EXPLORING THE EXPERIENCE OF THE NEW GRADUATE NURSE

_______________

A Thesis
Presented to the
Faculty of
San Diego State University

_______________

In Partial Fulfillment
of the Requirements for the Degree
Master of Science
in
Nursing

_______________

by
Harmony Lorraine Trassare
Summer 2011
SAN DIEGO STATE UNIVERSITY

The Undersigned Faculty Committee Approves the

Thesis of Harmony Trassare:

Exploring the Experience of the New Graduate Nurse

Jaynelle F. Stichler, Chair
School of Nursing

Willa Fields
School of Nursing

Lisa M. Kath
Department of Psychology

May 19, 2011
Approval Date
Copyright © 2011

by

Harmony Lorraine Trassare

All Rights Reserved
DEDICATION

This thesis is dedicated to my husband for his steadfast support, enthusiasm, and encouragement.
A gem is not polished without rubbing, nor a person perfected without trials.

Chinese Proverb
ABSTRACT OF THE THESIS

Exploring the Experience of the New Graduate Nurse
by
Harmony Lorraine Trassare
Master of Science in Nursing
San Diego State University, 2011

The transition of the new graduate nurse (NGN) from an educational focus to professional practitioner has long been acknowledged as a conflicted time of critical personal and professional adjustment and staggering reality shock. Up to 66% of NGNs experience severe burnout, with a reported turnover rate of 30% within the first year of professional practice, and 57% within the first two years of professional practice. NGN turnover is attributed to stressors such as workplace incivility, marginalization, lack of unit socialization and integration, work environment frustrations, and inconsistent support from preceptors, coworkers, and management. Particularly pivotal in the NGN’s transition is the phenomenon of role stress and conflict, which is based in the desire to be independent while still uncomfortable and uncertain of critical thinking and clinical skills.

The purpose of this study was to examine the sources of subjective stress experienced by NGNs within the first two years of their professional practice. NGN stressors were divided into two categories: personal and organizational. Personal stressors include lack of social support and work-family conflict, and organizational stressors include role overload, role conflict, and workplace incivility. Resiliency was examined as a moderating factor to these stressors.

Results of this pilot study (n = 36) showed subjective stress as significantly positively related to the personal stressor of work-family conflict (r = .70, p ≤ 0.00), as well as significantly positively correlated to the organizational stressor of role conflict (r = .59, p ≤ 0.00). Subjective stress was also positively correlated with both role overload scales (r = .40 to .60, p < .02), but negatively correlated with organizational support (r = -.36, p < .04). Resiliency was not a significant moderator in any of the models except for the regression model with work family conflict (F = 15.246, df = 2,31, p = .000) and then with resiliency added as a moderator (F = 10.124, df = 3, 30, p = .000).

The experience of stressors for the NGN has resonant implications throughout nursing practice, particularly considering the NGN is the foundation of the future of professional nursing. To that end, it is pivotal to understand these stressors, as well as to explore ways of amelioration. With all of the pressures on healthcare organizations regarding health care reform and promotion of nursing, it is imperative that healthcare leaders examine what structures and processes facilitate a smooth transition for the NGN.
TABLE OF CONTENTS

PAGE

ABSTRACT .................................................................................................................................................. vi
LIST OF TABLES ........................................................................................................................................ x
LIST OF FIGURES ....................................................................................................................................... xi
ACKNOWLEDGEMENTS ............................................................................................................................. xii

CHAPTER

1 INTRODUCTION .......................................................................................................................................1
   Significance ............................................................................................................................................. 2
   Background and Hypothesis .................................................................................................................. 4

2 THEORETICAL FRAMEWORK ............................................................................................................... 6

3 REVIEW OF LITERATURE ..................................................................................................................... 10
   Historical Implications and the Evolution of Nursing Education ..................................................... 10
   Personal Stressors and the NGN Experience of Transition into Practice ....................................... 13
   Organizational Stressors and the NGN Experience of Transition into Practice ........................................ 14
   Resiliency as Moderator ..................................................................................................................... 17

4 METHODOLOGY .................................................................................................................................. 20
   Study Design, Setting, and Sampling Plan ............................................................................................ 20
   Study Design ........................................................................................................................................ 20
   Setting .................................................................................................................................................. 20
   Sample ................................................................................................................................................. 21
   Subject Recruitment ............................................................................................................................ 22
Hypothesis 5 ................................................................. 36
Implications for Nursing .............................................. 37
Study Limitations ....................................................... 38
  Internal Validity ..................................................... 38
  History ................................................................. 38
  Selection Bias ....................................................... 38
  Testing Effects ...................................................... 39
  Instrumentation ..................................................... 40
  External Validity .................................................... 40
  Accessible Population ............................................ 40
Suggestions for Further Research ................................. 41
Conclusion .................................................................... 42
REFERENCES ................................................................ 43

APPENDIX

A  SHARP HEALTH CARE SYSTEM IRB APPROVAL ............ 47
B  SAN DIEGO STATE UNIVERSITY IRB APPROVAL ............ 49
C  RECRUITMENT POSTCARD ......................................... 51
D  CONSENT LETTER .................................................... 53
E  DEMOGRAPHIC QUESTIONNAIRE ................................ 55
F  TABLES AND FIGURES ............................................... 60
LIST OF TABLES

Table 1. Reliability Testing of Psychometric Instruments.................................................................61
Table 2. Ages of Sample..................................................................................................................62
Table 3. Highest Earned Nursing Degree ......................................................................................63
Table 4. Correlational Table ..........................................................................................................64
Table 5. Histogram........................................................................................................................69
LIST OF FIGURES

PAGE

Figure 1. Conceptual model.................................................................65

Figure 2. Model with beta weights......................................................66
ACKNOWLEDGEMENTS

My deepest and most sincere appreciation and thanks to Dr. Jaynelle Stichler, DNSc, RN, FACHE, FAAN, for her constant encouragement and dedication to the development of my thesis from inception to fruition. I would also like to thank the members of my thesis committee, Dr. Willa Fields and Dr. Lisa Kath, for their time and attention to detail. Many thanks also to Dr. Dale Glaser for his tireless efforts in assisting me with the statistical analyses of this thesis. I am also indebted to Kim Failla, RN, MSN, and the new graduate nurses who so willingly shared their experiences for this study.

My family has been an invaluable source of support and blessing throughout this foray into graduate school. To my husband, Samuel Trassare, for your beaming example of tireless, generous patience: you are my best friend forever and always, and the keeper of my heart and mind. To my sweet daughter, Santa Cecilia, for your independent spirit and inquisitive nature, and for tolerating so many days without your mother’s presence while I was busy with schoolwork. To my parents, Ray and Marcia Waugh: all I know of dedication and faith comes from the two of you, and you have been pivotal to all the success in my life. To my grandmother, Santa Trassare: thank you for listening to my anxieties about graduate school and thesis development, and offering your calm encouragement. I could not have completed this adventure without all of you!

I must acknowledge my friends, too, for the blessing of their unwavering support. To my good friend, Andrea Aluzzi, BSN, RN, CCRN: we made it through our RN program together, and your gifts of humor and love got me through this program as well. To my friend Luz Riley: thank you for always treating me to lunch and your undivided attention
when I began to falter in my commitment to this program. To my very dear Kirstin Larson:
you have been a source of loyalty and friendship in my life for twenty years, and my
gratitude runs very deep for your empathy and understanding while I struggled with the
development of this thesis. I love you all so very much, and hope you can comprehend what
an important part of my success you have been!
CHAPTER 1

INTRODUCTION

The global shortage of health professionals makes the retention of qualified practitioners imperative, especially those who have just completed rigorous and expensive educational programs. The transition of the new graduate nurse (NGN) from an educational focus to professional practitioner has long been acknowledged as a conflicted time of critical personal and professional adjustment and staggering reality shock. Up to 66% of NGNs experience severe burnout, with a reported turnover rate of 30% within the first year of professional practice, and 57% within the first two years of professional practice (Duchscher & Cowin, 2004; Duchscher & Myrick, 2008; Fink, Casey, Krugman, & Goode, 2008; Laschinger, Finegan, & Wilk, 2009; Maben, Latter, & Clark, 2007; Reinsvold, 2008). NGN turnover is attributed to stressors such as workplace incivility, marginalization, lack of unit socialization and integration, work environment frustrations, and inconsistent support from preceptors, coworkers, and management. Particularly pivotal in the NGN’s transition is the phenomenon of role stress and conflict, which is based in the desire to be independent while still uncomfortable and uncertain of critical thinking and clinical skills (Duchscher & Cowin, 2004; Duchscher & Myrick, 2008; Maben, et al., 2007). A definitive strategy to recognize, understand and ameliorate a climate that continues to intimidate and demoralize the NGN is imperative to replenish the nursing workforce.
SIGNIFICANCE

The loss of NGNs is unsustainable in a workplace environment where nursing shortages continue to rise (Cowin & Hengstberger-Sims, 2006; Zinsmeister & Schafer, 2009). The cost to an acute care hospital to replace a NGN who has completed the first year of practice is estimated to be $40,000 to $65,000, and the turnover rate for NGNs as a result of personal and organizational stressors, such as role ambiguity, reality shock and lack of unit socialization, is between 20-40% (Fink, et al., 2008; Reinsvold, 2008).

Personal stressors experienced by the NGN include unanticipated adjustment to the professional nurse role, loss of moral integrity, and a strong internal tendency to monitor one’s own professional progress with excessive self-criticism. Organizational stressors include lack of support within the unit and from management, as well as a lack of resources such as time, guidance, and equipment available to accomplish daily nursing tasks. In extreme cases, these personal and organizational stressors may lead to acute moral distress and clinical depression (Zinsmeister & Schafer, 2009).

