University of Windsor

Scholarship at UWindsor

Electronic Theses and Dissertations

Theses, Dissertations, and Major Papers

2009

Impact of mentoring on job satisfaction and retention

Kristy Bialkowski University of Windsor

Follow this and additional works at: https://scholar.uwindsor.ca/etd

Recommended Citation

Bialkowski, Kristy, "Impact of mentoring on job satisfaction and retention" (2009). *Electronic Theses and Dissertations*. 7894.

https://scholar.uwindsor.ca/etd/7894

This online database contains the full-text of PhD dissertations and Masters' theses of University of Windsor students from 1954 forward. These documents are made available for personal study and research purposes only, in accordance with the Canadian Copyright Act and the Creative Commons license—CC BY-NC-ND (Attribution, Non-Commercial, No Derivative Works). Under this license, works must always be attributed to the copyright holder (original author), cannot be used for any commercial purposes, and may not be altered. Any other use would require the permission of the copyright holder. Students may inquire about withdrawing their dissertation and/or thesis from this database. For additional inquiries, please contact the repository administrator via email (scholarship@uwindsor.ca) or by telephone at 519-253-3000ext. 3208.

IMPACT OF MENTORING ON JOB SATISFACTION AND RETENTION

by Kristy Bialkowski

A Thesis
Submitted to the Faculty of Graduate
Studies through the Faculty of Nursing
In Partial Fulfillment of the Requirements for
The Degree of Master of Science
at the University of Windsor

Windsor, Ontario, Canada

2009

© 2009 Kristy Białkowski



Library and Archives Canada

Published Heritage Branch

395 Wellington Street Ottawa ON K1A 0N4 Canada Bibliothèque et Archives Canada

Direction du Patrimoine de l'édition

395, rue Wellington Ottawa ON K1A 0N4 Canada

> Your file Votre référence ISBN: 978-0-494-82100-8 Our file Notre référence ISBN: 978-0-494-82100-8

NOTICE:

The author has granted a non-exclusive license allowing Library and Archives Canada to reproduce, publish, archive, preserve, conserve, communicate to the public by telecommunication or on the Internet, loan, distribute and sell theses worldwide, for commercial or non-commercial purposes, in microform, paper, electronic and/or any other formats.

The author retains copyright ownership and moral rights in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

AVIS:

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque et Archives Canada de reproduire, publier, archiver, sauvegarder, conserver, transmettre au public par télécommunication ou par l'Internet, prêter, distribuer et vendre des thèses partout dans le monde, à des fins commerciales ou autres, sur support microforme, papier, électronique et/ou autres formats.

L'auteur conserve la propriété du droit d'auteur et des droits moraux qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de cette thèse.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.



I. Co-Authorship Declaration

I hereby declare that this thesis incorporates material that is result of joint research, as follows:

This thesis incorporates the outcomes of a joint research project undertaken in collaboration with Professor Deborah Kane from the University of Windsor's Faculty of Nursing. This joint research encompassed the data collection from new graduate nurses after 3 months of employment. Since this thesis focused on new graduates after 9 months of employment, the data collected after 3 months was utilized as a means to compare scores on all measures over time. In all cases, the key ideas, primary contributions, experimental designs, data analyses and interpretation, were performed by the author. The contribution of the co-author includes strictly the collaboration on previous unpublished research that is included within this thesis.

I am aware of the University of Windsor Senate Policy on Authorship and I certify that I have properly acknowledged the contribution of other researchers to my thesis, and have obtained written permission from the co-author to include the above material in my thesis.

I certify that, with the above qualification, this thesis, and the research to which it refers, is the product of my own work.

II. Declaration of Previous Publication

I declare that, to the best of my knowledge, my thesis does not infringe upon anyone's copyright nor violate any proprietary rights and that any ideas, techniques, quotations, or any other material from the work of other people included in my thesis,

published or otherwise, are fully acknowledged in accordance with the standard referencing practices. Furthermore, to the extent that I have included copyrighted material that surpasses the bounds of fair dealing within the meaning of the Canada Copyright Act, I certify that I have obtained a written permission from the copyright owners to include such materials in my thesis.

I declare that this is a true copy of my thesis, including any final revisions, as approved by my thesis committee and the Graduate Studies office, and that this thesis has not been submitted for a higher degree to any other University of Institution.

ABSTRACT

Purpose: To evaluate a mentoring program by examining the impact of length of orientation on job satisfaction, organizational commitment, and propensity to leave.

