
One	187	19.5%
Two	185	19.3%
Three	62	6.5%
Four	14	1.5%
More than four	2	0.2%
Not Reported	14	1.5%

N = 959

Career characteristics. Career characteristics are defined as personal characteristics related to work, such as degree completion, or job or institution related characteristics. In this study career characteristics included highest degree earned, enrollment in a terminal degree program, faculty rank, tenure status, years of experience as a full-time nursing faculty member, years of experience at the current employing institution, current salary, and employment outside of the faculty job.

In this sample, 62.7% (601) reported that they have earned a terminal degree and 32.5% (312) have earned a master of science in nursing (MSN). Faculty academic ranks were as follows: 33.7% (323) were "assistant professor or clinical assistant professor" and 20.3% (195) were "associate professor or clinical associate professor". The sample's tenure status was as follows: 29.5% (283) answered "no [I do not have tenure]- I am not on a tenure track", 21.9% (210) answered "no [I do not have tenure]- but I am on a tenure track", 21.6% (207) answered "yes [I have tenure]". Respondents also indicated whether they were enrolled in a terminal degree program. The majority of the sample, 61.1% (586) answered "N/A- I have already obtained a terminal degree" and 19.6% (188) answered "yes" they are enrolled in a terminal degree program.

The majority of the respondents had less than 10 years' experience as full-time faculty, 52.7% (505). Table 6 below has the years of full-time faculty experience further detailed. Additionally, 47.7% (457) of the sample had 0-5 years of employment at the current institution.

The sample was asked about their current salary. The most frequently reported salary ranges were: $70,000-79,999 [19.6% (188)]; $60,000-69,999 [19.1% (183)]; and $50,000-59,999 [16.8% (161)]. Finally, respondents were asked if they held employment

in addition to their faculty job. The majority, 60.9% (584), answered "no" to this item.

See Table 7 for complete information on career characteristics of the sample.

Table 7

Demographic and Frequency Statistics of Sample Career Characteristics

Career Characteristic	*N*	%
Highest Degree Earned		
Ph.D., D.N.P., D.N.Sc., N.D., Ed.D., D.P.H., or other terminal degree	601	62.7%
M.S.N.	312	32.5%
M.S. or M.A. in a related subject	25	2.6%
Not Reported	21	2.2%
Faculty Rank		
Instructor or Clinical Instructor	129	13.5%
Assistant Professor or Clinical Assistant Professor	323	33.7%
Associate Professor or Clinical Associate Professor	195	20.3%
Professor or Clinical Professor	112	11.7%
Other	14	1.5%
Not Reported	186	19.4%
Tenure Status		
N/A- my institution does not function on a tenure system	69	7.2%
No- I am not on a tenure track	283	29.5%
No- but I am on a tenure track	210	21.9%
Yes I am tenured	207	21.6%
Not Reported	190	19.8%
Terminal Degree Enrollment		
Yes I am enrolled in a terminal degree program	188	19.6%
No, but I plan on obtaining a terminal degree in the future	72	7.5%
No, and I do not plan on obtaining a terminal degree	97	10.1%
N/A- I have already obtained a terminal degree	586	61.1%
Not Reported	16	1.7%
Years of Experience as Full-time Faculty		
0-5	286	29.8%
6-10	219	22.8%

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11-20	235	24.5%
21-30	127	13.2%
31-40	63	6.6%
>40	8	0.8%
Not Reported	21	2.2%

Years Employed at Current Institution

0-5	457	47.7%
6-10	246	25.7%
11-20	152	15.8%
21-30	61	6.4%
31-40	12	1.3%
>40	3	0.3%
Not Reported	28	2.9%

Annual Salary

$30,000-39,999	7	0.7%
$40,000-49,999	61	6.4%
$50,000-59,999	161	16.8%
$60,000-69,999	183	19.1%
$70,000-79,999	188	19.6%
$80,000-89,999	132	13.8%
$90,000-99,999	73	7.6%
>$100,000	138	14.4%
Not Reported	16	1.7%

Additional Employment Held

No	584	60.9%
Yes	365	38.1%
Not Reported	10	1.0%

$N = 959$

Descriptive Instrument Results

Table 8 presents the descriptive findings of the four instruments used in the study.

The table shows that faculty who have mentors have a lower mean related to stress, and

higher means related to psychological empowerment and job satisfaction.

Table 8

Descriptive Results of Study Instruments

Instrument	Faculty	Lowest Possible Score	Highest Possible Score	*M*	*SD*	Range	*N*
Faculty Stress Index	Mentored	1	5	2.56	.70	1.03-4.49	387
	Non-mentored	1	5	2.69	.75	1.06-4.60	581
	Sample	1	5	2.63	.73	1.03-4.60	968
Psychological Empowerment Scale	Mentored	1	7	5.47	.81	1.83-7.00	380
	Non-mentored	1	7	5.27	.89	1.33-7.00	576
	Sample	1	7	5.35	.87	1.33-7.00	956
Job Satisfaction Scale	Mentored	1	4	3.07	.52	1.25-4.00	380
	Non-mentored	1	4	2.85	.60	1.00-4.00	575
	Sample	1	4	2.94	.58	1.00-4.00	955
Mentoring Scale	Mentored	1	5	3.42	.88	1.00-5.00	378
	Non-mentored	N/A	N/A				

Faculty job stress was measured via Gmelch's Faculty Stress Index (35 items).

Individual stress scale item descriptives are listed in table 12, appendix E. In addition,

the means of item stress46, "Assess the level of stress you feel in your job", and item

stress47, "Assess the level of stress you experience in your daily life", were calculated to

compare to the mean of the faculty stress index items 1-35. Item stress46 served as a

control to assess whether the faculty stress index was capturing the level of job stress

accurately, $M = 3.16$ ($SD = 1.19$). Item stress47 served as a general measure of the

samples' life stress, $M = 2.81$ ($SD = 1.16$). The correlation between item 46 job stress

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and the 35-item stress scale was .668 ($p < .0005$), a substantial relationship. The correlation between item 46 job stress and item 47 life stress was significant but lower at .573 ($p < .0005$). The correlation between item 47 life stress and the 35-item stress scale was .454 ($p < .0005$). Therefore, responses to the 35-item scale were most closely correlated with the respondent's self-assessment of their job stress on item 46 which is an indication that the 35-item stress scale measured the sample's job stress properly.

Psychological empowerment was measured using Spreitzer's 12-item psychological empowerment instrument. Psychological empowerment scale item descriptives are listed in table 14, appendix E. The means and standard deviations of the four domains of psychological empowerment were calculated as: meaning ($M = 6.08$, $SD = .85$), competence ($M = 5.77$, $SD = .96$), self-determination ($M = 5.33$, $SD = 1.22$), and impact ($M = 4.20$, $SD = 1.53$).

The sample rated their job satisfaction via the 8-item NSOPF scale. Job satisfaction scale item descriptives are listed in table 15, appendix E.

Faculty members who identified themselves as having a mentor completed Dreher's 16-item mentoring scale. Individual mentoring scale item descriptives are listed in table 13, appendix E.

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Research Question Results

Research Question 1: What percentage of nursing faculty are being mentored? Research question one was answered by providing respondents with the definition of a mentor used in this study. Of the sample ($N = 959$), 39.8% (388) have a current mentor, 59.7% (583) do not have a current mentor, and 0.4% (4) did not respond. The study results reflect that almost 40% of the sample has a current mentor.

Research Question 2: What is the quality of nursing faculty mentoring relationships? The sample answered this question via two approaches: first the demographic question asking "what do you feel is the quality of the mentoring relationship you have now" was answered on a 3-point scale: good, fair, or poor. This response was compared with the descriptive statistics from Dreher's mentoring scale.

The demographic question, "what do you feel is the quality of the mentoring relationship you have now", was answered by a sub-sample of 388. This question was administered only to respondents who had previously answered that they do have a current work mentor. The largest portion of sample, 75.5% (284) answered the mentoring quality was "good", 19.5% (73) answered the mentoring quality was "fair", and 4.8% (18) answered "poor".

Subjects self-identifying themselves as having a mentoring relationship answered Dreher's mentoring scale regarding their experience as mentee and the quality of their relationship with their mentors. The scale score mean was 3.41 ($n = 381$, $SD = 0.89$). A scale response of three represented "to some extent". The researcher created question regarding mentoring quality correlated substantially with the mentoring scale score at 0.619.

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Descriptive statistics were calculated for each of the 16 items as well. The sample had the highest rated levels of mentoring relationship quality for the following two items: "To what extent has your mentor conveyed feelings of respect for you as an individual" ($M = 4.11$, $SD = 1.03$), and "To what extent has your mentor served as a role model" ($M = 3.95$, $SD = 1.11$). The sample had the lowest rated levels of mentoring relationship quality for the following two items: "To what extent has your mentor given or recommended you for assignments that increased your contact with higher level administrators" ($M = 2.72$, $SD = 1.33$) and "To what extent has your mentor given or recommended you for assignments that required personal contact with administrators in different parts of the school of nursing" ($M = 2.84$, $SD = 1.28$). Descriptive statistics for all items are in Table 13 in Appendix E.

Research Question 3: How do mentored versus non-mentored nursing faculty differ by levels of job stress, psychological empowerment, and job satisfaction? This research question was analyzed using a one-way multivariate analysis of variance (MANOVA) to ascertain whether significant differences exist between mentored and non-mentored nursing faculty's levels of psychological empowerment, job stress, and job satisfaction. Group membership (mentored, non-mentored) served as the independent variable and nursing faculty's self-reported job satisfaction, faculty stress index, and psychological empowerment scores served as dependent variables.