Resiliency is a pivotal, protective mechanism based in positive psychology that may provide a buffer to the aforementioned personal and organizational stressors experienced by the NGN. Composed both of innate traits and abilities that may be learned over time, resiliency indicates the human ability to adapt in the face of adversity, hardship, and ongoing significant life changes (Resnick & Inguito, 2011). Resiliency in the NGN may manifest as adaptive behavior, particularly relevant to social functioning, morale, and somatic health.

The plight of the NGN experience mirrors the incongruence in educational requirements for entry into the nursing profession. A subject of much debate, the nursing profession in the U.S. recognizes three traditional educational routes to becoming a
Registered Nurse (RN): diploma, associate degree in nursing (ADN), and baccalaureate degree in nursing (BSN). The issue is further complicated by the advent of non-traditional nursing educational programs, such as accelerated baccalaureate degree in nursing (ABN), RN to BSN programs for RNs with a diploma or ADN, and Master’s Entry into Professional Nursing programs (MEPN) (Boylston & Jackson, 2008; Cook, Becker, & Weitzel, 1996; Nelson, 2002; Raines & Taglaireni, 2008; Taylor, 2008). Notably, the term ‘Registered Nurse’ is used to describe a graduate of any of these educational routes (Kovner & Schore, 1998; Taylor, 2008).

NGNs have been studied from a variety of perspectives; however, an exhaustive literature search provides little insight into the moderating effects of resiliency in the NGN experience and the differentiation of the NGN experience based on educational point of entry. To that end, the variables of interest in this study, including (1) personal and (2) organizational stressors, (3) subjective stress, (4) resiliency, and (5) level of educational point of entry, may garner a unique perspective into the NGN experience that has yet to be fully explored. Inclusive in this study are the following questions: What are the relationships among personal and organizational stressors, resiliency, and subjective stress experienced by the NGN? Are there significant differences in personal and organizational stressors, resiliency, and subjective stress experienced by NGN based on educational level of entry to practice? What is the effect of resiliency in moderating the personal and organizational stressors on the NGN’s subjective stress outcome? By researching these questions, nursing leadership and the nursing profession as a whole may have the potential to create an inaugural work environment that supports the socialization of the NGN, as well as increases the longevity of the NGN’s career.
BACKGROUND AND HYPOTHESIS

Nursing is a human service profession ranked among the most stressful of occupations, along with Prison Service, Law Enforcement, and Social Work (Rella, Winwood, & Lushington, 2008). The practice readiness of today’s NGNs is a topic of divergent viewpoints. The phenomenon of reality shock has been acknowledged as a part of the NGN experience for the past three decades, and there is evidence to suggest that the experience of NGNs is more jarring today than at any point in the past. Currently, NGNs may take licensure examinations within weeks of graduation, and enter practice as fully licensed RNs. However, prior to the initiation of computerized licensure testing in 1994, NGNs entered practice with provisional licensure, closely working with seasoned nurses for a number of months prior to successful completion of licensure examination. This change has had the unintended consequence of pushing NGNs directly into clinical settings where they are expected to immediately assume professional responsibilities for which they may be unprepared. This issue is further compounded by the increased clinical complexity and acuity of today’s patients (Dyess & Sherman, 2009).

In the United States, successful completion of a nursing education program and achievement of a passing score on the National Council Licensure Examination-Registered Nurse (NCLEX-RN) is required to begin entry-level nursing practice. Although newly licensed NGNs have achieved the legal and professional minimum requirements to enter practice, studies indicate that many NGNs lack not only the clinical skills and judgment needed to provide safe, competent care, but are also grappling with several simultaneous personal and organizational stressors: role stress and role ambiguity, unrealistic expectations
by clinical staff, high expectations of self, lack of support, and tension within the social
climate of the workplace (Dyess & Sherman, 2009; Morrow, 2008).

Grounded in previous research evidence and the theoretical framework of Brighid
Kelly’s (1998) six-stage psychological process for preservation of the NGN’s moral integrity,
this researcher hypothesized the following relationships between the variables of interest:

*Hypothesis #1:* There will be significant relationships among personal and
organizational stressors, resiliency, and subjective stress.

*Hypothesis #2:* The higher the educational level, the lower the personal and
organizational stressors experienced by NGN.

*Hypothesis #3:* The higher the educational level, the lower the subjective stress
experienced by NGN.

*Hypothesis #4:* The higher the educational level, the higher the level of resiliency
experienced by NGN.

*Hypothesis #5:* Resiliency will be a significant moderator of the effect of personal
and organizational stressors on the subjective stress outcome.
CHAPTER 2

THEORETICAL FRAMEWORK

Brighid Kelly (1998) described a six-stage psychosocial process to explain how NGNs perceive their adaptation to the ‘real world’ of hospital nursing practice. The six stages are: vulnerability, getting through the day, coping with moral distress, alienation from self, coping with lost ideals, and integration of new professional self-concept. Preservation of moral integrity is the core variable which incorporates all six stages of this process, and is akin to preserving personal identity and self. Preservation of moral integrity is particularly poignant in the NGN experience, as professional identity is a crucial aspect of self, and is related to the human experience of desiring to be the kind of person you want to be, or self-actualization.

The first stage, vulnerability, is characterized by the shock of being inexperienced members of the health care team, sensing the global ‘newness’ of the situation, and feelings of fear or inadequacy in clinical and social situations unique to the unit. The major stressors in this stage are team influence and expectation, as well as unrealistic self-expectation. The pressure to conform, along with NGN’s propensity for perfectionism, creates opportunity for the NGN to mollify feelings of inadequacy and moral intuition surrounding powerlessness in providing exemplary patient care. NGNs may feel that once they have more experience, they will be able to do ‘more’ for their patients, and will have the power to assure that others RNs are not mistreating or under-treating their patients. There is a profound extent to which
psychological stress, engendered by lack of confidence, is experienced by the NGN in this stage of vulnerability (Kelly, 1998).

In the second stage, getting through the day, the NGN gives priority to making certain tasks are accomplished on time, that charting is fully completed, and that medications are administered in a timely manner, despite the fact that this focus on the clock may be in detriment to patient care. The NGN may be torn between their ethical commitment to protect the patient and their fear of punishment, particularly following the need for conformation experienced during the vulnerability stage. Mistakes that could be overlooked, such as medication errors without life-threatening consequence and dressings that were not changed, provide a heavy burden to the NGN psyche. Moral judging is a central theme in this stage, and the self may be the harshest judge (Kelly, 1998).

Events described in the second stage of powerlessness and compromised values inevitably lead to the third stage, which is coping with moral distress. The NGN may attempt to cope with the moral distress by leaving the unit in search of better conditions, decreasing the stress by working fewer hours, dropping out of nursing entirely, blaming nursing administration or hospital system, or avoiding patient interaction. These mechanisms are a natural reaction to being bombarded by events and actions that shock one’s moral integrity, and this stage is particularly laden with deep emotions, including self-doubt, self-blame and moral crisis (Kelly, 1998).

Alienation from self is the fourth stage, and is described as the experience of being alienated from oneself because one’s behavior is inconsistent with one’s conception of self. There is a painful awareness experienced by the NGN between the nurse they had aspired to and the nurse they perceive they have become. This alienation leads to loss of professional
self-concept, loss of ideals surrounding the nursing profession itself, and loss of the hope for collegial relationships amongst nurses (Kelly, 1998).

The loss of ideals and how NGNs cope with this is the logical fifth stage. The awareness that one is not living up to one’s values and principles may cause tremendous grief and distress. Rationalization is an important aspect of this phase, and is a form of self-deception in which a person provides themselves with good reason for their action. Rationalization involves appreciation of new skills and values, and is crucial to the sixth and final stage: integration of new professional self-concept. At this point in the psychosocial process, there is a need to rebuild self-esteem and professional self-concept by identifying strongly with the team, and creating a new sense of self-actualization borne of social integration and socially-constructed professional identity. The NGN gains control and confidence, and feels a cohesive part of the health care team (Kelly, 1998).

Kelly’s theory of preservation of moral integrity is relevant to the nature of the proposed relationships in this study between the variables of interest (personal and organizational stressors, subjective stress, resiliency, and level of educational point of entry) within the NGN experience. Personal and organizational stressors are a resonant theme within Kelly’s theory of preservation of moral integrity, particularly as it relates through the stage of vulnerability to moral distress to the influence of socialization on the professional concept.

The third stage of Kelly’s preservation of moral integrity, during which the NGN, struggling with moral distress and self-judgment, begins to employ coping mechanisms such as avoidance and blame, is of utmost importance to the study of NGNs and the future of the nursing profession. This is a stage heavy with emotion and vulnerability, and the NGN is
likely to question his or her decision to become a nurse, the longevity of their career, and may choose avoidance by decreasing number of hours worked, blame management for working conditions or lack of support, or leave the profession entirely. Theoretically, a NGN whose experience is properly understood and stressors are ameliorated through personal resiliency, may embrace this time with positivity and utilization of intrinsic resources.

Workforce trends, the lived experience of the NGN, and other literary evidence validates the need for further understanding of the NGN experience, particularly as it relates to level of educational point of entry. Hodges, Troyan, and Keeley (2010) noted in their qualitative study of the professional resiliency of BSN graduates that the development of resilient behaviors in the educational setting facilitates a safe passage through the tumultuous NGN experience, and that resiliency may be nurtured and integrated into curriculum with activities in group problem solving, self-reflection, and facilitation of personal growth and development. This study aims to explore the effect of resiliency upon stressors as it relates not only to BSN graduates, but to NGNs from other levels of education point of entry.
CHAPTER 3

REVIEW OF LITERATURE

This chapter includes a review of literature examining the variables of interest in this study. Historical implications related to the nursing profession and evolution of nursing education will be discussed as it applies to level of educational point of entry. Next, several quantitative and qualitative research studies exploring the NGN experience in transitioning to practice, including the lived experience of personal and organizational stressors, will be presented. A brief overview of the positive psychology of resiliency will be discussed, as well as a research study exploring resiliency as an enhancing cognitive style.