Significance: For the first time in Canada, the Vermont Nurse Internship Project was being implemented in an acute care hospital. A mentoring program with the ability to increase retention and decrease cost was worth examining.

Methods: A survey methodology was utilized to collect data from 27 newly hired nurses after being employed for 9 months.

Results: Significant correlations were found between the following variables; organizational commitment and propensity to leave, organizational commitment and job satisfaction, and propensity to leave and job satisfaction. Of the new graduates surveyed, 62% identified the opportunity for full-time employment as the most common reason for leaving their current workplace.

Conclusions: The results of this study can be utilized to shape mentoring programs of the future and to guide further research in this area.

DEDICATION

I would like to thank many special people who have supported me throughout my graduate educational endeavours over the last few years. To my parents, who have been there to provide emotional support and a nice home cooked meal during a long night of studying, I thank you. To my soul mate Rob, for all the positive encouragement and emotional support you have given me, I thank you. My accomplishments thus far have been made possible because of all of you. Thank you again from the bottom of my heart.

ACKNOWLEDGEMENTS

I would like to acknowledge and thank several people who have made my goal of completing this thesis possible. To my advisor Dr. Debbie Kane, for your kind words of wisdom and guidance throughout the last few years, I thank you. I admire your passion for research and your commitment to your students. I would also like to acknowledge and thank Dr. Linda Patrick for her objective suggestions and words of encouragement. Furthermore, I would like to thank Dr. Kathy Lafreniere for her guidance in data analysis and her recommendations in regards to reporting the findings of my thesis. Also, I would like to thank Kristi Thompson and Daniel Edelstein from the Academic Data Centre at the University of Windsor. I would like to extend my gratitude for their assistance and support in analyzing the data for my thesis.

TABLE OF CONTENTS

APPROVALS	ii
DECLARATION OF CO-AUTHORSHIP / PREVIOUS PUBLICATION	iii
ABSTRACT	v
DEDICATION	vi
ACKNOWLEDGEMENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF APPENDICES	xii
CHAPTER I: INTRODUCTION Problem Statement Significance Purpose Conceptual Framework Vermont Nurse Internship Model Research Questions CHAPTER II: REVIEW OF LITERATURE Search Strategy The Review. Organizational Commitment Propensity to Leave Job Satisfaction Turnover of New Graduates Turnover and Mentoring Programs Mentoring Relationships	2 6 13 15 15 15 16 19 24 24
Perceptions of the Mentoring Experience. Mentoring Programs. Cost Effectiveness. Summary.	29 35
CHAPTER III: METHOD Design Sample and Setting Protection of Human Subjects. Data Collection Procedures.	38 39 40
Variables	

Instrumentation	
Data Analysis Procedures	
CHAPTER IV: RESULTS	45
Data Cleaning Procedures	
Reliability Analyses	46
Sample Characteristics	48
Quantitative Data Analyses	
Qualitative Data Analyses	
CHAPTER V. DISCUSSION	60
Research Questions	
Job Satisfaction	
Qualitative Remarks	64
Limitations	65
Implications and Recommendations	
Conclusion	68
REFERENCES	70
VITA AUCTORIS	106

LIST OF TABLES

Table 1	Internal Consistency Reliability of all Measures	47
Table 2	Descriptive Statistics – MMSS Items	50
Table 3	Descriptive Statistics: Three and Nine Month Measures (n=12)	52
Table 4	Independent Samples T-test: Three and Nine Month	
	Measures	53
Table 5	ANOVA Results	56
Table 6	Means and Standard Deviations for Organizational Commitment,	
	Propensity to Leave, and Job Satisfaction According to	
	Orientation Length	57

LIST OF FIGURES

Figure 1 From Novice to Competent Nurse: A Process Model

LIST OF APPENDICES

Appendix A	Research Ethics Board Approval – University of Windsor	78
Appendix B	Research Ethics Board Approval – Hospital	80
Appendix C	Letter of Information.	84
Appendix D	E-mail Notice of Upcoming Study	88
Appendix E	Survey	90
Appendix F	Survey E-mail Notice	100
Appendix G	Reminder E-mail Notice	102
Appendix H	Final Reminder E-mail Notice	104