The data for job stress, psychological empowerment, and job satisfaction was tested for normal distribution and the results showed that job stress and job satisfaction data were not normally distributed. Job stress had Kolmogorov-Smirnov (K-S) = .046 ($p<.0005$) and job satisfaction K-S = .073 ($p<.0005$). This is not largely problematic for

this study because large sample sizes often have data that is not normally distributed and MANOVA is robust toward the violation with respect to Type I error (Stevens, 2002).

Mean scores for the groups' mentored and non-mentored faculty on each of the scales were calculated. Wilk's λ was interpreted because the homogeneity of variance-covariance matrices assumption was met (Box's $M > .01$). The multivariate results demonstrated that there were statistically significant differences among the groups on the linear combination of dependent variables, Wilk's λ = .965, multivariate $F_{(3,945)} = 11.52$, $p < .0005$, $\eta^2 = .04$, power 1.00, with a modest strength of association. Univariate results were interpreted following the significant multivariate findings.

Although the homogeneity of variance assumption was violated for the job stress and job satisfaction variables, the analyses are robust due to the large sample size. The univariate results were all statistically significant (all p-values $< .01$). To correct for the inflation of familywise Type I error rate, the alpha was reduced to .016 using the Bonferroni adjustment. The results of Spreitzer's psychological empowerment scale were significant, $F_{(1,947)} = 13.00$, $p < .0005$, $\eta^2 = .01$, with the mentored group ($M = 5.47$, $SD = 0.81$) demonstrating a higher mean score than the non-mentored group ($M = 5.26$, $SD = .89$); the power to detect the effect was .95. The results for Gmelch's faculty stress index were also significant, $F_{(1,947)} = 11.23$, $p = .001$, $\eta^2 = .01$, power = .92, with the mentored group ($M = 2.54$, $SD = 0.67$) reporting less overall job-related stress than the non-mentored group ($M = 2.70$, $SD = .73$). Finally, the results of the NSOPF job satisfaction scale reached significance as well, $F_{(1,947)} = 33.64$, $p < .0005$, $\eta^2 = .03$, power 1.00, again with the mentored group ($M = 3.07$, $SD = 0.52$) demonstrating higher satisfaction than the non-mentored group ($M = 2.85$, $SD = .60$).

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Research Question 4: What is the relationship among the dimensions of mentoring quality, job stress, psychological empowerment, and job satisfaction among nursing faculty? The relationships among mentoring quality, psychological empowerment, job stress, and job satisfaction were assessed using the parametric test of Pearson product-moment correlations. Although the variables were not all normally distributed parametric tests are acceptable for this study due to the large sample size; nonparametric tests are most useful when the sample is less than 100 (Stevens, 2002). Table 9 provides the correlation coefficients for each of the relationships. The strength of the relationship is interpreted as follows: very low (.01 - .1), low (.2 - .3), moderate (.4 - .5), substantial (.6 - .7), and very high (.8 - .9) (Field, 2009). Relationships >.90 indicate multicollinearity; no multicollinear relationships were found in this study. All of the relationships were significant in either the positive or negative direction (all *p*-values <.01). The fact that all bivariate correlations were < .90 suggests that the constructs under study demonstrate adequate divergent validity.

Mentoring quality had a very low inverse correlation with stress, a low correlation with psychological empowerment, and a low correlation with job satisfaction. Job stress had a low inverse relationship with mentoring quality, and moderate inverse relationships with psychological empowerment and job satisfaction. Psychological empowerment had a low correlation with mentoring quality, an inverse moderate correlation with job stress, and a moderate correlation with job satisfaction. Job satisfaction had a low correlation with mentoring quality, a moderate inverse relationship with job stress, and a moderate relationship with psychological empowerment.

Table 9

Pearson's Correlation Coefficients among Survey Constructs

Variable	1	2	3	4
1. Mentoring Quality	--			
2. Job Stress	-.160**	--		
3. Psychological Empowerment	.349**	-.443**	--	
4. Job Satisfaction	.229**	-.568**	.482**	--

** $p < 0.01$ level (2-tailed)
Mentoring Quality N = 377
All other variables N = 957

The relationships support the theoretical model as presented in Chapter 3.

Essentially, the question results demonstrated a positive relationship between mentoring

quality, psychological empowerment, and job satisfaction; and a negative relationship

between job stress and mentoring quality, psychological empowerment, and job
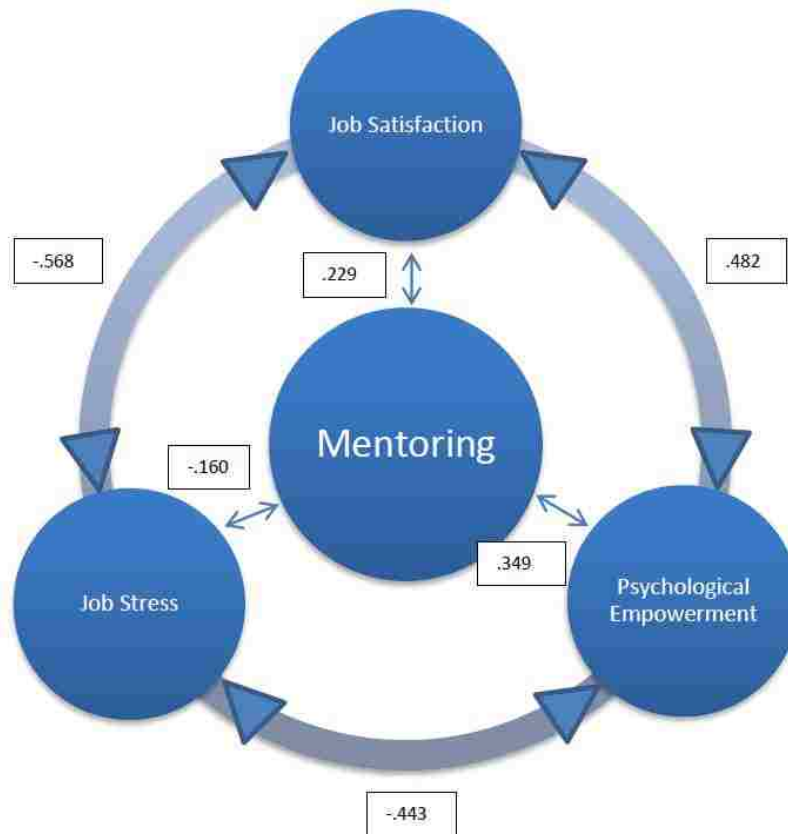
satisfaction.

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Figure 2. Pearson's Correlation Coefficients Reflecting Relationship Among Model Constructs of Mentoring, Job Stress, Psychological Empowerment, and Job Satisfaction (C. Chung, 2011).

Research Question 5: Do demographic characteristics, mentoring status, job stress, and psychological empowerment explain job satisfaction among nursing faculty? A standard multiple regression analysis was conducted to determine which variables were most influential on job satisfaction, the dependent variable.

Several of the demographic variables were dummy coded to allow for the regression analysis. Highest degree earned was dummy coded into two categories: 1 = terminal degree earned, 0 = other (MSN or MA in a related field). Tenure status was dummy coded into two categories: 1 = tenured or on a tenure track, 0 = not on a tenure

track or institution does not function on a tenure system. Marital status was dummy coded into two categories: 1 = married or living with partner/significant other, 0 = single, divorced, separated, or widowed. Race was dummy coded into the categories: white/Caucasian, black/African American, Hispanic/Latino, Asian/Pacific Islander.

The results of the standard multiple regression model indicated that the following variables had a significant positive relationship with job satisfaction ($p < .01$): mentoring status, psychological empowerment, and salary. Job stress and tenure had a significant inverse relationship with job satisfaction. The model accounted for 47% of the variance in job satisfaction ($R^2 = 0.468$).

Table 10 presents the unstandardized coefficients, the standard error, the standardized coefficient, the *t*-value, the significance value for each variable in the model, R^2, and *F* statistic for the models. The regression results will be discussed further in Chapter 6.

Table 10

Multiple Linear Regression Model 1

Variable	b	Std. Error	β	*t*	*p*-value
Mentoring Status	.131	.038	.110	3.477	.001*
Job Stress	-.332	.026	-.426	-12.851	.0005*
Psychological Empowerment	.206	.023	.305	8.860	.0005*
Years FT Faculty	.004	.002	.080	1.805	.072
Years at current institution	-.006	.003	-.076	-1.975	.049

Highest Earned Degree	.045	.053	.038	.856	.392
Tenure Status	-.109	.040	-.094	-2.722	.007*
Enrolled in Terminal Degree Program	.027	.052	.019	.516	.606
Faculty Rank	-.032	.023	-.053	-1.357	.175
Additional Employment Held	-.037	.036	-.031	-1.044	.297
Salary	.054	.012	.171	4.582	.0005*
Age	-.003	.003	-.046	-1.214	.225
Gender	.086	.067	.038	1.285	.199
Household Partner	-.020	.043	-.014	-.473	.636
Number of Dependent Children	.007	.018	.013	.399	.690
White	-.072	.097	-.035	-.743	.458
Asian	.110	.190	.019	.579	.563
Black	-.146	.138	-.042	-1.058	.290
Hispanic	.047	.157	.011	.300	.764

$R = .684$

$F (19, 650) = 30.071, p<.0005$

$*p<.01$

The multiple regression results in response to the research question are as above. To understand the relationship of the primary variables in the study an additional multiple regression analysis was conducted. The variables of mentoring status, job stress, and

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psychological empowerment were analyzed to determine the amount of influence they had on job satisfaction. The model showed that mentoring status, job stress, and psychological empowerment accounted for 40% of the variance in job satisfaction ($R^2 = .401$). See table 11.