HISTORICAL IMPLICATIONS AND THE EVOLUTION OF NURSING EDUCATION

To gain insight into the NGN experience, it is necessary to understand the historical and sociopolitical events that have shaped the nursing profession throughout the 20th century, and to understand the differentiation in focus based on education level of professional entry into practice available today.

With its founding in 1896, a core goal of the American Nurses’ Association (ANA) was the establishment of nursing education standards through state legislation. It soon became clear, however, that efforts to improve and standardize nursing education would be impractical due to nursing’s reliance on hospital-based training programs. At the core of the conflict was the interest of hospital administrators to maintain minimum costs versus nursing educators, whose goal was to maximize instructional time and opportunity. In 1928, ANA stated that no hospital should be expected to bear the cost of nursing education out of funds
collected for care of the sick, and that the education of nurses is a public responsibility (Hardy, 1988).

In 1932, Franklin Delano Roosevelt was elected President of the United States. The New Deal was set in motion, which encompassed an unprecedented expansion of federal involvement in social programs, including nursing. The Social Security Act of 1935 authorized funding for many state and local public health programs, and The Works Program helped unemployed nurses find jobs. The U.S. population began to slowly increase in mobility and affluence, and hospitals grew in aesthetics and technology, which lead to an increase in the accessibility and acceptance of hospitals as places of holistic caregiving (Hardy, 1988).

Pressure for change in nursing education was primarily borne of the implementation of many new facets of nursing educational entry created during World War II, including the Nurse Cadet Corps and newly-created Licensed Practical Nurse programs. Throughout the 1940s, ANA lobbied successfully for the funding of nursing education, scholarship, research, and increasing standards for nursing education. In 1943, the Bolton Act funded the costs for nursing school and provided nursing students with a stipend for living expenses (Hardy, 1988; Taylor, 2008).

In 1965, the ANA took a bold stance by publishing a position paper calling for a baccalaureate degree to be the minimum level of education for entry into practice by 1985. This recommendation was based on the increasing complexity of theory, technology and science within the practice of nursing (Nelson, 2002; Taylor, 2008). This position paper was in stark contrast to the hospital-owned, Diploma in Nursing programs whose popularity had grown exponentially throughout the 1950s and early 1960s, and recommended that nursing
education be phased away from the hospital and toward higher education. Although the ANA originally envisioned the merging of Diploma and ADN programs into institutions of higher learning, the ADN program gained unexpected momentum during the late 1960s, and consequently, enrollment in Diploma programs decreased (Hardy, 1988; Nelson, 2002; Raines & Taglaireni, 2008).

Nearly forty-five years later, the ultimate goal of moving nursing educational entry to the BSN remains unfulfilled. In 2007, the breakdown of newly minted RNs in the U.S. included 58.4% from associate degree programs, 38.4% with baccalaureate degrees, and 3.1% from diploma programs (Hardy, 1988; Nelson, 2002; Raines & Taglaireni, 2008), so the three main routes of educational entry into the nursing profession continue to be Diploma in Nursing, Associate Degree in Nursing and Bachelor of Science in Nursing. The Diploma program focuses on a direct apprenticeship model, with an average of 1,539 hours of clinical time, generally provided over three years. The Diploma student is trained using eight-hour work shifts in clinical facilities, and often garners 24-32 hours of clinical time a week. The ADN program is typically offered at the community college level, and aims to graduate clinically competent, technically proficient professionals. Average clinical hours for the ADN graduate is 809, and is usually completed over two to three years. The BSN program encompasses all course work taught in ADN and Diploma programs, plus provides a more in-depth discussion of humanistic, holistic treatment modalities, as well as expanded clinical experience in research, public health, professional development and the social sciences. Clinical hours required for the BSN total 1,037. Notably, graduates of each educational entry point are referred to as ‘Registered Nurse’ (Kovner & Schore, 1998; Raines & Taglaireni, 2008; Reinsvold, 2008).
PERSONAL STRESSORS AND THE NGN EXPERIENCE OF TRANSITION INTO PRACTICE

This literature search thus far has covered the sociopolitical and historical factors that present the foundation for understanding the experience of today’s NGN experience. In the next section, personal stressors of today’s NGNs will be examined.

Dyess and Sherman’s (2009) qualitative research of NGNs involved in a structured transitional program discussed a complex phenomenon of exhilaration and intense fear. This combination of fear and confidence appears to stem from recognition of all that had been learned in educational programs, and an anticipation of the unknown in both everyday and emergent patient situations. In this study, NGNs expressed both trepidation and hope that there would be support among peers and preceptors sufficient to ease the emotionality of their personal transition (Dyess & Sherman, 2009).

Further qualitative study on the emotionality of the NGN experience was described by Pellico, Brewer, and Kovner (2009), whose interviews of NGNs described abrupt exposure to moral distress evidenced by a conflict between personal caring philosophy and clinical reality, which was described by participants as an astute sense of hopelessness. This hopelessness and moral distress is a personal stressor previously described by Kelly (1998), and is a mismatch between personal expectation and variables that influence ethical practice. A participant in the Pellico and colleagues (2009) study described feelings of distress as such:

Just a note about my experience in the first six months of my nursing career: I wanted to quit many times, went home crying every day and struggled with lack of compassion from other more experienced nurses. This created a very difficult transition. (p. 199)
This experience of transition and personal stressors is varied, and reflective of the diversity of the NGN’s personal, professional, and educational background. Personal and educational experience affects the images that students develop about what the world of work will be like after graduation. In predictor analysis of NGNs’ job satisfaction, Scott, Engelke, & Swanson (2008) noted that NGNs who were satisfied with their job were 1.7 times more likely to be married or widowed. This finding confirms the assertion that familial support and involvement is a strong predictor of NGN success in transition. It is also interesting to note that NGN who were satisfied with their job were 5.2 times more likely to be White/Caucasian.

**ORGANIZATIONAL STRESSORS AND THE NGN EXPERIENCE OF TRANSITION INTO PRACTICE**

Organizational stressors unique to today’s NGNs include a chaotic workplace characterized by nursing shortage, high patient acuity, and scarce resources. As such, it is necessary to create an organizational structure which transitions NGNs in a way that will develop proficiency, foster satisfaction, and encourage retention. Scott and colleagues (2008) noted that the first year of professional practice is of utmost importance in establishing an individual’s career framework, and holds the promise of influencing long-term professional development and satisfaction.

In a sample of 329 NGNs in North Carolina, in which participants’ educational preparation was equally divided between BSN (50.2%, n = 165) and ADN/Diploma (49.8%, n = 164) graduates, 54.1% (n = 178) stated dissatisfaction with their current job and 52.3% (n = 172) had already left their first job (Scott, et al., 2008).
Also of note from the aforementioned study by Scott and colleagues (2008) was the relationship between insufficient NGN orientation and turnover. Although 94.8% \((n = 310)\) of participants in this study had received an orientation, 58.7% \((n = 193)\) stated that this orientation was insufficient to meet their learning needs. Orientation is a crucial aspect of organizational support and stressors, and the turnover rate for those who felt that the orientation completely met their needs was 45%, whereas turnover rate for those who noted that their orientation had not completely met their needs was 60\% \((\chi^2 = 6.44, p = .01)\). NGNs who evidenced satisfaction with their job were 2.4 times more likely to also report being completely satisfied with their orientation. The orientation length for NGNs who turned over in their first nursing job \((M = 7.8 \text{ weeks}, SD = 6.35)\) averaged about two weeks less as compared with the orientation length for those who did not turnover \((M = 9.7 \text{ weeks}, SD = 6.39, t = 2.65, p = .008)\). This evidences that organizational stressors are acutely felt by NGNs, and that extended periods of transition and orientation have present, current and recurrent implications throughout the NGN’s career.

Further study of the organizational stressors experienced during the NGN transition into practice shows that although the transitional period may initially be exhilarating, the experience often becomes traumatic. Dyess and Sherman (2009) studied participants \((n = 81, 51\% \text{ BSN}, 49\% \text{ ADN})\) involved in the Novice Nurse Leadership Institute (NNLI) in South Florida, which is a university-based, but practice-informed, one-year transition program meant to reduce turnover in the first year of practice. Qualitative research was designed using pre- and post-program focus groups and hermeneutic analysis. Several resonant themes of organizational stressors emerged from this research, including lack of interdisciplinary communication skills, the experience of horizontal violence, and the
perception of professional isolation which was indicative of lack of support and socialization within the unit, and a feeling that there was no one to whom to ask questions or request guidance.

Structural empowerment, which includes access to information, resources, support and opportunities to learn and grow, was studied by Laschinger, Finegan, and Wilk (2009) as a moderator to the organizational stressors experienced by NGNs. This study included 415 participants who were RNs in Ontario, Canada, with less than 3 years experience. The sample had an average length of time as RN of 2.3 years, an average of 2.1 years at the current organization, and 1.9 years on the current unit. Perceptions of structural empowerment were measured using the Conditions for Work Effectiveness Questionnaire II (CWEQ-II), with reported Cronbach’s alpha of 0.79 to 0.82. Bullying behaviors were measured using the Negative Acts Questionnaire-Revised (NAQ-R), with reported Cronbach’s alpha of 0.92, and the Maslach Burnout Inventory-General Survey (MBI-GS), which was used to measure new graduate burnout, with reported Cronbach’s alpha of 0.91. Encouragingly, NGNs in this study reported moderate empowerment levels, with access to growth and opportunity rated highly. Conversely, it was alarming to note that participants reported relatively high levels (range = 1 - 4) of emotional exhaustion ($M = 3.15$, $SD = 1.62$), with almost half of the participants quantified as ‘severely burned out’ (score > 3.0). A third of the participants (33%) were also classified as ‘bullied.’ The concept of bullying was based on the criteria that a person is bullied if they are exposed to at least two negatively defined acts a week for a period of at least 6 months (Laschinger et al., 2009).