IMPACT OF MENTORING ON JOB SATISFACTION AND RETENTION

CHAPTER I

INTRODUCTION

Nurses form the backbone of Canada's health system and most would agree that it is virtually impossible to receive health care in this country without the expertise, knowledge, and caring of a professional nurse (CIHI, 2006). Unfortunately, nursing economists have calculated and predicted a looming nursing shortage that will become severe and prolonged if action is not taken immediately (Halfer & Graf, 2006). The extent of this shortage in Canada is expected to reach 78,000 Registered Nurses by the year 2011, and increase to 113,000 by the year 2016 (Canadian Nurses Association, 2002). Contributing to this shortfall of nurses is an aging population with greater and more complex health care needs, a graying profession, and greater career choices for women (Scott-Findlay, Estabrooks, Cohn, & Pollock, 2002). Complicating this looming shortage is the possibility that current nurses are being driven away from bedside care due to the forces of increasing patient acuity, the constraints imposed by a managed care environment, and shortages in nursing personnel (Owens et al., 2001).

In order to prepare for future nursing shortages and to alleviate current shortages. a strong focus on the recruitment and retention of new graduate nurses is required. Unfortunately, orientation programs for new graduates can be extremely grueling and stressful, as levels of patient acuity have increased over time (Almada, Carafoli, Flattery, French, & McNamara, 2004). The environments faced by new graduate nurses are becoming increasingly complex, especially in acute care settings that present patients with a multitude of clinical and psychosocial challenges (Rosenfeld, Smith, Iervolino, &

Bowar-Ferres, 2004). The new graduate nurse, in today's intricate healthcare environment, often experiences difficulty when transitioning from student to professional nurse, with resulting dissatisfaction (Altier & Krsek, 2006). Hospitals have started to acknowledge the need to assist new graduates in their transition, recognizing that successful orientation of new staff is related to increased retention and patient safety (Floyd, Kretschmann, & Young, 2005).

Problem Statement

According to Winter-Collins and McDaniel (2000), new graduate nurses are leaving their current positions at an alarmingly higher rate than experienced nurses. Turnover rates have been reported as high as 30% within one year of practice and 57% by two years in an American hospital setting (Bowles & Candela, 2005; Halfer, 2007). According to the Canadian Institute for Health Information (CIHI) (2008), 6.6% of Canadian Registered Nurses under the age of 30 did not renew their licenses in 2007. Similarly, 4.4% of Ontario's 2007 new graduates nurses did not renew their nursing licenses in 2008 (College of Nurses of Ontario, 2008). In order to sustain the nursing workforce in Canada, turnover and job dissatisfaction among new nurses needs to be addressed.

Significance

According to Sibbald (1998), Canada's population is predicted to increase by 23% by the year 2011, and the largest portion of this population will be greater than 45 years of age. Current trends show that health care service utilization is greatest among older populations; therefore a 46% increase in the demand for Registered Nursing services between 1993 and 2011 can be anticipated (Sibbald). While the demands for Registered

Nurses are increasing, an aging workforce will inevitably lead to a diminished supply (Sibbald). The average age of a Registered Nurse in Canada has increased from 43.3 vears in 2000 (Canadian Nurse Association, 2006) to 45.1 years in 2007 (CIHI, 2008). The largest age group within the regulated nursing workforce in Canada is comprised of those between the ages of 50 and 54 years, accounting for 17.2% of the total workforce (CIHI, 2007). As the current nursing workforce ages simultaneously with the growing number of people over the age of 45, the recruitment and retention of new graduate nurses will be a key factor in sustaining the healthcare resources of the future.

New graduate nurses are entering the healthcare workforce at a time that can be arguably referred to as the most chaotic and unstable in memory (Bowles & Candela, 2005). If new graduates develop negative perceptions of their first jobs in this hectic and unstable workforce, the less likely they may be to remain in those positions (Bowles & Candela). The "image of greener pastures" can lead new graduates to seek a workplace environment where their ideas and needs are valued (Winter-Collins & McDaniel, 2000, p.110). Upon arriving at a new employment site, many nurses realize that unfortunately "the grass isn't greener but only a lighter shade of gray" (Winter-Collins & McDaniel p.110).