Table 11

Multiple Linear Regression Model 2

Variable	b	Std. Error	β	t	p-value
Mentoring Status	.129	.030	.109	4.303	.0005*
Job Stress	-.343	.022	-.432	-15.405	.0005*
Psychological Empowerment	.189	.019	.281	10.008	.0005*

$R = .633$
$F (3, 947) = 211.233, p<.0005$
*$p<.001$

Chapter Summary

The sample of nursing faculty in this study was analyzed based on the appropriate statistical analyses. The data were analyzed with SPSS 19.0 (2010).

This chapter presented the pilot study results, study sample size and response rate, results of the exploratory factor analysis, the sample demographic characteristics, and the results of the statistical analyses guided by the five research questions.

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CHAPTER 6: DISCUSSION

This research study assessed job stress, mentoring status and quality, psychological empowerment, and job satisfaction among nursing faculty by analyzing responses to an online survey. The study sample was comprised of nursing faculty employed full-time in CCNE-accredited nursing programs nationwide. 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 practice and theory plus recommendations for future research.

Summary of Study Findings

The purpose of the research study was to examine mentoring relationships among nursing faculty to understand their impact upon job stress and psychological empowerment, and whether these variables ultimately affect job satisfaction. A pilot study was conducted first to assess survey procedures.

Demographic variables of the research study sample ($N = 959$) indicated that the average subject is female, 53 years old, Caucasian, married, and is not presently supporting dependent children. Professionally the average subject is doctorally prepared, and does not hold additional employment to their full-time faculty job. In addition, the following were the most commonly occurring career characteristics of the sample; less than 10 years of experience as a full-time faculty member, less than 10 years of employment at the current institution, rank of assistant professor or clinical assistant professor, untenured, and an annual salary of $70,000 to $79,999.

Frequency statistics were calculated to determine what percentage of the nursing faculty sample has current mentors. Responses indicated that 39.8% of the faculty

members currently have mentors. The sample's self-assessment of the current mentoring relationship quality compared to Dreher's mentoring scale score was analyzed with descriptive statistics to determine current mentoring relationship quality. The majority of subjects self-reported that the quality of their mentoring relationship was "good". A mean of 3.4 for the mentored sample was obtained using Dreher's 5-point mentoring quality scale.

A MANOVA was utilized to compare mentored and non-mentored groups of faculty on the variables of job stress, psychological empowerment, and job satisfaction. Significant differences were detected between groups with the mentored subjects scoring higher levels of psychological empowerment and job satisfaction, and lower on the level of job stress than the non-mentored subjects.

The variables of mentoring quality, job stress, psychological empowerment, and job satisfaction were analyzed with Pearson product-moment correlations to examine relationships among the variables. All variables were significantly related; job stress was negatively related to mentoring quality, psychological empowerment was positively related to mentoring quality and negatively related to job stress, and job satisfaction was positively related to mentoring quality and psychological empowerment and negatively related to job stress.

Finally, demographic characteristics, mentoring status, job stress, and psychological empowerment were examined with a standard multiple regression analysis to determine which variables were most influential in explaining job satisfaction among nursing faculty. Results indicated that job satisfaction showed significant relationships with the variables: mentoring status, psychological empowerment, and salary. Stress and

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tenure status had significant inverse relationships with job satisfaction. This model explained 47% of the variance in job satisfaction.

Implications of Demographic Variable Results

The average age of the sample was 53 years ($SD = 8.69$). The majority of the sample, 61.1%, had an earned a terminal degree, and 19.6% are enrolled in a terminal degree program. These data are in line with the AACN's recent annual reports which state:

1. The average age of doctorally-prepared full-time faculty ranges from 51.5-60.5 years depending on rank (2011).

2. The average age of nursing doctoral students was 42.7 (full time programs) to 44 (part time programs) (2010a).

3. Of nurses enrolled in doctoral programs, 22.8% were already teaching either full- or part-time in nursing programs (2010a).

These data regarding doctoral preparation and doctoral program enrollment, in combination with the average age of the sample, demonstrate a frightening reality for nursing education's future. The first concern is the lack of improvement these numbers lend to the nursing faculty shortage. If 20% of current faculty are enrolled in terminal degree programs they will likely be unavailable to fill vacant faculty positions upon graduation. Therefore, the current pipeline of doctoral students is insufficient to meet the demands of nursing education. For example, in the current academic year, 2011-2012, there is a 7.7% full-time faculty vacancy rate which equates to 1,088 funded vacant full-time positions (Fang & Li, 2011). There were 1,815 nursing doctorates granted between August 2009 and July 2010; however, 1,282 of those were practice-focused and only 533

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were research-focused (AACN, 2011). Enrollment in practice-focused doctoral programs is increasing rapidly, and enrollment in research-focused doctoral programs increased by 10% in 2010 which was the largest increase in enrollment in five years (AACN, 2011).

Additionally, qualified nursing students at all levels are being turned away primarily due to lack of faculty and resources which limit the ability of nursing program's to expand enrollment (AACN, 2010a, 2011). In 2010 there were 54,686 BSN applicants, 1,452 RN to BSN, 10,223 master's applicants, and 1,202 doctoral applicants turned away (AACN, 2011). The nursing faculty shortage will continue to be a major challenge for nursing education.

Also illustrated by the research study sample is the limited time that doctorally-prepared nursing faculty have to build a research program. The average age of the sample is 53 years old which coincides with AACN findings (AACN, 2011). Almost 40% of the sample is not doctorally prepared—they have not begun post-doctoral research careers and they are only about a dozen years from retirement. Nursing science is already facing the shortage of doctorally prepared researchers (usually academics) without a strategy to address the lack of knowledge producers (Glasgow & Dreher, 2010). The trajectory of a full-time faculty career when the average age of a new faculty member is 47 (AACN, 2010a) allows a limited time frame to produce and disseminate research and teach the next generation. Nursing education needs to recruit faculty into doctoral programs at a younger age, thus maximizing faculty's opportunities to expand the knowledge of the discipline as well as educate the next generation.

The average respondent had less than ten years of academic experience; 28% had five years' academic experience or less. This fact coupled with a mean age of 53

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represents a dramatic threat to the future of nursing education. Our most experienced faculty have started to retire, and will continue to do so due to the baby boomer demographic distribution in the United States (Berlin & Sechrist, 2002). Without experienced faculty to mentor the inexperienced, especially in research and knowledge dissemination, nursing as a discipline may be vulnerable. Non-licensed professions may see an opportunity when nursing education cannot meet the output necessary to care for the population. It takes a considerable amount of time for a faculty member to gain experience and reach tenure. Faculty will be less inclined to take on the workload of a tenure-track if they only have a dozen years to practice as faculty members.

Gender and race distributions of current full-time nursing faculty present challenges to nursing education as well. The research study sample was 92% female and 91% white. This does not reflect the distribution of the general population, but it does reflect the distribution of the nursing workforce (AACN, 2011). In order to best serve our patients and students nursing continues to focus on increasing diversity at all levels (Kaufman, 2007b).

Salary and tenure have consistently shown a relationship with job satisfaction among nursing faculty (Disch, et al., 2004; Kaufman, 2007a). This study supported the findings in regards to salary, but not tenure status. Although salary is not the primary motivator for many nurse educators it is an influential factor. Nurse practitioner salaries are considerably more than faculty salaries and only require a MSN (Yucha & Witt, 2009) as opposed to the doctoral degree that faculty need to achieve to increase in rank and pay. The literature has shown that the achievement of tenure increases job satisfaction, but this study showed differently. The multiple regression results indicated

that tenure is inversely significantly associated with job satisfaction (β = -.094, t = -2.722, p < .007). It is unknown why this sample would reflect this association. It is unknown how long the tenured portion of the sample has held tenure—perhaps the length of tenure affects job satisfaction. Alternatively, as the sample has on average less than 10 years of faculty experience, perhaps many of the tenured faculty have recently achieved the status and the strain of the tenure process is still affecting their job satisfaction.

Discussion of Results

This research study had five research questions that guided the analysis. Following is a discussion of the research question results in the context of existing literature and theory, followed by implications for practice, theory, and future research.

Mentoring among nursing faculty. The research study showed approximately 40% of the respondents were involved in mentoring relationships. There are no previous studies that present the percentage of nurse educators with current mentors. The assessment of these results is mixed—encouraging because the data indicate mentoring is being used regularly in nursing academia. Utilizing mentoring in nursing education is consistent with the recommendations from the NLN (2006). However, if mentoring is a strategy that assists novice faculty's adjustment to the academy, increases job satisfaction and retention of nursing faculty then 40% is not adequate. Law faculty have been shown to have a 58.2% mentoring rate (Haynes & Petrosko, 2009).

Additionally, although mentoring is recommended for new faculty across academic disciplines, the methods of mentoring that works best has not been standardized because mentors and mentees have different needs and relational styles (Borders, et al., 2011). Mentoring functions when it is developed through formal programs and through

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informal mutual agreements (Borders, et al., 2011). However, mentoring does not function well for every pair of mentors and mentees (Borders, et al., 2011).

Time spent working together and developing the relationship is an essential element of a successful mentoring relationship. Time is a major challenge for nursing faculty today—the nursing faculty shortage creates and perpetuates mentoring challenges. Current experienced faculty may not have the time to mentor to the level needed by novice faculty members (Monk, et al., 2010). This inability to mentor new nursing faculty sufficiently may lead to "a self-perpetuating cycle of insufficient numbers of faculty with inadequate preparation for academia could lead to a profound decline in the nursing profession" (Records & Emerson, 2003, p. 553). These dire predictions due to insufficiently prepared faculty point to a discussion of mentoring quality, as mentoring has been indicated as a successful orientation method for new faculty (Morin & Ashton, 2004; Smith & Zsohar, 2007).