Further correlational findings from the aforementioned study by Laschinger and colleagues. (2009) supports the assertion that NGNs experience acute organizational stressors
which lead to subjective stress and lack of moral integrity. These pertinent correlational findings include a strong association between the emotional MBI-GS exhaustion subscale and the NAQ-R work-related subscale \( (r = 0.53, p < 0.01) \), and the MBI-GS cynicism subscale and the total NAQ \( (r = 0.53, p < 0.01) \). Although these findings were not unexpected, they warrant further investigation, and support the assertion that will be researched in this study that organizational stressors are likely predecessors to acute subjective stress.

**Resiliency as Moderator**

This literature review has thus far examined the foundations of nursing education and the personal and organizational stressors experienced by the NGN. Presently, resiliency shall be discussed as a moderating personal, psychological mechanism that tempers these stressors.

The emerging science of positive psychology focuses on utilization of intrinsic personal resources, such as hardiness or resiliency. The concept of resiliency has increasingly found its way into nursing literature and is focused on the ability to adapt to adverse circumstances by employing coping strategies that enable personal growth, despite sometimes overwhelming obstacles. Resiliency is linked to insight, independence, humor, morality, initiative, and creativity (Garrosa, Rainho, Moreno-Jimenez, & Monteiro, 2010; McGee, 2006). Under stressful circumstances, individuals with a low level of resiliency may react in a stiff, perseverative manner. Alternatively, individuals with a high level of resiliency will approach stressful circumstances with a desire to exceed expectations, even under the most pressing stressors, such as the personal and organizational stressors.
experienced by the NGN (Letzring, Block, & Funder, 2005; Sinclair & Wallston, 2004; Wagnild, 2009).

Stress is the product of personal interpretation of events within the environment. Personal interpretative styles of stress are the subjective judgment patterns that influence reality, adding meaning to objective fact. Resiliency acts as a mode of personal empowerment. The concept of resiliency is the capacity to realistically envision possible future tasks or events, focusing on solutions, opportunities, and the enjoyment of accomplishment; to choose freely among options; and to appreciate personal abilities, strengths, skills, and competencies (Larrabee, et al., 2010). These assertions establish the basis of resiliency as moderator to stressful life events.

Haefel and Vargas (2011) conducted a four-week longitudinal prospective study of 128 undergraduate psychology students at University of Notre Dame to examine the interaction of negative cognitive style, enhancing cognitive style, and both negative and positive life events. Results of this study showed a significant three-way interaction among negative cognitive style, stressful life events, and enhancing cognitive style ($b = 1.60$, $t = 2.34$, $p = 0.02$), as well as the three-way interaction among negative cognitive style, stressful life events, and positive events ($b = 0.32$, $t = 2.76$, $p = 0.007$), and three-way interaction among negative cognitive style, enhancing cognitive style, and positive life events ($b = 0.57$, $t = 2.46$, $p = 0.02$). Individuals with a negative cognitive style who were experiencing a high proportion of stressful events, but with an enhancing cognitive style (such as resiliency), were buffered from depressive symptoms and displayed levels of depressive symptoms similar to those without a negative cognitive style. Tests of simple slopes confirmed the
significant protective effects of the enhancing cognitive style \((t = 2.57, p = 0.01)\) (Haeffel & Vargas, 2011).

In conclusion, this review of literature has shown that research evidence supported the assumption in this study that the NGN experience includes both personal and organizational stressors, and that the NGN experience may be varied based on the educational point of entry. Furthermore, research evidence has shown resiliency and enhancing cognitive style to be a moderator to stressful life events, buffering them prior to the development of subjective stress. The next chapter will describe the methodology of this study.
CHAPTER 4

METHODOLOGY

This chapter explicitly describes the research study design, the sampling plan, data collection, the process to protect human subjects’ rights, definition of terms, and the instruments used to operationalize the study variables.

STUDY DESIGN, SETTING, AND SAMPLING PLAN

The design of this study employed a mixed methods cross-sectional and comparative design pilot study to explore the experience of the NGN within the first two years of professional practice. The first two years of practice are considered the most vulnerable, with a reported NGN turnover rate of 30% within the first year of professional practice, and 57% within the first two years of professional practice (Duchscher & Cowin, 2004). The study was conducted within a single, metropolitan health care system in San Diego, California. A non-probability, convenience sample was used with volunteer research subjects among nursing staff and participants of the New Graduate Residency Program.

Setting

The setting for this study was a specific, not-for-profit health care delivery system comprised of three acute care hospitals (ranging in capacity from 204 to 368 patient beds) and a single specialty care hospital of 169 patient beds, located throughout San Diego County. The New Graduate Residency Program participants were recruited primarily from the general medical-surgical hospital of 368 patient beds within this health care delivery system.
Sample

The target population for this study was Registered Nurses within the first two years of professional practice who worked on any unit of the following Sharp HealthCare System hospitals: Sharp Memorial Hospital, Sharp Coronado Hospital, Sharp Mary Birch, and Sharp Chula Vista. An estimate of the target population (as approximated by nurse managers and the New Graduate Residency Program Coordinator) was approximately 106 NGNs. A total of 36 respondents \( (n = 36) \) completed the online survey for an approximated response rate of 34%.

A power analysis methodology described by Cohen (1992) was used to determine the optimal sample size to prevent a Type II error. The sample size was estimated to be 150 subjects with a medium effect size, Power = .80 and a .05 alpha level for significance which is considered appropriate for nursing studies. Since there were only 36 respondents the sample did not achieve adequate power to effect the study increasing the possibility of a Type II error. Because of this, the study will be considered as a pilot for future studies.

The sample included NGNs in any area of specialty, working at least 0.6 full-time equivalent status (two twelve-hour or three eight-hour shifts a week), who held active licensure as a Registered Nurse. Participants must have graduated between May 2008 and December, 2010. It was not necessary for the participant to have had experience as a Charge Nurse or Preceptor. Participants of all ages and ethnicities were welcomed. Inclusion criteria included all nurses with the following educational degrees required to be a RN: (1) diploma, (2) associates degrees in nursing (ADN), (3) baccalaureate degree in nursing (BSN), and (4) master’s degree entry into nursing (MEPN).
Data Collection

Prior to commencement of data collection, permission to conduct the research was granted from the Institutional Review Board (IRB) at the target hospitals within the health care system (Appendix A) and from the Committee on the Protection of Human Subjects at San Diego State University (Appendix B).

Subject Recruitment

Given the fluidity and culture of technology in today’s world, electronic mail and Internet was primarily utilized for mass distribution of the Survey in this study. Subjects were recruited in their place of employment within the health care system. The purpose, aims, and methodology of the study was made known to the Nurse Managers and Clinical Nurse Specialists at the target medical-surgical hospital, and to the New Graduate Residency Program Coordinator, with the request that they distribute the Recruitment Postcard (Appendix C) and Consent Letter (Appendix D) to potential participants.

To recruit subjects, the researcher attended a class session of the New Graduate Residency Program, providing a brief presentation that detailed the study and how subjects could participate. It was explained that participation was completely voluntary and if they did not wish to participate, they did not have to complete the online research questionnaire. Recruitment Postcards and Consent Letters were distributed at this time. The Recruitment postcard included a brief biography of the researcher, as well as the purpose of the study and a link to the online survey as a means to participation. Participants were informed that only aggregated data would be shared or published in any reports related to this study, and that the study has garnered approval from the appropriate Internal Review Boards in protection of human rights. Participants were encouraged to contact the Principal Investigator directly
with questions, and contact information was displayed on both the Recruitment Postcard and Consent Letter. Participants were made aware that submission of the online survey implied consent. A deadline for submission of the online survey was strictly enforced. The survey was available online at www.surveymonkey.com/newgraduate for completion by participants from March 29, 2011 through April 8, 2011.

**PROTECTION OF HUMAN RIGHTS OF SUBJECTS**

Protocol for use of human subjects per the Sharp Health Care System Institutional Review Board (IRB) and the San Diego State University IRB was supplemented with formal approval and oversight from both institutions (Appendices A & B). A Consent Letter (Appendix D) was formally stamped by the Sharp Health Care System IRB. The subject’s consent to participation was implied with their completion of the research instrument and the demographic survey on Survey Monkey. Recruitment postcards (Appendix C) were also submitted for approval.

There were no personal identifiers requested in this study so the subjects’ responses were completely anonymous and confidential. The IP-address recording capability of www.surveymonkey.com was disabled. All data collected remained in a secure location available only to the researcher to protect the confidentiality of the respondents’ individual responses.

The benefits exceeded the risks to the NGNs who participated in this study. Risks were minimal but included: fatigue related to completion of the survey and emotional response secondary to questions that inquired about stressors, resiliency, and subjective stress. A measure taken to minimize the risk of subject fatigue was to reduce the number of
items on the survey for brevity by choosing reduced instruments when possible and limiting some measures to relevant subscales.

**DEFINITION OF TERMS**

This study focused on NGN stressors, which were divided into two categories: personal and organizational. Resiliency was explored as a moderating factor of stressors on subjective stress.

**Personal Stressor**

In this study, the concept of personal stressor was conceptualized using the variables of work-family conflict and social support. Work-family conflict is rooted in role theory and derived from a scarcity hypothesis and postulates that work and family requirements may be incompatible. Preoccupation with one role in particular, such as work, decreases role performance in the other domain (i.e., family). Social support was defined as instrumental aid, emotional concern, informational, and appraisal function of the family domain, intended to enhance the well-being of the recipient (Michel, Mitchelson, Pichler, & Cullen, 2010).