The first year in any profession shapes an individual's career framework and can profoundly influence long-term professional development and satisfaction (Scott Engelke & Swanson, 2008). New graduate nurses experience common challenges during the first post-graduate year, including becoming licensed as a Registered Nurse, selecting one's first employer and area of specialization, establishing oneself as a member of the health care team, adjusting to a new job and organization, and becoming confident in

one's clinical skills and knowledge (Halfer, 2007). In addition, new graduates must overcome the generational intricacy of today's workplace. The generational composition of the workforce is increasing in complexity and currently contains four generations of nurses: Veterans, Baby Boomers, Generation Xers, and Millennials (Duchscher & Cowin, 2004). This unique generational intricacy can be unsettling to new graduates who enter a professional practice with a perception that they will be valued and respected as healthcare professionals, only to encounter a workplace filled with interpersonal conflict (Duchscher & Cowin). Many new graduate nurses fall within the Millennial generation and are known to be culturally diverse, technologically savvy, highly educated, confident, determined, and to have a greater focus on preserving a balance between work and home life (Mangold, 2007; Duschsher & Cowin).

New graduate nurses are leaving their current positions at an alarmingly higher rate than experienced nurses (Winter-Collins & McDaniel, 2000). Nurses leave their jobs or the profession altogether in search of greater job fulfillment, superior working conditions, better salaries, and the ability to deliver high quality care, which can result in great financial and quality of care losses by the healthcare sector and society in general (Roberts, Jones, & Lynn, 2004). On average, the sheer cost of turnover per nurse in the United States ranges from \$42,000 for a medical-surgical nurse to \$64,000 for an ICU nurse (Cline, Reilly, & Moore, 2003). The total mean cost of turnover in Canada per nurse, as calculated in a pilot study, was reported as \$10,100 (O'Brien-Pallas et al., 2006). The true cost of turnover is projected to be four to five times higher than suspected, primarily due to a failure to account for the loss of productivity by new hires and the high cost of recruiting, hiring, orientating, and training new nurses to achieve the

skill and competency levels of experienced nurses (Wong, 2000). Turnover, leading to staff vacancies can also negatively impact the morale of senior staff who are requested to work short-staffed or extra shifts, and are repeatedly asked to train the new nurses that are hired (Greene & Puetzer, 2002).

Retaining new graduate nurses is an obvious strategy to address current and looming nursing shortages, especially as competition for nurses increases among healthcare facilities (Roberts, Jones, & Lynn, 2004). Canadian cities situated close to the United States border and their surrounding municipalities are in a unique position, as they must also compete for nurses and other healthcare personnel with their American neighbours. Cameron, Armstrong-Stassen, Bergeron, and Out (2004) point out that our proximity to the United States may result in Canadian nurses being tempted by signing bonuses and the enticing contracts and career opportunities that are offered across the border.

In order to focus efforts on retention, a renewed urgency has surfaced to examine new graduate nurses' perceptions of their initial practice experiences (Casey, Fink Krugman, & Propst, 2004). Upon determining the factors leading to unsatisfied new graduates and high turnover rates, health care facilities can utilize this valuable information to focus on strategies aimed at improving recruitment and retention. Mentoring programs have been widely adopted and embraced in hospitals across the United States as a strategy for the recruitment and retention of new graduate nurses (Blanzola, Lindeman, & King, 2004; Collins & Thomas, 2005; Hayes & Scott. 2007: Herdrich & Lindsay, 2006; Marcum & West, 2004; Newhourse, Hoffman, Suflita. & Hairston, 2007; Rosenfeld, Smith, Iervolino, & Bowar-Ferres, 2004). Outcome

evaluation of mentoring programs indicates increased retention or decreased turnover rates among the participating new graduates (Beecroft, Kunzman, & Krozek, 2001; Halfer & Graf, 2006; Hurst & Koplin-Baucum, 2003; Marcum & West, 2004; Zucker et al., 2006). Other mentoring programs have demonstrated consistent levels of job satisfaction (Altier & Krsek, 2006) and high levels of critical thinking amongst new graduate nurses (Marcum & West, 2004). A large gap in the current Canadian literature exists, as only a single article addressing the evaluation of a nurse internship program in an Ottawa hospital was found upon searching the literature (Smith, 2008).

The Vermont Nurse Internship Project

A mentoring program with the ability to increase retention and thus in turn decrease cost is worth examining. Of the existing mentoring programs being implemented in the United States, the Vermont Nurse Internship Project (VNIP) has demonstrated an increase of 29% in retention rates in a community hospital setting (Almada, Carafoli, Flattery, French, & McNamara, 2004). For the first time in Canada the VNIP model is being implemented in an acute care hospital as a means of recruiting and retaining safe and competent new graduate nurses.