The results of this study indicated that three-fourths of mentees felt their mentoring relationships were "good" (as opposed to "fair" or "poor"). However, the results of Dreher's mentoring scale showed a somewhat less favorable picture, with the mean score being just over the mid-value "to some extent"—reflecting fairly neutral feelings about the relationship. The correlation between the self-assessment of mentoring quality and the mentoring scale was significant at 0.629 ($p < .0005$), a "substantial" correlation. A higher correlation or even a multicollinear relationship was expected as the mentoring quality question and Dreher's mentoring scale were attempting to assess the same construct. The respondents may have felt compelled to answer their mentor was "good" as opposed to "fair" because the question only had a three-point scale.

Dreher's mentoring scale asks the mentee whether the mentor has facilitated certain tasks and responsibilities and asks about the development of an interpersonal relationship with the mentor. These results may indicate that respondents, as mentees, value parts of their mentoring relationship that are not reflected in the mentoring scale items. The items on the mentoring scale which earned the highest mean responses dealt with the interpersonal relationship between the mentor and mentee. The lower mean responses were items dealing with facilitating actions which would develop the roles of teaching, scholarship, and service. This may indicate that nursing faculty mentoring relationships are centered on the interpersonal connection between the mentor and mentee, as opposed to being oriented toward specific career growth functions.

It is possible that mentoring relationships among nursing faculty have not achieved the depth or longevity that exists in corporate business mentoring relationships. The literature states corporate mentoring relationships are commonly a minimum of five years in duration (Gibson, 2009; Kram, 1983). This study did not ask how long the mentee had been involved in the current mentoring relationship. The developmental phases of mentoring relationships, developed by Kram (1983) through large-scale studies of corporate mentoring relationships, indicate that the initiation phase of the mentoring relationship is primarily the building of the interpersonal relationship between the mentor and mentee. This phase is approximately six to twelve months in length. Following the initiation phase is the cultivation phase which encompasses years two through five of the mentoring relationship. This researcher questions whether nursing faculty mentoring relationships extend for a number of years—enough time the mentoring relationship to truly allow the mentee's growth—or if nursing faculty mentoring relationships tend to be

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shorter in duration and focused more on orientation to the institution rather than career growth.

The AACN and Robert Wood Johnson Foundation have partnered to form the New Careers in Nursing program which provides nursing scholarships to students and grants to nursing schools. These program grants have been used to fund mentoring and leadership programs (AACN, 2011). Johnson & Johnson's Campaign for Nursing's Future partnered with AACN to provide mentoring support to minority nurse scholars (AACN, 2011). Mentoring is utilized because it is believed to provide positive modeling and supportive to the mentee. While the current study demonstrated that mentoring does influence nursing faculty in a positive manner, mentoring best practices have not been empirically tested.

Comparison of levels of job stress, psychological empowerment, and job satisfaction by mentoring status. Job stress has been problematic for faculty across disciplines, both nationally and internationally (Gmelch, 1993; Schuldt & Totten, 2008; S. P. Thomas, 2009). This is especially true for nursing faculty due to long clinical course hours and high workloads (S. E. Campbell & Filer, 2008; Kaufman, 2007b). The result of job stress for nursing faculty members is burnout (Shirey, 2006; Spurlock Jr., 2008).

Mentored faculty in the current study had significantly higher levels of psychological empowerment and job satisfaction and significantly lower levels of job stress than non-mentored faculty. These results supported the researcher's theoretical model. Mentoring may act as a buffer for faculty job stress. The mentor can model useful stress management techniques and organizational skills to help the mentee

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negotiate their faculty role. The mentor may also provide social support to the mentee which decreases stress (Kram & Hall, 1989). The research study supports the body of knowledge that indicates mentoring is a useful strategy to manage faculty stress (Dunham-Taylor, et al., 2008).

Mentored faculty had a significantly higher level of psychological empowerment compared to non-mentored faculty. These results are supported by mentoring theory—the mentor serves as a behavioral model for the mentee (Dreher & Ash, 1990; Kram, 1983). Therefore, the mentor demonstrates empowered behaviors, which helps the mentee develop their own empowered behaviors (Luna & Cullen, 1995).

Job satisfaction was also found to be significantly higher in the mentored nursing faculty group. The importance of this finding cannot be underestimated in the climate of the current faculty shortage. Strategies for increasing job satisfaction among nursing faculty are being sought not only by individual institutions (Baker, 2010) but by national organizations as well (AACN, 2005; IOM, 2011).

Relationship among mentoring quality, job stress, psychological empowerment, and job satisfaction. The relationships among the variables examined in this study showed significant results that support the researcher's theoretical model: mentoring quality was positively correlated with psychological empowerment and job satisfaction, and negatively correlated with job stress. The strongest relationships in this study were (a) the inverse relationship between job stress and job satisfaction and (b) the positive relationship between psychological empowerment and job satisfaction. The correlation between mentoring quality and job satisfaction was significant but low. The

stronger correlation between psychological empowerment and job satisfaction as opposed to mentoring quality and job satisfaction was an unexpected result.

Job stress has been shown to have a negative physical and emotional outcome in the literature (Nash, 2010). The study results showed a meaningful inverse relationship between job stress and job satisfaction which concurs with the body of knowledge. As Gmelch's theory of faculty job stress determined, faculty are unable to function effectively when stress levels become too high (Gmelch, 1993). The literature has detailed job stress among faculty and its pathway to burnout (Shirey, 2006; Spurlock Jr., 2008).

The study supports evidence from other disciplines and work settings with the positive relationship between psychological empowerment and job satisfaction. Work in over 50 studies with workers from a variety of industries and the concept of psychological empowerment has shown that higher psychological empowerment levels are linked to increased job satisfaction, production, and retention (Spreitzer, 1995b; Spreitzer, De Janasz, & Quinn, 1999; Spreitzer & Quinn, 2001).

The body of knowledge regarding nursing faculty and psychological empowerment is quite small, but the current study concurred with the results of Brancato (2007), who found that nursing faculty's psychological empowerment was above average. Brancato's results also found that the impact dimension on Spreitzer's psychological empowerment instrument was the dimension on which nursing faculty scored lowest. That result was repeated in the current study. The impact dimension examines how much the respondent feels they influence the employing institution. Academic institutions often allow faculty to influence their inner workings through

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faculty governance and department and university-level service work (Honeycutt, et al., 2010). Additionally, nursing faculty should have an impact on their program and department through course development, curricular revision, and assessment of program outcomes (NLN, 2005).

The researcher questions whether current nursing faculty workloads and the resulting stress are influencing the dimension of impact in psychological empowerment. Perhaps faculty feel too stressed to participate in institutional service work that could develop the impact dimension. While the focus on immediate workload may feel necessary the lack of impact at an institutional level may be detrimental to the faculty career. Lower impact may cause less commitment to the employing institution and could negatively affect job satisfaction (Spreitzer & Quinn, 2001).

Influential variables on job satisfaction. Multiple regression results that analyzed all of the demographic and research variables in the study showed having a mentor, greater psychological empowerment, and higher salary had positive significant influences on job satisfaction; job stress and tenure status had significant inverse influences on job satisfaction. The variables accounted for 47% of the variance in job satisfaction.

A second multiple regression was computed using only the primary study variables. The results indicated having a mentor and psychological empowerment had positive significant influences on job satisfaction and job stress had a significant inverse influence on job satisfaction. The primary study variables alone accounted for 40% of the variance in job satisfaction. These results further supported the researcher's

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theoretical model and indicate that this combination of variables is an important area of inquiry for nursing research.

Implications for Practice

This research study both acknowledges and increases the evidence that nursing academia is in a precarious position of aging faculty, lack of supportive strategies for novice faculty, and high stress levels. Specific areas of the study will be discussed related to current nursing faculty practice. Although the sample was largely a homogenous Caucasian female faculty, this sample represents nursing faculty in the U.S. today as they are a largely Caucasian female group (AACN, 2011).

The current study verified the negative effect of job stress on job satisfaction among nursing faculty. Job stress showed the most statistically significant (inverse) link to job satisfaction. The literature concurs that job stress is a severe problem for workers across industries, including faculty across disciplines (Jahanzeb, 2010; Nash, 2010; S. P. Thomas, 2009).

Several implications may be drawn from this study to assist academic institutions and nursing faculty move toward improved job satisfaction. Since mentored faculty had higher associations with job satisfaction and lower associations with job stress it may be concluded that mentoring is a beneficial strategy for assisting nursing faculty. Only 40% of nursing faculty in the sample had a mentor, and this is insufficient to support job satisfaction in the environment of the current nursing faculty shortage. The literature is inconclusive regarding statistical links between mentoring and job satisfaction. Although Mariani (2011) found no statistically significant link between mentoring in nursing and career satisfaction, there is a body of knowledge that supports mentoring as increasing

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job satisfaction in studies with community mental health workers (Lee & Montiel, 2011) and U.S. Army Reserve nurses (Prevosto, 2001). The literature is supportive of mentoring to increase job satisfaction among nursing faculty and retention regardless of empirical evidence (Baker, 2010; Dunham-Taylor, et al., 2008; Monk, et al., 2010). The current study lends statistical evidence to the link between mentoring and job satisfaction among nursing faculty.