**Organizational Stressor**

The concept of organizational stressor was defined as lack of supervisory support, misguided expectations, interpersonal conflicts, communication problems, lack of knowledge and decisional latitude experienced by the NGN in the inaugural position. Emotional exhaustion was highly associated with organizational stressors and demands such as role overload (Garrosa, et al., 2010). In this study, organizational stressor was conceptualized using the variables of role conflict and role overload.
Resiliency
Resiliency is a complex phenomenon and is defined in this study the ability to rebound from and positively adapt to significant stressors. Resilient personality traits promote the use of adaptive cognitive and behavioral coping processes in the face of adversity (Sinclair & Wallston, 2004). The buffering effects of resiliency would mean that the association between stressors and psychological outcomes (i.e., subjective stress) is weakened or not found in individuals with high levels of resiliency (Pinquart, 2009).

Subjective Stress
In this study, subjective stress was defined as the experience of feeling pressured or threatened within the context of organizational or professional stressors. Stress results from suffering a serious loss or threat, or from the experience of chronic difficulty. According to Oatley and Jenkins (1992), subjective stress has been shown to cause clinical depression when it is coupled with a vulnerability factor, such as lack of social support.

Level of Education
Level of education was defined as educational entry point the subject pursued in order to obtain Registered Nurse licensure. This may be through a variety of routes, including Diploma, ADN, BSN, ABN, RN-to-BSN or MEPN programs.

INSTRUMENTATION
This section will provide an overview of each of the instruments used to operationalize the aforementioned variables of interest in this study. First, the demographic questionnaire will be reviewed with attention given to the rationale for items included as descriptive characteristics of the study sample. Next, each instrument will be discussed in
depth, including the appropriateness of the instrument for this study, demonstrated validity of the instrument, and demonstrated reliability of the instrument as originally established.

**Demographic Questionnaire**

The purpose of the demographic questionnaire is two-fold: (1) to collect descriptive information about the study sample, and (2) to identify possible confounding variables in the study sample that have been found in previous research to be relative to the experience of the NGN. Following is a description of items included in the demographic questionnaire (Appendix E).

Descriptive characteristics included in the demographic questionnaire include: age, ethnicity, marital status, educational level, year nursing degree was obtained, previous level degree obtained (other than nursing), number of dependents within the home, and percentage time worked. As some of these characteristics may also be confounding variables, all items were analyzed for correlation to the outcome of interest.

**Personal Stressors**

In this study, personal stressors were divided into two categories: social support and work-family conflict. Social support was operationalized using the Baruch-Feldman, Brondolo, & Ben-Dayan (2002) Family Support Scale. Work-family conflict was operationalized with the adapted Matthews, Kath, and Barnes-Farrell (2010) Short Work-Family Conflict Scale. Please see below for more information on each of these instruments.

**SOCIAL/FAMILIAL SUPPORT SCALE**

Baruch-Feldman and colleagues (2002) described the Family Support Scale as a four-item scale measuring the participant’s perception of support from their spouse or partner,
relatives, and other family members. The Family Support Scale has strong internal consistency ($\alpha = .91$). A five-point Likert scale was used, with answers ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores represented higher levels of perceived support.

**WORK-FAMILY CONFLICT SCALE**

The abbreviated Work-Family Conflict Scale (Matthews et al., 2010) was a six-item Likert-style scale to identify traditional predictors and outcomes of work-family mismatch. The six items were divided into two categories of three: work-to-family conflict and family-to-work conflict. Internal consistency of the work-to-family portion of the scale was strong ($\alpha = .75 - .80$), as was the internal consistency of the family-to-work conflict ($\alpha = .71 - .72$) (Matthews et al., 2010).

**Organizational Stressors**

Organizational stressors in this study were role overload, role conflict, and organizational support. Role overload was operationalized using the adapted Seashore, Lawler, Mirvis, and Cammann (1982) Role Overload Scale and the adapted Camman and colleagues Role Overload Scale (as cited in Bacharach, Bamberger, and Conley, 1990). Role conflict was operationalized with the adapted Haynes, Wall, Bolden, Stride, and Rick (1999) Role Conflict Scale. The Eisenberger, Huntington, Hutchinson, and Sowa (1986) adapted Perceived Organizational Support Scale operationalized organizational support.

**ROLE OVERLOAD AND ROLE CONFLICT**

This study investigated two types of role demands that have been found to affect important employee outcomes such as well-being and commitment: role overload and role
conflict. Role overload has been described as a stressor related to the extent to which work-role demands are experienced as over-burdening (Cardenas, Major, & Bernas, 2004). Role conflict referred to a lack of congruent expectations between and within job roles, such as receiving conflicting messages from different parties about what is expected of the job incumbent (Parker, Axtell, & Turner, 2001).

The adapted Seashore et al. Role Overload Scale included two items on a five-point Likert scale, with responses ranging from 1 (strongly disagree) to 5 (strongly agree). The items included the statements: ‘I never seem to have enough time to get everything done’ and ‘I have too much work to do everything well.’ The reported reliability of this scale is $\alpha = .65$ (Klein, 2007). The Camman et al. Role Overload Scale consisted of one statement on a Likert scale with response from 1 (strongly disagree) to 5 (strongly agree). This statement was ‘I’m rushed in doing my job.’ This scale has documented reliability of $\alpha = .64$ (Bacharach, Bamberger, & Conley, 1990). Although the documented reliability of these scales is below the preferred .70, these scales have been frequently used in nursing research, and are considered valid scales.

Role conflict was operationalized in this study with the Haynes and colleagues (1999) Role Conflict Scale. This scale included four Likert-style statements, again with responses ranging from 1 (strongly disagree) to 5 (strongly agree). Sample statements from this scale were ‘I receive conflicting instructions from two or more people’ and ‘I do things which are accepted by one person, but not another.’ This scale showed an acceptable level of reliability (ranging from .78 to .90), with reliability specific to nurses of $\alpha = .87$ (Haynes et al., 1999).
**Organizational Support**

In this study, organizational support was operationalized by the adapted Eisenberger et al. Perceived Organizational Support Scale. According to the classical research of Eisenberger, and colleagues (1986), organizational support depends on the same processes that people use to infer the commitment of social relationships, including the formation of an emotional bond of trust and loyalty. Seven Likert-style items from the Perceived Organizational Support Scale were used in this study, with responses from 1 (strongly disagree) to 5 (strongly agree). Reliability of this survey resulted in Cronbach’s alpha of .97 (Eisenberg et al., 1986).

Thus far, instruments used to operationalize personal and organizational stressors have been discussed. Presently, instruments used in this study to operationalize resiliency and stress will be examined.

**Resiliency**

In this study, resiliency was measured using the adapted Bartone, Ursano, Wright, and Ingraham (1989) Dispositional Resiliency Scale (DRS). The DRS was a 27-item Likert-style scale, and had three subscales: (1) commitment, (2) control, and (3) challenge. Each item had four possible responses: ‘completely true,’ ‘quite true,’ ‘a little true,’ and ‘not at all true.’ Items in the DRS included statements such as ‘By working hard, you can always achieve your goals’ and ‘When I make plans, I am certain I can make them work.’ The DRS has been used extensively with excellent results, and has demonstrated good psychometric properties and criterion-related validity across multiple samples. Cronbach’s $\alpha$ reliability coefficient for the DRS has been reported at $\alpha = .82$ for the total hardiness scale, and for the
subscales: commitment $\alpha = .77$, control $\alpha = .68$, and challenge $\alpha = .69$ (Bartone, Roland, Picano, & Williams, 2008).

**Subjective Stress**

The adapted stress subscale of the Depression, Anxiety, and Stress Scales (DASS) was used in this study to operationalize subjective stress. The DASS has been noted as a suitable scale for participants who are particularly busy, and the stress subscale has documented strong reliability ($\alpha = .86$) (Bucks et al., 2010). In this study, three items were used from the stress subscale. Statements such as ‘Over the past week, I found it very hard to wind down’ were graded on a four-point Likert scale, with responses ranging from 0 ‘did not apply to me at all’ to 3 ‘applied to me very much, or most of the time’ (Bucks et al., 2010).

All of the instruments used in this study will be tested again to determine the Cronbach’s alpha to determine how the instruments fared in this study’s design and with these subjects. Table 1 (See Appendix F) shows the Cronbach’s alpha reliability for the scales used in this study.

In the next chapter, findings will be presented and discussed.
CHAPTER 5

PRESENTATION AND DISCUSSION OF FINDINGS

This chapter presents the results from the data analysis including sample characteristics, instrument reliability, results of hypotheses testing, discussion of the findings, study limitations, nursing implications, and recommendations for further nursing research.

SAMPLE CHARACTERISTICS

The respondents were primarily Caucasian (58.3%, n = 21), married or partnered (50%, n = 18), and had completed their nursing program in the past two years (2010 and 2011: 50%, n = 18). The subjects had a mean age of 29.28 years (SD = 5.78 years). Table 2 (See Appendix F) provides the graphical display of the ages of the sample.

Regarding highest earned nursing degree, 16.7% (n = 6) of study participants had either earned an ADN or Diploma in Nursing, 38.9% (n = 14) had earned a generic baccalaureate or BSN, and 30.6% (n = 11) held a second-degree Bachelor’s in Nursing. Please see Table 3 (See Appendix F) for breakdown of the respondents’ highest earned nursing degree.

Within the sample, 86% worked full-time (greater than 36 hours per week), 3% worked part-time, and 11% declined to answer the number of hours of work per week. Twenty-six percent (26%) of sample worked in Critical Care, 16% worked in a Medical-Surgical Unit, 10% in Emergency Department, 13% in Telemetry, 19% in Labor and Delivery, 13% float, and 3% in the Neonatal Intensive Care Unit. Forty-one percent (41%)
of the sample did not presently hold national board certification in the area of clinical specialty, 9% did currently hold national board certification in the area of clinical specialty, and 50% expressed plans to pursue national board specialty certification in the next five years.