Purpose

The purpose of this study was to evaluate the VNIP mentoring program being implemented in an acute care hospital in Ontario, by examining the impact of length of orientation on organizational commitment, propensity to leave, and job satisfaction. This study has the potential to discover if varying lengths of a mentoring program can affect the commitment, turnover intent, and satisfaction of new graduate nurses. With this information, organizations can foster supportive environments for new graduates leading

to a decrease in turnover, a savings of valuable health care dollars, and a strengthened workforce.

Conceptual Framework

The conceptual framework chosen to guide this study was a developmental transition model formulated by Schoessler and Waldo (2006) for the newly graduated nurse termed "From Novice to Competent Nurse: A Process Model" (Figure 1). Schoessler and Waldo constructed this process model with the aim of providing new graduate nurses with a framework to assist in the interpretation of their experiences and for organizations to tailor developmentally appropriate strategies for supporting new nurses. The model is based on three existing theoretical frameworks: 1) Benner's Novice to Expert Skill Acquisition Model; 2) Bridges' Transition Management and 3) Kolb's Experiential Learning Cycle. Schoessler and Waldo's model was refined through reflecting on the practice experiences of new nurses. The model describes the first 18 months of a new graduate nurse's practice, as the transition from advanced beginner to competent nurse occurs. Approximate time frames for new graduate transitions are suggested, but movement throughout the transition phases is individualized and some phases may overlap or relapse (Schoessler & Waldo). The following are the three phases of the model: ending, neutral zone, and new beginning.

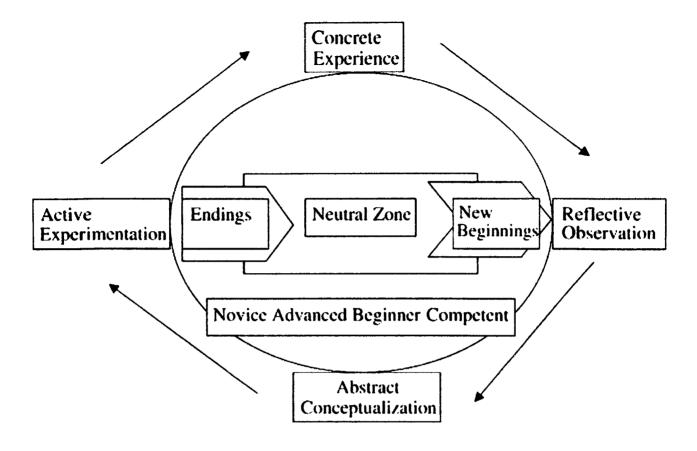


Figure 1. From Novice to Competent Nurse: A Process Model

(Schoessler & Waldo, 2006, p. 48)

Ending (0 to 3 months)

The first phase is described as the ending phase because it signifies the losses new graduates experience as they transition from student to nurse. Schoessler and Waldo (2006) indicate that during the ending phase, nurses express the preparedness to develop relationships with patients, but indicate they have little time to do so. Nurses report finding it difficult to focus on the patient when there are many tasks to be accomplished. and the loss of quality time spent with patients as student nurses is mourned (Schoessler & Waldo). Further losses experienced by new nurses throughout the ending phase include the loss of student peers, school faculty, and support.

During the ending phase nurses report experiencing anxiety and stress as they are trying to "measure up" to patient and staff expectations and patient care needs (Schoessler & Waldo). New graduates are also struggling with how to become organized in the work place. They often spend time experimenting with their organizational skills and do so by anticipating how long a particular procedure would last and by trying to decide which patient to assess first and why Hallmark events of this phase include the development of new skills, coping with the first patient death, and coping with the first mistake made as a practicing nurse (Schoessler & Waldo). As nurses progress through this phase, the performance of tasks becomes smoother and attention is shifted towards improving organization and achieving patient goals.