Mentoring was not the most statistically influential variable of those examined in this study. Increased psychological empowerment showed a higher correlation with increased job satisfaction among nursing faculty. The current study was unable to determine causality, therefore it is unknown how high levels of psychological empowerment were obtained—whether it was through mentoring, other work experiences, or years of faculty experience. However, the literature does support psychological empowerment as a means to develop organizations with highly productive, satisfied, innovative workforces (Spreitzer & Quinn, 2001). Psychological empowerment has also been linked to increased innovative behaviors among academics (Ghani, et al., 2009). Academia is an environment ripe for developing psychological empowerment and reaping its benefits—academia is largely autonomous and faculty often feel deep meaning connected with their work (Disch, et al., 2004). While mentoring may assist in developing psychological empowerment, the organizational culture is important as well. Organizational culture significantly impacts psychological empowerment among a variety of work organizations (Spreitzer, 1995a, 1995b) including nursing academia (Johnson, 2009). Organizational culture was not addressed in the current study. It may be that the one-on-one mentoring examined in this study, while beneficial, could be

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expanded to a group mentoring process which would positively affect the organizational culture as well as individual psychological empowerment and job satisfaction.

Implications for Theory

The theoretical modeling of mentoring, job stress, psychological empowerment, and job satisfaction assumed that mentoring would be the core component to affect job stress, psychological empowerment, and job satisfaction. While mentoring has been shown to affect the other constructs, the evidence from this study is not enough to say that mentoring is the *core* strategy needed to improve job satisfaction among nurse educators. This research has demonstrated that mentoring is a strategy that can benefit faculty in several ways, but the results demonstrated that other strategies to decrease job stress, increase psychological empowerment, and increase job satisfaction are needed in addition to mentoring.

This study reinforced Spreitzer's psychological empowerment theory by demonstrating higher psychological empowerment was associated with increased job satisfaction and decreased job stress.

Recommendations for Future Research

Mentoring relationships among nursing academia are ripe for further research. The literature has addressed the meaning of mentoring relationships qualitatively within mentoring dyads and small groups (White, Brannan, & Wilson, 2010; Wilson, et al., 2010). With the benefit of technology, nursing education may perform larger scale qualitative studies may be undertaken to examine the variables job stress, mentoring, psychological empowerment, and job satisfaction among nursing faculty. Although the data illustrate one picture of these variables, journals or open ended comments from

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faculty could enrich these data and reveal new insights to deepen the understanding of the variables relationships.

The amount of time a mentoring relationship is established may affect the influence that occurs both on the mentee and mentor. The format of the mentoring relationship—formally or informally established—may also affect the outcomes of the relationship. A quantitative study examining these variables may assist in developing mentoring programs that best serve job satisfaction among nursing faculty.

Studying another target population to determine if mentoring is being utilized at a 40% rate across nursing education could confirm the results of the current study. The study may be repeated with NLNAC-accredited nursing programs.

A comparative study with an academic discipline known to utilize mentoring, such as business or law, could assist in the understanding of mentoring practices and outcomes as well. Perhaps other disciplines are utilizing mentoring strategies that are more focused on career development as opposed to interpersonal relationships that could benefit nursing academia. Studying mentoring via multiple methodologies could assist in determining best practices in academic mentoring.

Finally, as a result of the current study this researcher has expanded interest beyond one-on-one mentoring within nursing academia to creating "collegial communities". The idea of an increase in collegiality and collaboration among nursing academics has been discussed in the literature (Brady, 2010). A collegial community would be based on civil respectful interactions, deep commitment to the mission of the department and program, information sharing, and research collaboration. The conscious creation of collegial communities utilizing group mentoring processes and scholarship

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collaboration may decrease stress, increase psychological empowerment, increase job satisfaction, and ultimately increase retention. This concept could better serve faculty spanning the entirety of the faculty career. An exploratory qualitative study would begin this line of inquiry.

Conclusion

The current study utilized a cross-sectional quantitative survey administered online via Survey Monkey to examine the relationships between mentoring status and quality, job stress, psychological empowerment, and job satisfaction among nursing faculty. The target population was CCNE-accredited full-time nursing faculty in the U.S. The resulting sample ($N = 959$) demonstrated a 40% mentoring rate. Statistical correlations showed a significant negative relationship between job stress and job satisfaction, and significant positive relationships between mentoring quality, psychological empowerment, and job satisfaction. A multiple regression analysis revealed that mentoring status, psychological empowerment, and salary had a positive significant impact on job satisfaction among nursing faculty; and job stress and tenure had a negative significant impact on job satisfaction. The model accounted for 47% of the variance in job satisfaction.

Nursing academia faces multiple challenges, including a faculty shortage, dramatically changing education methodologies, and demographic pressures on both the supply and demand sides. Increasing job satisfaction in order to increase retention among nursing faculty is necessary in the current environment. The research study demonstrated that mentoring is a useful strategy for decreasing job stress, and increasing psychological

empowerment and job satisfaction. Further research is needed to determine best practices

of academic mentoring.

APPENDICES

APPENDIX A: INSTRUMENTATION

<u>Dreher's Mentoring Scale</u>

To what extent has your mentor…	Not at All	To a Small Extent	To Some Extent	To a Large Extent	To a Very Large Extent
Given or recommended you for challenging assignments that present opportunities to learn new skills?					
Given or recommended you for assignments that required personal contact with administrators in different parts of the school of nursing?					
Given or recommended you for assignments that increased your contact with higher level administrators?					
Given or recommended you for assignments that helped you meet new colleagues?					
Helped you finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete?					
Protected you from working with other administrators or departments before you knew about their likes/dislikes, opinions on controversial topics, and the nature of the political environment?					
Gone out of his/her way to promote your career interests?					
Kept you informed about what is going on at higher levels in the school of nursing or how external conditions are influencing the school of nursing?					
Conveyed feelings of respect for you as an individual?					

Conveyed empathy for the concerns and feelings you have discussed with him/her?					
Encouraged you to talk openly about anxiety and fears that detract from your work?					
Shared personal experiences as an alternative perspective to your problems?					
Discussed your questions or concerns regarding feelings of competence, commitment to advancement, relationships with peers and department heads or work/family conflicts?					
Shared history of his/her career with you?					
Encouraged you to prepare for advancement?					
Encouraged you to try new ways of behaving on the job?					
Served as a role model?					
Displayed attitudes and values similar to your own?					

Dreher, G. F. & Ash, R. A. (1990). *A comparative study of mentoring among men and women in managerial, professional, and technical positions*. **Journal of Applied Psychology, 75 (5), 539-546.**

Gmelch's Faculty Stress Index

The following work-related situations have been identified as potential sources of stress. It is possible that some of these situations cause more pressure than others. Indicate to what extent each is a source of pressure by selecting the appropriate response.

	Slight Pressure		Moderate Pressure	Excessive Pressure		Not Applicable
Participating in the work of departmental or university committees	1	2	3	4	5	
Participating in work-related activities outside regular working hours						
Meeting social obligations (clubs, parties, volunteer work) expected of me because of my position						
Complying with departmental and university rules and regulations						
Having inadequate facilities (office, library, laboratories, classrooms)						
Evaluating the performance of students						
Making presentations at professional conferences and meetings						
Imposing excessively high self-expectations						
Receiving inadequate university recognition for community services						
Having students evaluate my teaching performance						
Resolving differences with fellow faculty members						
Having insufficient time to keep abreast of current developments in my field						
Having insufficient authority to perform my responsibilities						
Believing that the progress in my career is not what it						

should or could be					
Assignment of duties that take me away from my office					
Being interrupted frequently by telephone calls and drop-in visitors					
Securing financial support for my research					
Frequently being requested to provide community services					
Teaching/advising inadequately prepared students					
Preparing a manuscript for publication					
Being unclear as to the scope and responsibilities of my job					
Having insufficient reward for institutional/departmental service					
Having inadequate time for teaching preparation					
Feeling pressure to compete with my colleagues					
Having repetitious teaching and job assignments					
Writing letters and memos, and responding to other paper work					
Resolving differences with students					
Having insufficient time for performing the service function					
Feeling that I have too heavy a work load, one that I cannot possibly finish during the normal work day					
Attending meetings which take up too much time					
Dealing with program changes or reduced enrollment impacting my job					
Receiving insufficient recognition for teaching performance					

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Making class presentations						
Trying to influence my chair's actions and decisions which affect me						
Not having clear criteria for evaluating service activities						
Resolving differences with my chair						
Lacking congruency in institutional, departmental, and personal goals						
Having to teach subject matter for which I am not sufficiently prepared						
Receiving insufficient institutional recognition for research performance						
Lacking personal impact on departmental/institutional decision making						
Not knowing how my chair evaluates my performance						
Receiving inadequate salary to meet financial needs						
Not having clear criteria for evaluation of research and publication activities						
Having job demands which interfere with other personal activities (recreation, family, and other interests)						
Being drawn into conflict between colleagues						
Assess the level of stress you experience in your job						
Assess the level of stress you experience in your daily life						

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Spreitzer's Psychological Empowerment Instrument

	Very Strongly Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Very Strongly Agree
Listed below are a number of self-orientations that people may have with regard to their work role. Using the following scale, please indicate the extent to which you agree or disagree that each one describes your self-orientation.							
I am confident about my ability to do my job.							
The work that I do is important to me.							
The work that I do is important to me.							
My impact on what happens in my department is large.							
My job activities are personally meaningful to me.							
I have a great deal of control over what happens in my department.							
I can decide on my own how to go about doing my own work.							
I have considerable opportunity for independence and freedom in how I do my job.							
I have							

mastered the skills necessary for my job.							
The work I do is meaningful to me.							
I have significant influence over what happens in my department.							
I am self-assured about my capabilities to perform my work activities.							