Regarding professional organization membership for the clinical specialty, 43% of the sample stated that they did presently belong to a professional organization, 41% stated that they did not, and 16% stated that they planned to become members of a professional clinical specialty organization within the next five years.

The subjects were involved in a NGRP for a mean of 3.03 months ($SD = 3.137$, with a range of 0 – 12 months). They were involved in a mentorship program for a mean of 4.3 months ($SD = 5.37$, with a range of 0 – 12 months). Orientation is a critical transitional period for NGNs and 42% indicated that they had three months of orientation in their first role as a RN, 29% had four months, 13% had five months, 6.5% had six months, 6.5% had one month, and 3.2% had two months.

Since the study was concerned with subjective stress, questions were asked pertaining to their personal stressors. Seventy-two percent (72%) of the sample indicated they did not have any children, but 16% indicated they had one child, 6% indicated that they had two children, and 6% indicated they had three children. Thirteen percent (13%) indicated that they had one dependent adult for whom they provided direct care in their home, and 3% indicated that they had two dependent adults in their direct care.

**Instrument Reliability**

The reliability for the instruments used in this study was computed using Cronbach’s alpha ($\alpha$). Reliability testing is outlined in Table 1 (See Appendix F). All of the instruments
met the preset criteria of $\alpha = .70$, with the exception of the subscales for the Resiliency scale (‘commitment’ subscale, $\alpha = .54$, ‘control’ subscale $\alpha = .51$, and ‘challenge’ subscale $\alpha = .61$); therefore, only the total scale score was used in the analysis.

**Results**

The purpose of this study was to explore the personal and organizational stressors of the NGN, the experience of subjective stress, and the moderating effect of resiliency. There were significant correlations among many of the study variables as outlined in Table 4 (See Appendix F). The following section presents the results of the hypotheses testing.

**Hypothesis 1**

Hypothesis 1 stated: *There will be significant relationships among personal and organizational stressors, resiliency, and subjective stress.* The relationships between the variables of interest in this hypothesis were tested using Pearson product-moment correlation coefficient, and Hypothesis 1 was partially supported. Subjective stress was significantly positively related to the personal stressor of work-family conflict ($r = .70, p \leq 0.00$), as well as significantly positively correlated to the organizational stressor of role conflict ($r = .59, p \leq 0.00$). Subjective stress was also positively correlated with both role overload scales ($r = .40$ to $.60, p < .02$), but negatively correlated with organizational support ($r = -.36, p < .04$). These findings support the notion that the higher the organizational support, the lower the subjective stress. A negatively correlational relationship between organizational support and work-family conflict was also noted ($r = -.49, p < 0.03$), demonstrating that increased work-family support is correlated with decreased organizational stressors. Of note, work-family conflict was also strongly positively correlated with ‘control’ subscale of the Resiliency Scale ($r = .55, p < .001$). These findings were expected, but there was a lack of evidence
linking resiliency to the other variables in this study, other than a moderately positive correlation between resiliency and work-family conflict \( (r = .36, \ p < .04) \). All findings are presented in the Correlational Table (Table 4, See Appendix F).

**Hypothesis 2**

Hypothesis 2 stated: *The higher the educational level, the lower the personal and organizational stressors experienced by the NGN.* Kendall tau rank correlation coefficient was used to test hypothesis 2 since educational level yielded ordinal level data. Hypothesis 2 was partially supported. There was a significant positive correlation between higher earned nursing degree and the organizational stressor of role conflict \( (\tau = -.35, \ p < .02) \), indicating that NGNs who have completed BSN or second-degree baccalaureate nursing programs experience decreased role conflict in the first two years of professional practice. There were significant differences \( (F = 3.092, \ df = 3, \ p = .043) \) between the highest earned nursing degree and the Role Conflict scale. The ADN group had a mean score of 3.17 \( (SD = .93) \) as compared to the generic BSN \( (M = 2.59, \ SD = .80) \) and the second degree BSN \( (M = 2.18, \ SD = .69) \). Surprisingly, there were no significant differences in personal stressors experienced by the NGN based on educational level of entry into professional practice.

There were significant differences \( (F = 20.55, \ df = 3, \ p = .000) \) in the year that the first RN degree was earned and the level of social support. NGNs who graduated in 2008 had a mean of 5.0 on the Social Support scale (range 0 – 5) as compared to NGNs graduating in 2009 \( (M = 2.75, \ SD = .69) \) and 2010 \( (M = 4.60, \ SD = .40) \).

There were significant differences \( (F = 6.84, \ df = 2, \ p = .004) \) between subjects who hold or plan to hold national board certification in their clinical specialty relative to the level of organization support. The highest level of organizational support \( (M = 4.39, \ SD = \)
.52) was reported for those who planned to obtain board certification in the next five years. These findings indicate that organizational support may be relative to nurses obtaining their board certification in their clinical specialty.

**Hypothesis 3**

Hypothesis 3 stated: *The higher the educational level, the lower the subjective stress experienced by the NGN.* Again, Kendall tau rank correlation coefficient was used to test this hypothesis. This hypothesis was not supported, as the Kendall’s tau correlation between highest earned nursing degree and subjective stress was not significant (τ = -.22, p < .14). This result is likely related the small sample size, particularly considering the aforementioned strongly negative correlation between higher earned nursing degree and the organizational stressor of role conflict.

**Hypothesis 4**

Hypothesis 4 stated: *The higher the educational level, the higher the level of resiliency experienced by the NGN.* Using Kendall’s tau correlation, this hypothesis was not supported. There was no significant relationship between higher level educational level and increased levels of resiliency (τ = -.04, p < .80). This finding is unexpected, but may be related to the low reliability Cronbach’s alpha reliability noted in the resiliency scale used in this study. It can also be explained if resiliency is viewed as a personality characteristic innate to the individual as contrasted to a learned characteristic. As a personality characteristic, resiliency would be less effected by the educational level, although it would seem that those obtaining higher levels of education would be the more resilient type personality because of the stressors inherent in the academic setting. More studies are needed
to determine the effect of resiliency as a personality trait on nurses obtaining higher degrees and their ability to manage job, personal, and school stress.

**Hypothesis 5**

Hypothesis 5 stated: *Resiliency will be a significant moderator of the effect of personal and organizational stressors on the subjective stress outcomes.* This hypothesis was not supported. All of the predictor variables (resiliency, role overload, personal support, organizational support, role conflict, and work-family stress) were centered and the two role overload scales were combined into one before the multiple regression analysis was done. This model explained 60.8% of the variance in subjective stress ($F = 5.77$, $df = 7,26$, $p = .000$). There was a 14.8% incremental variance for the set of moderator terms but this was not significant ($p = .110$). A second regression analysis entering each of the predictor variables separately with resiliency was also done. Resiliency was not a significant moderator in any of the models except for the regression model with work family conflict ($F = 15.246$, $df = 2,31$, $p = .000$) and then with resiliency added as a moderator ($F = 10.124$, $df = 3, 30$, $p = .000$). A third regression analysis was done entering all predictor variables in combination with the exception of resiliency and this model explained 60% of the variance in subjective stress ($p = .000$). The only significant predictor that accounted for the most unique variance was work-family conflict ($\beta = .54$, $p = .002$) in the total combined predictor model.

Figure 2 (See Appendix F) illustrates the final model with the Beta weights for each predictor variable with and without resiliency added as a moderator. Table 5 (See Appendix F) presents a histogram illustration of the regression analysis.
**Implications for Nursing**

Role conflict is the experience of discord between the NGN’s expectations of their clinical practice and the reality of their inaugural professional position. When newly graduated nurses are not supported in adjusting to the role of a working nurse, they may suppress their professional values or leave practice altogether to resolve this role discrepancy (Young, Stuenkel, & Bawel-Brinkley, 2008). The results of this pilot study show a strongly significant and positively correlational relationship between role conflict and personal and organizational stressors, as well as subjective stress, making it clear how resonant is the theme of role conflict. To this end, it behooves nursing leadership to pursue further studies into this facet of the NGN experience, in an effort to prevent NGN burnout and turnover.

Also of interest from the results of this pilot study is the factor of work-family conflict. Work-family conflict is experienced when the demands of work interfere with effective participation in the family role, and vice versa. There is considerable evidence that work-family conflict results in serious negative consequences to both individuals and organizations, including such outcomes as decreased satisfaction and performance, increased burnout and intention to turnover (Westring and Ryan, 2011). In this pilot study, work-family conflict was shown to be significantly positively correlated with role overload, role conflict, and subjective stress. However, work-family conflict was negatively correlated with organizational support. As such, there are serious implications to the nursing profession to provide organizational support as an effective measure in ameliorating work-family conflict.

Although resiliency was not shown as a strong moderator in this pilot study, there remains literary evidence supporting the link between resiliency and psychological empowerment, decreased job stress, increased job satisfaction, and decreased turnover
intention (Larrabee et al., 2010). This study did show a moderately negative correlational relationship between the Resiliency subscale of ‘control’ and work-family conflict, indicating that increased resiliency is related to decreased work-family conflict. This link is crucial for nurse leaders to understand and acknowledge, particularly in light of family-work balance.

**Study Limitations**

This study was assessed for limitations in design and methodology, as well as for potential threats to internal and external validity.

**INTERNAL VALIDITY**

Polit and Beck (2004) stated that internal validity refers to:

> the extent to which it is possible to make an inference that the independent variable is truly causing or influencing the dependent variable and that the relationship between the two is not the spurious effect on an extraneous variable. (p. 213)

The internal validity of this study was assessed and potential threats were identified as being history, selection bias, testing effects, and instrumentation.