Neutral Zone (4 to 9 months)

As new nurses enter the second phase or the neutral zone, as described by Schoessler and Waldo (2006), they face several challenges as they strive for balance and become functioning members of the team. During this phase new graduates perceived

caring for long-term patients as taxing. Nurses also expressed concern regarding being unable to answer patients' questions pertaining to their disease or the course of treatment. Upon entering the neutral zone, nurses conveyed distress regarding time constraints and claimed that there wasn't enough time for preparation, to read charts, or spend time with patients and families (Schoessler & Waldo). Throughout this phase, nurses also continue to strive for a balance between educational definitions of quality care and organizational meanings of quality care and efficiency. A struggle exists because at the personal level, patient care is challenging, whereas at the organizational level, issues such as staffing and

Relationships with physicians were also viewed as challenging throughout this phase (Schoessler & Waldo, 2006). New graduate nurses believe strongly in their role as patient advocates, but lack the skills and rapport with physicians required to carry out this important role. In addition, new graduate nurses need to learn and master the unwritten rules surrounding situations such as which physician to call, how to get through to the physician quickly, and what information to provide in order to best advocate for the patient.

budget begin to surface (Schoessler & Waldo).

A hallmark event signaling successful transition in the neutral zone occurs when experienced staff ask new nurses questions, and when new graduates realize that they are knowledgeable and able to provide some answers (Schoessler & Waldo, 2006). This indicates that new graduates are becoming functioning members of the team and no longer constantly require the support of others.

New Beginning (10 to 18 months)

The final transition phase has been named as a period of new beginning by Schoessler and Waldo (2006). They describe how nurses in this phase develop comfort with the tasks and skills required to care for patients, thus allowing them to focus more energy on developing relationships with patients and families. This new beginning phase brings full integration of new graduates into the nursing team (Schoessler & Waldo). Some of the hallmarks of this phase include: assuming additional organizational roles, completing the shift on time, having a sense of knowing what might happen, and knowing what resources would be required to care for patients (Schoessler & Waldo). According to Schoessler and Waldo, new nurses in the final phase of transition realize how much they've truly grown over a year's time when comparing themselves with the current year's newly hired graduates.

Vermont Nurse Internship Model

The aim of this study was to examine the outcomes of the implementation of the VNIP within an acute care hospital in Ontario. The VNIP is a healthy workplace strategy that was formulated in response to the looming staffing issues identified in 1999 by the Vermont Organization of Nurse Leaders (VONL) (Vermont Nurse Internship Project, 2005). The VONL joined forces with the Vermont Association of Hospitals and Health Systems to initiate research on nursing workforce issues specific to Vermont (Boyer, 2002). The Vermont Nursing Report that resulted from this partnership served as the framework for further collaborative work and strategic planning regarding the pending nursing workforce crisis (Vermont Nurse Internship Project).

The internship project is based on the precepted delivery model and consists of two programs: one for the new graduate nurses and another for the development and support of staff nurse preceptors (Boyer, 2002). The internship is a formal, post-graduate educational program designed to expand on the new graduate nurse's education, preparation, and skills (Vermont Nurse Internship Project, 2005). The program includes individual studies, staff development courses, conferences, and one-on-one preceptor guidance and support (Boyer). The role of the preceptor is to develop learning goals and objectives in collaboration with the intern, assess the intern's level of skills and learning style, plan learning experiences accordingly, and provide daily feedback to the intern (Vermont Nurse Internship Project). The preceptor and the intern work together in a "married state" for the duration of the orientation program (Almada, Carafoli, Flattery, French, & McNamara, 2004, p.269).

The internship program creates a new workplace culture where professional nurses support and mentor their colleagues, which is a sharp contrast to a culture where nurses are said to "eat their young" (Boyer, 2002, p.85). According to Boyer, the VNIP supports the entry of nurses into practice along a continuum of expertise, while fostering the development of essential leadership skills as nurses take their place within the complex and demanding field of health care delivery.

The following two goals form the focus for the internship project:

 Create a formal nursing internship program that provides adequate practical clinical experience for novice nurses to function at a competent level when they enter the work force. 2.) Expand clinical opportunities for students by increasing the use of clinical staff as preceptors in specialty areas.

(Vermont Nurse Internship Project, 2005)

The internship program has been in place as an active educational process in Vermont since the year 2000 and has seen annual growth and expansion (Vermont Nurse Internship Project, 2005). The program has expanded through collaboration with various non-Vermont healthcare agencies that are requesting consulting time and model adoption (Vermont Nurse Internship Project). Improved retention rates have also been seen in institutions that have adopted the model. In a study performed at a community hospital in Massachusetts at which the VNIP was implemented, retention rates demonstrated an increase of 29% (Almada, Carafoli, Flattery, French, & McNamara, 2004).

For the first time, the VNIP model is being adopted by an acute care hospital in Canada as a means of recruiting and retaining new graduate nurses. As previously stated, a mentoring program with the ability to increase retention and thus in turn decrease cost is worth examining. Due to the looming nursing shortage within Canada it is absolutely necessary that methods of recruitment and retention are evaluated and refined in order to ensure the sustainability of the future nursing workforce.