<u>NSOPF Job Satisfaction Scale</u>

With regard to your job, would you say you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied with…				
	Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied
The authority you had to make decisions about content and methods in your instructional activities				
The institutional support for implementing technology-based instructional activities				
Quality of equipment and facilities available for classroom instruction				
Institutional support for teaching improvement (including grants, release time, and professional development funds)				
Your workload				
Your salary				
The benefits available to you				
Your job at this institution, overall				

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<u>Researcher created demographic instrument</u>

1. Do you have a current mentor at your faculty workplace?
   a. Yes
   b. No

*If no mentor the next question and Dreher's mentoring scale were skipped in Survey Monkey. The survey continued with Gmelch's faculty stress index.

2. What do you feel is the quality of the mentoring relationship you have now?
   a. Good
   b. Fair
   c. Poor
   d. No mentor

3. What is your gender?
   a. M
   b. F

4. What is your race? (please select one or more that best describe your race)
   a. American Indian or Alaska Native
   b. Asian
   c. Black or African American
   d. Hispanic or Latino
   e. Native Hawaiian or Other Pacific Islander
   f. White

5. What is your age? (please enter whole number)

6. What is your marital status?
   a. Single and never married
   b. Married
   c. Living with partner or significant other
   d. Separated, divorced, or widowed

7. How many dependent children do you support? (A dependent child is a person 24 years old or younger for whom you provide at least half of his/her financial support.)
    a. 1
    b. 2
    c. 3
    d. 4
    e. More than 4

8. What is the highest degree you have earned?
    a. PhD, DNP, DNSc, ND, EdD, DPH or other terminal degree
    b. MSN
    c. MS or MA in a related subject
    d. Other, please enter

9. Are you enrolled in a terminal degree program at this time?
    a. Yes
    b. No, but I plan on obtaining a terminal degree in the future
    c. No, I have already obtained my terminal degree
    d. No, and I do not plan on obtaining a terminal degree

10. How many years total have you been employed in a full time nursing faculty position? (please enter whole number)

11. How many years have you been employed in a full time nursing faculty position at your current institution? (please enter whole number

12. What is your faculty rank?
    a. Instructor or Clinical Instructor
    b. Assistant Professor or Clinical Assistant Professor
    c. Associate Professor or Clinical Associate Professor
    d. Professor or Clinical Professor
    e. Other

13. Are you tenured?
    a. Yes
    b. No, but I am on a tenure track
    c. No, I am not on a tenure track
    d. NA- my institution does not function on a tenure system

14. What is your faculty salary per year (please do not include any overload pay)?
   a. $30,000-39,999
   b. $40,000-49,999
   c. $50,000-59,999
   d. $60,000-69,999
   e. $70,000-79,999
   f. $80,000-89,999
   g. $90,000-99,999
   h. >$100,000

15. Do you hold any additional employment in addition to your faculty position?
   a. Yes
   b. No

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Biomedical IRB – Exempt Review
Deemed Exempt

DATE: **August 19**, 2011

TO: **Dr. Susan Kowalski,** Physiological Nursing

FROM: Office of Research Integrity – Human Subjects

RE: Notification of review by /Cindy Lee-Tataseo/Ms. Cindy Lee-Tataseo, BS, CIP, CIM
               Protocol Title: Job Stress, Mentoring, Psychological Empowerment, and Job
               Satisfaction Among Nursing Faculty
               Protocol # 1108-3888M

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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www.manaraa.com

Below is the information presented on page one of the online survey; this page will serve as informed consent for this study. If the participant wishes to proceed after reading, they simply click NEXT at the bottom of the page. If you wish to see a demonstration, please go to https://www.surveymonkey.com/s/P3RL69R

My name is Catherine Chung and I am a doctoral candidate at the University of Nevada, Las Vegas. I need your assistance as a participant in my dissertation research regarding job stress, mentoring practices, psychological empowerment, and satisfaction among nursing faculty.

TITLE OF STUDY: Job Stress, Mentoring, Psychological Empowerment, and Job Satisfaction among Nursing Faculty

INVESTIGATOR(S): Susan Kowalski and Catherine Chung

CONTACT PHONE NUMBER: 702-895-7397

Purpose of the Study:
You are invited to participate in a research study. The purpose of this study is to examine job stress, mentoring practices, psychological empowerment, and job satisfaction among nursing faculty today.

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

(a) nursing faculty with an earned masters or terminal degree in nursing or a related field
(b) employed in a full-time nursing faculty position at a CCNE accredited school of nursing in the U.S
(c) licensed registered nurse in at least one state or other jurisdiction
(d) teaching in a baccalaureate of nursing program or higher level nursing program
(e) have a work email address that is able to be obtained via the internet

Procedures:
If you volunteer to participate in this study, you will be asked to complete the online job stress/mentoring/psychological empowerment/job satisfaction survey and a few demographic questions.

Benefits of Participation:
There may be no direct benefits to you as a participant in this study. However, we are examining job satisfaction among nursing faculty and the findings will be submitted for publication to increase the knowledge base of the nursing discipline.

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:
The study will take approximately 15-20 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:

Deemed exempt by the ORI-HS and/or the UNLV IRB. Protocol #1108-3888M
Exempt Date: 08-19-11

If you have any questions of concerns about the study, you may contact Dr. Susan Kowalski (PI and Faculty Dissertation Chair) at susan.kowalski@unlv.edu or 703-895-7397. 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 in this study is voluntary. You may refuse to participate in this study at all or you have the ability to skip answers on the survey questions and/or submit the survey without requiring an answer on each item. You are encouraged to ask questions about this study at the beginning or any time during the research study. If you would like a copy of the study results, please email your request to Catherine Chung at chungc5@unlv.nevada.edu

Confidentiality:
All information gathered in this study will be kept completely confidential. No reference will be made in written or oral materials that could link you to this study. The Internet Protocol address used to contact you will not be collected. All records will be stored in a locked facility at UNLV for 3 years after completion of the study. After the storage time the information gathered will be destroyed.

This study has been approved by our University's Institutional Review Board.

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

Deemed exempt by the ORI-HS and/or the UNLV IRB. Protocol #1108-3888M
Exempt Date: 08-19-11

Dissertation Survey

Welcome Nursing Faculty!

My name is Catherine Chung and I am a doctoral candidate at the University of Nevada, Las Vegas. I need your assistance as a participant in my dissertation research regarding job stress, mentoring practices, psychological empowerment, and satisfaction among nursing faculty.

TITLE OF STUDY: Job Stress, Mentoring, Psychological Empowerment, and Job Satisfaction among Nursing Faculty

INVESTIGATOR(S): Catherine Chung and Susan Kowalski

CONTACT PHONE NUMBER: 702-895-7397

Purpose of the Study:
You are invited to participate in a research study. The purpose of this study is to examine job stress, mentoring practices, psychological empowerment, and job satisfaction among nursing faculty today.

Participants:
You are being asked to participate in the study if you are a nursing faculty member who meets the inclusion criteria below:

(a) has an earned masters or terminal degree in nursing or a related field
(b) employed in a full-time nursing faculty position
(c) licensed registered nurse in at least one state or other jurisdiction
(d) teaching in a baccalaureate of nursing program or higher level nursing program
(e) have a work email address that was able to be obtained via the internet

Procedures:
If you volunteer to participate in this study, you will be asked to complete the online job stress/mentoring/psychological empowerment/job satisfaction survey and a few demographic questions.

Benefits of Participation:
There may be no direct benefits to you as a participant in this study. However, we are examining job satisfaction among nursing faculty and the findings will be submitted for publication to increase the knowledge base of the nursing discipline.

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 15-20 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 of concerns about the study, you may contact Dr. Susan Kowalski (PI and Faculty Dissertation Chair) at susan.kowalski@unlv.edu or 702-895-7397. 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 in this study is voluntary. You may refuse to participate in this study at all or you have the ability to skip answers on the survey questions and/or submit the survey without requiring an answer on each item. You are encouraged to ask questions about this study at the beginning or any time during the research study. If you would like a copy of the study results, please email your request to Catherine Chung at chung-5@unlv.nevada.edu

Confidentiality:
All information gathered in this study will be kept completely confidential. No reference will be made in written or oral materials that could link you to this study. The Internet Protocol address used to contact you will not be collected. All records will be stored in a locked facility at UNLV for 3 years after completion of the study. After the storage time the information gathered will be destroyed.

Dissertation Survey

This study has been approved by our University's Institutional Review Board.

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

Dissertation Survey

1. The following work-related situations have been identified as potential sources of stress. It is possible that some of these situations cause more pressure than others. Indicate to what extent each is a source of pressure by selecting the appropriate response. These questions are meant to be answered quickly, with your first reaction.

	1 Least Pressure	2 Slight Pressure	3 Moderate Pressure	4 Lots of Pressure	5 Excessive Pressure	N/A Not Applicable
Participating in the work of departmental or university committees.						
Participating in work-related activities outside regular working hours.						
Meeting social obligations (clubs, parties, volunteer work) expected of me because of my position.						
Complying with departmental and university rules and regulations.						
Having inadequate facilities (office, library, laboratories, classrooms).						
Evaluating the performance of students.						
Making presentations at professional conferences and meetings.						
Imposing excessively high self-expectations.						
Receiving inadequate university recognition for community services.						
Having students evaluate my teaching performance.						
Resolving differences with fellow faculty members.						
Having insufficient time to keep abreast of current developments in my field.						
Having insufficient authority to perform my responsibilities.						
Believing that the progress in my career is not what it should or could be.						
Assignment of duties that						

take me away from my office.						
Being interrupted frequently by telephone calls and drop-in visitors.						
Securing financial support for my research.						
Frequently being requested to provide community services.						
Teaching/advising inadequately prepared students.						
Preparing a manuscript for publication.						