**HISTORY**

It is unknown what other influences in the respondents’ background or in the organization could have affected the findings of this study, including recent hiring into New Graduate Residency programs or mentorships. The issues of educational point of entry, tenure as a nurse, age, and role as caregiver within the home to children and/or dependent adults likely had great influence on the findings.

**SELECTION BIAS**

The convenience method of sampling and self-administration of the instruments on Survey Monkey rather than random sampling may have resulted in a selection bias. The
volunteer participants who made up the sample in this study may not have been representative of the general population of NGNs throughout the US. Furthermore, the participants were recruited at their place of employment that may have unwittingly created bias. Another consideration is that the primary researcher was not employed by the hospital system of choice, and was unknown to many of the participants prior to the recruitment process. This may have affected those who self-selected participation in the study. It is unknown how many multiple studies were occurring simultaneously at the target hospitals, and how this may have affected the participants’ responses to the study instruments.

**TESTING EFFECTS**

The test environment may have been a limitation, as the instruments were self-administered by subjects via online survey, and thus the researcher could not attempt to control for distractions or interruptions. Furthermore, the online method of instrumentation may have been a direct disadvantage due to the lack of urgency and the need for self-determination for participation.

The instruments used in this study were self-report instruments. Self-report instrumentation has many advantages, but must be acknowledged as a limitation in that respondents may wish to present themselves in the best possible light. Particularly, the instruments for Role Overload, Role Conflict, Subjective Stress, and Resiliency may have been perceived as reflective of personal issues. Nevertheless, the researcher must assume the respondents answered frankly.

Concerns regarding test fatigue and emotional exhaustion were minimized by the affirmation of confidentiality and by reducing the number of questions in each instrument.
**INSTRUMENTATION**

Instruments with known psychometric properties were used for this study to operationalize the variables. All instruments had been used in previous studies and were appropriate to measure the variables of interest in this study. It is not known how other instruments measuring the same constructs would alter the results seen in this study.

The reliability of the Resiliency scale ($\alpha = .75$ for this study for the total scale) and the low Cronbach’s alphas for the subscales may have also played a part in the results of this study. If the subscales had higher Cronbach alphas and could have been used in the correlational analysis, the results may have revealed significant correlations with the subscales and the other independent and dependent variables. When this pilot study moves forward, it may be advisable to find another resiliency scale with stronger documented reliability coefficients.

Another issue in instrumentation is the co-linearity between the two scales for role overload: the Seashore, Lawler, Mirvis, and Cammann (1982) Role Overload Scale and the Camman and colleagues Role Overload Scale (as cited in Bacharach et al., 1990). These scales have one to two items, respectively, and may be more reliable combined, rather than separated.

**EXTERNAL VALIDITY**

External validity denotes the generalizability of the results to settings or samples beyond the parameters of the current study, and is focused on the accessible population.

**ACCESSIBLE POPULATION**

The results of this study may not be generalizable on a larger population due to the convenience sample surveyed and the sample size. The nature of using a convenience sample...
of NGNs from a single hospital system in a metropolitan area of San Diego, California, indicates that the available subjects might be atypical of the population of interest.

Sample Size. The sample size (n = 36) of this study is a definite limitation, and may have unwittingly caused some bias or Type I errors. As such, this study should be considered a pilot study, and further research with a broader, larger sample may yield more statistically significant results.

Suggestions for Further Research

This study focused on a single hospital system in a large metropolitan area of the southwest region of the United States. The results are limited to the population surveyed and are not generalizable to the other populations. In respect to the continued growth of the professionalism of nursing, it is important for nursing to identify if there is a difference between the experience of NGNs experience of personal and organizational stressors, particularly in reference to educational point of entry and resiliency. Study of the NGN has both financial and cultural implications, benefits organizational change, and may prove a spearhead for educational reformation within the nursing profession, particularly as this pilot study has confirmed the assumption that NGNs with higher levels of education experience less role stress. Conducting further research into the NGN experience in various parts of the country would add to this body of research knowledge, particularly in areas of the country with a lower percentage of second-degree Baccalaureate nurses and BSN program availability. The recommendation to utilize a random sampling method will allow for the results to be more generalizable as well.
CONCLUSION

The aim of this research study was to employ a mixed methods correlational and comparative design in investigating the relationship between NGN stressors and the evidenced-based assumption that resiliency would negatively correlate with personal and organizational stressors, as well as subjective stress. A new variable of interest was included that had not been previously explored: educational point of entry. Brighid Kelly’s (1998) six-stage psychosocial process to explain how NGNs perceive their adaptation to the ‘real world’ of hospital nursing practice was used as the theoretical framework.

The importance of the comparison between educational point of entry and increased resiliency and decreased subjective stress is needed to justify the expense and resources required for educational reform in professional nursing. Educational reform has been a goal of the ANA since 1965, and has proven elusive. The results noted in this pilot study that higher educational point of entry is significantly negatively correlated with role conflict ($\tau = -0.42, p \leq 0.02$) is an encouraging point in the argument for educational reform in nursing.

The experience of stressors for the NGN has resonant implications throughout nursing practice, particularly considering the NGN is the foundation of the future of professional nursing. To that end, it is pivotal to understand these stressors, as well as to explore ways of amelioration. With all of the pressures on healthcare organizations regarding health care reform and promotion of nursing, it is imperative that healthcare leaders examine what structures and processes facilitate a smooth transition for the NGN.
REFERENCES


APPENDIX A

SHARP HEALTH CARE SYSTEM IRB APPROVAL
March 24, 2011

Harmony Travers, RN, BSN, PHN
3770 Farnsley Road, Suite 15
San Diego, CA 92106

RE: IRB #1103280
Exploring the Experience of the New Graduate Nurse

Dear Ms. Travers,

The Sharp Healthcare Institutional Review Board (IRB#00000996; FWA#00000981) has reviewed and approved your application for the above referenced research activity in accordance with 45 CFR 46.111(b)(1), Category 2. This approval includes:

- Recruitment Proposal (2/20/2011)
- Flyer (3/1/2011)
- Introductory Consent Letter (3/1/2011)
- Waiver of Signature waiver is allowed per 45 CFR 46.111(b)(1)
- Instrument (Survey Monkey questionnaire, 3/1/2011)

This action will be reported to all committee members at the February 16, 2011 meeting.

The following site(s) and investigator(s) are approved:

Sites:
- Chula Vista
- Mary Birch
- Memorial

*Initial application included Grossmont. Request was denied by Grossmont's administration so IRB can take no further action on request to conduct this activity at that facility.

Principal Investigator: Harmony Travers, RN, BSN, PHN

Study Coordinator: None

Sub-investigator and Other Study Personnel: Jeannette S. Stichler, DNSc, RN, FACHE, FAAN

The IRB approval reference number is 1103280. Please include this reference number in all future correspondence relative to this research activity.

As a reminder, it is the responsibility of the Principal Investigator to submit periodic status reports to the IRB. Periodic review of this research activity may be conducted via an expedited process and is scheduled for inclusion on the February 15, 2011 IRB meeting agenda. Approval for this research activity will expire if periodic review is not conducted on or before February 7, 2011. Please provide a completed research status report to the IRB office no later than January 31, 2012 to assure timely review and continuation of this research activity.
APPENDIX B

SAN DIEGO STATE UNIVERSITY IRB APPROVAL
February 22, 2011

Student Researcher: Harmony Trassare
Faculty Sponsor/Thesis Chair: Dr. Stichler
Department: School of Nursing

IRB Number: 060607
Title: Exploring the Experience of the New Graduate Nurse
Risk Level: Minimal
Exemption: 45 CFR 46.101(b)(2)

Dear Harmony Trassare:

The project referenced was reviewed and verified as exempt in accordance with SDSU's Assurance and federal requirements pertaining to human subjects protections within the Code of Federal Regulations (45 CFR 46.101). This review applies to the conditions and procedures described in your protocol.

The determination of exemption is final and requests for continuing review (Progress Reports) are not required for this study. However, if any changes to your study are planned, you must submit a modification request and receive either IRB approval (per 45 CFR 46.110 or 46.111) or IRB verification that the modification is exempt (per 45 CFR 46.101). To submit a modification request, access the protocol via the WebPortal, on the protocol Main Page, you will need to click on "Modifications" under Protocol Maintenance and enter a report. Once you have filled in your responses on the report form, click "submit". Additionally, notify the IRB office if your status as an SDSU-affiliate changes while conducting this research study (you are no longer an SDSU faculty member, staff member or student).

Please note the following for all exempt studies:

a) If this research involves the use of existing or secondary data sources, information obtained must be recorded so that subjects cannot be identified, either directly or through identifiers linked to the subjects.

b) If information will be obtained from individual medical records, please check with the organization authorized to provide access to these records to determine whether regulations relating to the Health Insurance Portability and Accountability Act (HIPAA) pertain to your research. Likewise, if academic records are accessed, Federal Education Rights and Privacy Act (FERPA) requirements must be respected. Notify the SDSU IRB office if protocol revisions are necessary to comply with HIPAA regulations.

c) As recruitment will take place through Sharp Hospital, confirm with that institution that you have permission to conduct the study prior to initiation of any study activities. If this research involves the use of existing or secondary data sources, confirm with the data owner that you have permission to access the data.
APPENDIX C

RECRUITMENT POSTCARD
New Grads!
Help us learn more about the stress of being a new graduate nurse by participating in this brief online survey!

- **Who:** New Graduate Nurses who currently hold RN licensure, and graduated nursing school between May, 2008 and December, 2010.

- **What:** Participate in a quick, fifteen minute online survey discussing the new graduate nurse experience.

- **When:** March 29 to April 8, 2011.

- **How:** Complete the online survey.

- **Questions:** Contact the Principal Investigator, Harmony Trassare, graduate nursing student at San Diego State University: 619-203-9234 or trassare@rohan.sdsu.edu

  * Please note this survey is for research purposes.
APPENDIX D

CONSENT LETTER
Exploring the Experience of the New Graduate Nurse

Dear Colleagues:

Please consider participating in this study of new graduate nurse stress and resiliency.