Dissertation Survey

2. Please continue (this is the longest question)... Indicate to what extent each is a **source** of pressure by selecting the appropriate response. These questions are meant to be answered quickly, with your first **reaction.**

	1 Least Pressure	2 Slight Pressure	3 Moderate Pressure	4 Lots of Pressure	5 Excessive Pressure	N/A Not Applicable
Being unclear as to the scope and responsibilities of my job.						
Having insufficient reward for institutional/departmental service.						
Having inadequate time for teaching preparation.						
Feeling pressure to compete with my colleagues.						
Having repetitious teaching and job assignments.						
Writing letters and memos, and responding to other paper work.						
Resolving differences with students.						
Having insufficient time for performing the service function.						
Feeling that I have too heavy a work load, one that I cannot possibly finish during the normal work day.						
Attending meetings which take up too much time.						
Dealing with program changes or reduced enrollment impacting my job.						
Receiving insufficient recognition for teaching performance.						
Making class presentations.						
Trying to influence my chair's actions and decisions which affect me.						
Not having clear criteria for evaluating service activities.						
Resolving differences with my chair.						
Lacking congruency in institutional, departmental.						

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and personal goals.

Having to teach subject matter for which I am not sufficiently prepared.	♨	♨	♨	♨	♨	♨
Receiving insufficient institutional recognition for research performance.	♨	♨	♨	♨	♨	♨
Lacking personal impact on departmental/institutional decision making.	♨	♨	♨	♨	♨	♨
Not knowing how my chair evaluates my performance.	♨	♨	♨	♨	♨	♨
Receiving inadequate salary to meet financial needs.	♨	♨	♨	♨	♨	♨
Not having clear criteria for evaluation of research and publication activities.	♨	♨	♨	♨	♨	♨
Having job demands which interfere with other personal activities (recreation, family, and other interests).	♨	♨	♨	♨	♨	♨
Being drawn into conflict between colleagues.	♨	♨	♨	♨	♨	♨
Assess the level of stress you experience in your job.	♨	♨	♨	♨	♨	♨
Assess the level of stress you experience in your daily life.	♨	♨	♨	♨	♨	♨

3. Please add other sources of work-related stress (optional):

4. Do you have any comments about workplace stressors you would like to share? (optional)

5. Do you have any other comments to share related to faculty stress? (optional)

6. Do you have a current mentor at your faculty workplace?
(In this study a mentor is a faculty member who is comfortable with their role(s) in the employing academic institution and is currently helping you with aspects of career development and achievement that will facilitate your success as a nursing faculty member.)

- Yes
- No

Dissertation Survey

7. What do you feel is the quality of the mentoring relationship you have now?

- Good
- Fair
- Poor

8. To what extent has your mentor...

	Not at All	To a Small Extent	To Some Extent	To a Large Extent	To a Very Large Extent
Given or recommended you for challenging assignments that present opportunities to learn new skills?					
Given or recommended you for assignments that required personal contact with administrators in different parts of the school of nursing?					
Given or recommended you for assignments that increased your contact with higher level administrators?					
Given or recommended you for assignments that helped you meet new colleagues?					
Helped you finish assignments/tasks or meet deadlines that otherwise would have been difficult to complete?					
Protected you from working with other administrators or departments before you knew about their likes/dislikes, opinions on controversial topics, and the nature of the political environment?					
Gone out of his/her way to promote your career interests?					
Kept you informed about what is going on at higher levels in the school of nursing or how external conditions are influencing the school of nursing?					
Conveyed feelings of					

respect for you as an
individual?

9. To what extent has your mentor... (please continue...)

	Not at All	To a Small Extent	To Some Extent	To a Large Extent	To a Very Large Extent
Conveyed empathy for the concerns and feelings you have discussed with him/her?					
Encouraged you to talk openly about anxiety and fears that detract from your work?					
Shared personal experiences as an alternative perspective to your problems?					
Discussed your questions or concerns regarding feelings of competence, commitment to advancement, relationships with peers and department heads or work/family conflicts?					
Shared history of his/her career with you?					
Encouraged you to prepare for advancement?					
Encouraged you to try new ways of behaving on the job?					
Served as a role model?					
Displayed attitudes and values similar to your own?					

10. Do you have any comments about your mentoring relationship you would like to share? (optional)

11. Listed below are a number of self-orientations that people may have with regard to their work role. Using the following scale, please indicate the extent to which you agree or disagree that each one describes your self-orientation.

	Very Strongly Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Very Strongly Agree
I am confident about my ability to do my job.							
The work that I do is important to me.							
I have significant autonomy in determining how I do my job.							
My impact on what happens in my department is large.							
My job activities are personally meaningful to me.							
I have a great deal of control over what happens in my department.							
I can decide on my own how to go about doing my own work.							
I have considerable opportunity for independence and freedom in how I do my job.							
I have mastered the skills necessary for my job.							
The work I do is meaningful to me.							
I have significant influence over what happens in my department.							
I am self-assured about my capabilities to perform my work activities.							

12. Do you have any comments about how you feel toward your faculty work? (optional)

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Dissertation Survey

13. With regard to your job, would you say you are very dissatisfied, somewhat dissatisfied, somewhat satisfied, or very satisfied with...

	Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied
The authority you had to make decisions about content and methods in your instructional activities.	1	1	1	1
The institutional support for implementing technology-based instructional activities.	2	2	2	2
Quality of equipment and facilities available for classroom instruction.	1	1	1	1
Institutional support for teaching improvement (including grants, release time, and professional development funds).	2	2	2	2
Your workload.	1	1	1	1
Your salary.	2	2	2	2
The benefits available to you.	1	1	1	1
Your job at this institution, overall.	2	2	2	2

14. Any comments on your faculty job satisfaction you would like to share? (optional)

Dissertation Survey

The last few items are demographic questions...

15. What is your gender?

- Male
- Female

16. What is your race?

- American Indian or Alaska Native
- Asian
- Black or African American
- Hispanic or Latino
- Native Hawaiian or Other Pacific Islander
- White or Caucasian
- Other
- More than one race

17. What is your age? (Please enter whole number.)

18. What is your marital status?

- Single and never married
- Married
- Living with partner or significant other
- Separated, divorced, or widowed

19. How many dependent children do you support? (A dependent child is a person 24 years old or younger for whom you provide at least half of his/her financial support.)

- 0
- 1
- 2
- 3
- 4
- More than 4

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Dissertation Survey

20. What is the highest degree you have earned?

- PhD, DNP, DNSc, ND, EdD, DPH, or other terminal degree
- MSN
- MS or MA in a related subject

Other (please specify)

21. What is your faculty rank?

- Instructor or Clinical Instructor
- Assistant Professor or Clinical Assistant Professor
- Associate Professor or Clinical Associate Professor
- Professor or Clinical Professor
- Other

22. Are you tenured?

- Yes
- No- but I am on a tenure track
- No- I am not on a tenure track
- N/A My institution does not function on a tenure system

23. Are you enrolled in a terminal degree program at this time?

- Yes
- No, but I plan on obtaining a terminal degree in the future
- No, and I do not plan on obtaining a terminal degree
- N/A: Not applicable, I have already obtained a terminal degree

24. How many years total have you been employed in a full-time nursing faculty position? (Please enter whole number.)

25. How many years have you been employed in a full-time nursing faculty position at your current insitution? (Please enter whole number.)

Dissertation Survey

26. What is your faculty salary per year? (Please do not include any overload pay.)

- $30,000-39,999
- $40,000-49,999
- $50,000-59,999
- $60,000-69,999
- $70,000-79,999
- $80,000-89,999
- $90,000-99,999
- >$100,000

27. Do you hold any employment in addition to your faculty position?

- Yes
- No

Thank you VERY MUCH for participating!

If you would like a copy of the results of this study, please email chungc5@unlv.nevada.edu

APPENDIX D: INSTRUMENT PERMISSIONS

Dreher, George F. <dreher@indiana.edu> Wednesday, June 01, 2011 2:38 PM
Catie Chung
Re: Mentoring Scale

Follow up
Flagged

Hi Catie,

You have my permission to use the scale - and good luck

with your dissertation research. Regards,

George Dreher

Sent from my iPhone

On Jun 1, 2011, at 5:34PM, "Catie Chung"

<cchung04@cox.net> wrote: Hello

Dr. Dreher,

I am a doctoral student in nursing education at the University of
Nevada Las Vegas. I am in the process of writing my
dissertation, which is about mentoring quality, psychological
empowerment, job stress and job satisfaction in nursing faculty.
I am seeking permission to utilize your mentoring scale
published in the Journal of Applied Psychology:

Dreher, G. F., & Ash, R. A (1990). A comparative study of
mentoring among men and women in managerial, professional,
and technical positions. *journal of Applied Psychology,*
75(5), 539-546. doi: 10.1037/0021-9010.75.5.539

I understand that the American Psychological Association
holds the copyright and I will seek permission from them as
well.

Thank you

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Spreitzer, Gretchen
<spreitze@umich.edu> Thursday,
June 02, 2011 6:05AM
'Catie Chung'
RE: Psychological Empowerment Instrument

Good morning Catie,

Thanks so much for your nice message. I am glad to learn about your research in this domain! Sound exciting! Yes, you have permission to you use my instrument. Please share your findings with me so that I can learn from you! Best wishes to you!