You are being asked to participate in this study because you hold RN licensure, have graduated nursing school in the past two years, and are working at least twenty-four hours a week. The study will include new graduate nurses who are working in any specialty within the hospital. Preceptorship or orientation does not have to be complete. Please encourage fellow graduates who are employed by the Sharp HealthCare System and have graduated after May 2008 to participate in this study.

Approximately 150 people will take part in this research at Sharp Coronado Hospital, Sharp Chula Vista Hospital, Sharp Grossmont Hospital, Sharp Mary Birch Hospital, and Sharp Memorial Hospital.

If you choose to participate you will be asked to complete two study surveys, a short questionnaire and a brief demographic form. The two surveys together should require no more than twenty minutes of your time. The survey is available online at www.surveymonkey.com/newgraduate. The online survey will be available from March 28, 2011 to April 8, 2011, and you may complete the survey at any point during this time.

Participation in this study is fully voluntary, and if you do not wish to participate, you do not need to do anything further. You may withdraw at any time without explanation. There are minimal risks associated with your participation in this study. There may be discomfort caused by answering questions about the personal and organizational stressors experienced by the New Graduate Nurse. The study does not require any personal identifiers from you, so your responses will be totally anonymous. Your hospital, unit, preceptor or manager will not be notified of your responses. Only aggregated data will be shared, and submission of your online survey will imply consent. There may be no direct benefit to you from your participation in this study. It is hoped that the information collected during this study may be used to gain better understanding of the New Graduate Nurse experience.

This study is being conducted by Harmony Waugh Trassare, RN, MSNc, PHN, who is the Principal Investigator and a graduate nursing student at San Diego State University in San Diego, California, and Jaynelle F. Stichler, DNS, RN, FACHE, FAAN, a Professor of Nursing at San Diego State University. Please feel free to contact Ms. Trassare at any time for questions or comments at 619-203-9234 or via e-mail at trassare@rohan.sdsu.edu and Dr. Stichler at 858-451-8557 or via e-mail at stichler@mail.sdsu.edu.

If you have any questions about your rights as a participant in this study or desire report research-related problems, you may contact the Division of Research Affairs at SDSU (telephone: 619-594-6622; email: irb@mail.sdsu.edu) or Sharp’s Office for the Protection of Human Research Subjects (858-499-4836).

Respectfully,
Harmony Waugh Trassare, RN, MSNc, PHN
APPENDIX E

DEMOGRAPHIC QUESTIONNAIRE
Directions: These questions concern the backgrounds of those who respond to this survey.

As with all answers to this survey, your responses will be kept confidential. Please circle the appropriate letter or fill in the blank.

1. What is your age in years? ________

2. What best describes your Race/Ethnic Group? *(circle all that apply)*

   a. **Hispanic or Latino.**
      A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

   b. **American Indian or Alaska Native.**
      A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.

   c. **Asian.**
      A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, or Malaysia.

   d. **Black or African American.**
      A person having origins in any of the black racial groups of Africa.

   e. **Native Hawaiian or Other Pacific Islander.**
      A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

   f. **White.**
      A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

   g. **Other**

   h. **Decline to state**
3. What is your marital status?

   Single (*never married*)  Married/Partnered  Divorced (not remarried)
   Widow(ned)  Decline to state

4. How many children (18 and under) live with you at home?

5. How many dependent adults (for whom you provide direct care) live with you at home?

6. What year did you complete your first RN degree? (For example: 2009)

7. What is your highest earned nursing degree?
   a. Associate Degree (Nursing, ADN)
   b. Diploma in Nursing
   c. Generic Baccalaureate (Nursing, BSN)
   d. Second Degree Bachelors in Nursing
   e. Second Degree Masters in Nursing
   f. Generic Master’s (Nursing)
   g. Doctoral Degree (Nursing)

8. What is your highest earned degree other than nursing?
   a. Associate Degree
   b. Baccalaureate (*Other field*)
   c. Master’s (*Other field*)
   d. Doctoral Degree (*Other field*)
9. How many months of orientation did you have in your first role as a RN? ______

10. How many months were you involved in a New Graduate Nurse Residency program? (If none, please enter “none.”)

11. How many months were you involved in a mentor program? (If none, please enter “none.”)

12. What is your current title? ___________________________ ___________________________

13. What best describes your present position?
   a. Full time (>35 hours/week)
   b. Part-time
   c. Interim
   d. Per diem
   e. Other

14. Which of the following best describes your primary work unit? (circle all that apply):
   a. Float to all units as a new graduate nurse; no unit assignment
   b. L&D
   c. LDRP
   d. Postpartum / Nursery
   e. NICU or Intermediate Care Nursery
   f. Pediatrics, general
   g. Pediatric ICU
   h. Inpatient OR
i. Inpatient PACU
j. Medical Unit
k. Oncology Unit
l. Surgical Unit (*pre & post surgical patient care*)
m. Combined medical-surgical unit
n. Orthopedics
o. Intensive or Critical Care (*includes medical, surgical, neuro & cardiac*)
p. Emergency department
q. Telemetry
r. Outpatient Surgery
s. Outpatient PACU
t. Procedural Units such as Cardiac Cath
u. Testing, Diagnostic or Interventional Unit

15. Do you currently hold any national board certification in your clinical specialty? Example: CCRN, PCCN
   a. Yes
   b. No
   c. Plan to in the next five years

16. Do you belong to a professional organization for your clinical specialty? Example: AORN, AACN
   a. Yes
   b. No
   c. Plan to in the next five years
APPENDIX F

TABLES AND FIGURES
<table>
<thead>
<tr>
<th>Instrument</th>
<th>Original Cronbach’s Alpha</th>
<th>Cronbach’s Alpha for this Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baruch et al. Social Support Scale</td>
<td>.91</td>
<td>.94</td>
</tr>
<tr>
<td>Matthews et al. Work-Family Conflict Scale</td>
<td>.71 - .80</td>
<td>.72</td>
</tr>
<tr>
<td>Seashore et al. Role Overload Scale</td>
<td>.65</td>
<td>.86</td>
</tr>
<tr>
<td>Camman et al. Role Overload Scale</td>
<td>.64</td>
<td>.89</td>
</tr>
<tr>
<td>Eisenberger et al. Perceived Organizational Support Scale</td>
<td>.97</td>
<td>.88</td>
</tr>
<tr>
<td>Bartone et al. Dispositional Resiliency Scale – Total Scale</td>
<td>.82</td>
<td>.75</td>
</tr>
<tr>
<td>Bartone et al. Dispositional Resiliency Scale – Commitment Subscale</td>
<td>.77</td>
<td>.54</td>
</tr>
<tr>
<td>Bartone et al. Dispositional Resiliency Scale – Control Subscale</td>
<td>.68</td>
<td>.51</td>
</tr>
<tr>
<td>Bartone et al. Dispositional Resiliency Scale – Challenge Subscale</td>
<td>.69</td>
<td>.61</td>
</tr>
<tr>
<td>Depression, Anxiety, and Stress Scales (DASS) – Stress Subscale</td>
<td>.86</td>
<td>.70</td>
</tr>
</tbody>
</table>
Table 2. Ages of Sample

Mean = 29.28
Std. Dev. = 5.788
N = 32
Table 3. Highest Earned Nursing Degree

What is your highest earned nursing degree?

![Bar chart showing the distribution of highest earned nursing degrees. The categories are: Associate Degree (Nursing, ADN), Diploma in Nursing, Generic Baccalaureate (Nursing, BSN), Second Degree Bachelors in Nursing.]
### Table 4. Correlational Table

<table>
<thead>
<tr>
<th></th>
<th>Social Support</th>
<th>Work-Family Conflict</th>
<th>Organizational Support</th>
<th>Role Overload (Seashore)</th>
<th>Role Overload (Camman)</th>
<th>Role Conflict</th>
<th>Resiliency (total scale)</th>
<th>Subjective Stress</th>
<th>Role Overload (Combined Seashore and Camman)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Support</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work-Family Conflict</td>
<td>-.339*</td>
<td>1</td>
<td>-.492**</td>
<td>.348*</td>
<td>.515**</td>
<td>.363*</td>
<td>.70***</td>
<td>.36*</td>
<td></td>
</tr>
<tr>
<td>Organizational Support</td>
<td>-.492**</td>
<td>1</td>
<td>-.354*</td>
<td>-.472**</td>
<td>-.446**</td>
<td>-.358*</td>
<td>-.419**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role Overload (Seashore)</td>
<td>.348*</td>
<td>-.354*</td>
<td>1</td>
<td>.76***</td>
<td>.364*</td>
<td>.46**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role Overload (Camman)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role Conflict</td>
<td>.515**</td>
<td>-.446**</td>
<td>.364*</td>
<td>.460**</td>
<td>1</td>
<td></td>
<td>.593***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resiliency (total scale)</td>
<td>.363*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective Stress</td>
<td>-.358*</td>
<td>.70***</td>
<td>.460**</td>
<td>.398*</td>
<td>.593***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role Overload (Combined Seashore and Camman)</td>
<td>.36*</td>
<td>-.419**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* P < .05  ** P < .01  ***P < .001

Note: (a) = Personal stressors included in social support and work-family conflict;  
(b) = Organizational stressors included in organizational support, role overload and role conflict
Figure 1. Conceptual model.
Figure 2. Model with beta weights.
Organizational Support
$\beta = .27, p = .11$

Resiliency
$\beta = .30, p = .09$

Organization Support x Resiliency
$\beta = .24, p = .16$

Subjective Stress
Table 5. Histogram

Histogram

Dependent Variable: SubjStress: DASS scale (mean)

Mean = -.677E-17
Std. Dev. = 0.778
N = 34