Professor Gretchen M. Spreitzer
Area Chair and Professor of Management and Organizations
Ross School of Business
Ann Arbor, Ml 48109
Phone: 734.936.2835
email: spreitze@umich.edu
website: http://webuser.bus.umich.edu/spreitze/

From: catie Chung [mailto:cchung04@cox.net]
Sent: Wednesday, June 01, 2011 5:44 PM
To: Spreitzer, Gretchen
Subject: Psychological Empowerment Instrument

Hello Dr. Spreitzer,
I am a doctoral student in nursing education at the University of Nevada Las Vegas. I am in the process of writing my dissertation, which is about mentoring quality, psychological empowerment, job stress and job satisfaction in nursing faculty. I am seeking permission to utilize your Psychological Empowerment Instrument. I saw the instrument was available online at
http://webuser.bus.umich.edu/spreitze/empowermentinstrument.pdf - I just wanted to verify permission for use in my dissertation study.

Additionally, I read A Company of Leaders and not only did it motivate my dissertation topic but it was personally inspiring also- psychological empowerment as you and Dr. Quinn conceptualized it is just what the nursing discipline needs.

Thank you
Catie Chung

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Hi Ms. Chung,

Dr. Gmelch extends his permission for use of the stress index, however, requests that a copy of the results be shared with him and that you cite the copyright (Walter H. Gmelch@ University of San Francisco).

Thank you!

-Maria:)

-------- Original Message --------
Subject:Fwd: Dr Gmelch- Faculty Stress Index
   Date:Wed, 1 Jun 2011 15:01:25 -0700
  From:Helen Huynh
    <hhuynh3@usfca
    .edu> To:Walter
    H Gmelch
    <whgmelch@usf
    ca.edu>
    CC:Maria
    Martinez
    <mlmartinez@usf
    ca.edu>

Hello Ms. Huynh,

If you could please forward my email to Dr. Gmelch, I am seeking his permission to utilize the Faculty Stress Index that he created. I am a doctoral student at the University ofNevada Las Vegas in nursing education.

Hello Dr. Gmelch,

I am a doctoral student in nursing education at the University of Nevada Las Vegas. I am in the process of writing my dissertation, which is about mentoring quality, psychological empowerment, job stress and
job satisfaction in nursing faculty. I am seeking permission to utilize your Faculty Stress Index. I saw the instrument is published in the book Coping with Faculty Stress (great book by the way- I am a full-time faculty member, too)- I just wanted to verify permission for use in my dissertation study.

Thank you very much, have a nice summer,

Catie Chung RN MA

D'Amico, Aurora <Aurora.DAmico@ed.gov> Friday, June 03, 2011 8:56AM
Catie Chung
RE: Faculty Satisfaction Items

Hi, Catie:

Thank you for your interest in our data. The items are already in the public
domain so you don't need any special permission to use them. We just ask
that you cite NCES and NSOPF.

Best of luck! Aurora
Aurora.D'Amico@ed.gov
NCES Postsecondary, Adult, & Career Education Division (PACE)

From:
Catie
Chung
[cchung04
@cox.net]
Sent:
Thursday,
June 02,
2011 8:04
PM **To:**
D'Amico,
Aurora
Subject: Faculty Satisfaction Items

Hello Aurora,
I am seeking permission to use the Faculty Satisfaction items from the
NSOPF:04. Are there special forms I need to complete to use these items in my
dissertation research? I am not using NSOPF data, I would just like to use the
items with other survey instruments as part of my study.
Thank you for your help,
Catie Chung
PhD student
University of Nevada Las Vegas

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AMERICAN
PSYCHOLOGICAL
ASSOCIATION

IN MAKING PAYMENT REFER TO THE ABOVE INVOICE NUMBER

Catie Chung
Nursing Department, University of Nevada Las Vegas
4505 S. Maryland Pkwy, Box 453018
Las Vegas, NV 89154

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- Table 1 (adapted), p. 542, from Dreher, G. F., & Ash, R. A. (1990). A comparative study of mentoring among men and women in managerial, professional, and technical positions. *Journal of Applied Psychology, 75*(5), 539-546. doi:10.1037/0021-9010.75.5.539

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_____   _____
Applicant   for the American Psychological Association

_____   _____
Date   June 27, 2011
                                             Date

_____ I wish to cancel my request for permission at this time.

Table 12

Gmelch's Faculty Stress Index Item Scores

Item	Mean	SD
Participating in the work of departmental or university committees	2.98	.95
Participating in work-related activities outside regular working hours	2.93	1.14
Meeting social obligations (clubs, parties, volunteer work) expected of me because of my position	2.33	1.14
Evaluating the performance of students	2.74	1.11
Imposing excessively high self-expectations	3.42	1.24
Receiving inadequate university recognition for community services	2.43	1.41
Having students evaluate my teaching performance	2.84	1.33
Resolving differences with fellow faculty members	2.81	1.30
Having insufficient time to keep abreast of current developments in my field	3.29	1.14
Believing that the progress in my career is not what it should or could be	2.49	1.42
Assignment of duties that take me away from my office	2.57	1.29
Being interrupted frequently by telephone calls and drop-in visitors	2.63	1.29
Securing financial support for my research	2.67	1.83
Teaching/advising inadequately prepared students	3.04	1.28
Preparing a manuscript for publication	3.09	1.60
Being unclear as to the scope and responsibilities of my job	2.08	1.19
Having insufficient reward for institutional/departmental service	2.74	1.41
Having inadequate time for teaching preparation	3.05	1.22

Having repetitious teaching and job assignments	1.74	1.04
Writing letters and memos, and responding to other paper work	2.56	1.15
Resolving differences with students	2.38	1.11
Having insufficient time for performing the service function	2.54	1.20
Feeling that I have too heavy a work load, one that I cannot possibly finish during the normal work day	3.24	1.38
Attending meetings which take up too much time	3.36	1.25
Receiving insufficient recognition for teaching performance	2.60	1.45
Making class presentations	1.96	1.06
Trying to influence my chair's actions and decisions which affect me	2.24	1.35
Not having clear criteria for evaluating service activities	2.11	1.29
Lacking congruency in institutional, departmental, and personal goals	2.38	1.43
Receiving insufficient institutional recognition for research performance	1.77	1.46
Lacking personal impact on departmental/institutional decision making	2.34	1.43
Not knowing how my chair evaluates my performance	1.92	1.38
Receiving inadequate salary to meet financial needs	3.12	1.59
Not having clear criteria for evaluation of research and publication activities	1.98	1.46
Having job demands which interfere with other personal activities (recreation, family, and other interests)	3.10	1.43
Being drawn into conflict between colleagues	2.23	1.36

Range = 1-5
N = 956

Table 13

Dreher's Mentoring Scale Item Scores

Item	Mean	SD
To what extent has your mentor…		
Given or recommended you for challenging assignments that present opportunities to learn new skills?	3.35	1.91
Given or recommended you for assignments that required personal contact with administrators in different parts of the school of nursing?	2.84	1.28
Given or recommended you for assignments that increased your contact with higher level administrators?	2.72	1.33
Given or recommended you for assignments that helped you meet new colleagues?	2.99	1.26
Gone out of his/her way to promote your career interests?	3.25	1.32
Kept you informed about what is going on at higher levels in the school of nursing or how external conditions are influencing the school of nursing?	3.25	1.23
Conveyed feelings of respect for you as an individual?	4.11	1.03
Conveyed empathy for the concerns and feelings you have discussed with him/her?	3.80	1.03
Encouraged you to talk openly about anxiety and fears that detract from your work?	3.48	1.24
Shared personal experiences as an alternative perspective to your problems?	3.42	1.20
Discussed your questions or concerns regarding feelings of competence, commitment to advancement, relationships with peers and department heads or work/family conflicts?	3.33	1.21
Shared history of his/her career with you?	3.57	1.17
Encouraged you to prepare for advancement?	3.69	1.21
Encouraged you to try new ways of behaving on the job?	2.87	1.38

Served as a role model?	3.95	1.11
Displayed attitudes and values similar to your own?	3.81	1.12

Range 1-5

N = 379 [Note: only respondents who have a mentor answered these items.]

Table 14

Spreitzer's Psychological Empowerment Scale Item Scores

Item	Mean	SD
I am confident about my ability to do my job.	5.95	.96
The work that I do is important to me.	6.27	.91
I have significant autonomy in determining how I do my job.	5.46	1.26
My impact on what happens in my department is large.	4.60	1.59
My job activities are personally meaningful to me.	5.85	1.03
I have a great deal of control over what happens in my department.	3.92	1.61
I can decide on my own how to go about doing my own work.	5.28	1.33
I have considerable opportunity for independence and freedom in how I do my job.	5.23	1.42
I have mastered the skills necessary for my job.	5.54	1.18
The work I do is meaningful to me.	6.13	.98
I have significant influence over what happens in my department.	4.09	1.71
I am self-assured about my capabilities to perform my work activities.	5.82	1.06

Range = 1-7
N = 954

Table 15

NSOPF Faculty Satisfaction Scale Means

Item	Mean	SD
The authority you had to make decisions about content and methods in your instructional activities	3.44	.77
The institutional support for implementing technology-based instructional activities	3.17	.89
Quality of equipment and facilities available for classroom instruction	3.06	.93
Institutional support for teaching improvement (including grants, release time, and professional development funds)	2.66	.95
Your workload	2.71	.90
Your salary	2.26	.98
The benefits available to you	3.00	.85
Your job at this institution, overall	3.20	.75

Range 1-4
$N = 956$

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Job Stress, Mentoring, Psychological Empowerment, and Job Satisfaction among Nursing Faculty

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