Research Questions

This study asked the following research questions:

- 1. Does organizational commitment, propensity to leave, and job satisfaction differ between 3 and 9 months of employment?
 - Hypothesis: a.) As experienced is gained, organizational commitment and job satisfaction scores will increase and propensity to leave will decrease.
- 2. Does length of orientation impact organizational commitment, propensity to leave, and job satisfaction?
 - Hypotheses: a.) Organizational commitment will be higher in those nurses given longer orientations.
 - b.) Propensity to leave will be lower in those nurses given longer orientations.
 - c.) Job satisfaction will be higher in those nurses given longer orientation.
- 3. What is the relationship among organizational commitment, propensity to leave, and job satisfaction?
 - Hypothesis: a.) Nurses with higher levels of job satisfaction will also have higher levels of organizational commitment and lower levels of propensity to leave.

CHAPTER II

REVIEW OF LITERATURE

Search Strategy

The following literature was retrieved from the subsequent databases: Proquest Nursing Journals, PubMed, Cumulative Index to Nursing and Allied Health Literature, Medline, Ovid Nursing, and the Cochrane Database of Systematic Reviews. The key terms utilized in the search process were: new graduate nurses, new nurses, new RNs, job satisfaction, organizational commitment, propensity to leave, intent to leave, intent to stay, new nurse perceptions, mentoring, mentoring relationships, internship, precepting, new nurse turnover, Vermont Nurse Internship Project, Vermont model, and Vermont mentoring. The search terms were utilized in different combination to obtain a total of 36 published journal articles. The majority of the literature pertaining to new graduate nurses and the evaluation of mentoring programs addressed studies that were performed in the United States. A single article examined a nurse internship program that was implemented in an Ottawa hospital (Smith, 2008). This finding pointed out a major gap in the current Canadian literature.

The Review

The current literature regarding organizational commitment, propensity to leave, job satisfaction and turnover in new graduate nurses is addressed in the following literature review. Recent studies that have evaluated the effectiveness of mentoring programs for new graduate nurses were examined in order to identify the strengths and gaps present within the existing literature.

Organizational Commitment

Organizational commitment, although not frequently selected as a predictor variable of turnover in nursing studies, according to the evidence, is a reliable variable (Wagner, 2007). Wagner set out to prove the reliability of organizational commitment by examining the findings of 23 turnover studies. He concluded that organizational commitment had a statistically significant predictive ability, with correlation values ranging from .06 to .53, in the nursing turnover studies that were examined. Wagner indicated that ideally, organizational commitment should have a direct relationship with turnover, while only five of the studies examined demonstrated this direct effect. He further suggested that the use of mediator variables such as intent to leave or remain, can make organizational commitment a highly desirable component when examining turnover in nursing studies.

Although organizational commitment is not commonly chosen as a predictor variable in nursing studies, Newhouse, Hoffman, Suflita, and Hairston (2007) examined the organizational commitment of new nurses participating in a one-year internship program at an academic hospital of an unspecified geographic location. The Organizational Commitment Questionnaire was utilized to collect data at baseline (*n*=73), 6 months (*n*=237), and 12 months (*n*=212). Researchers discovered that no significant difference in organizational commitment among participants was demonstrated over time. Mean scores ranged from 1 to 7 and were calculated as 5.09, 5.08, and 5.15 at baseline, 6, and 12 months respectively.

Cho, Laschinger, and Wong (2006) examined workplace empowerment, work engagement, and organizational commitment in 496 randomly selected new graduate

nurses working in acute care hospitals in Ontario. The Affective Commitment Scale, a subscale of the Organizational Commitment Questionnaire, was utilized by researchers as a measurement of organizational commitment. Researchers discovered that emotional exhaustion, as measured by the Maslach Burnout Inventory (General Survey), demonstrated a direct negative effect on the organizational commitment reported by new graduates (β =-.13). Researchers also determined that access to support (r=.49, p<.01) and formal power (r=.48, p<.01) were highly correlated with organizational commitment.

Yang and Chang's (2007) study aimed to examine the emotional labour, job satisfaction, and organizational commitment among 295 nurses of all ages and levels of experience working at a teaching hospital in Taiwan. The researchers utilized a survey methodology that included the Minnesota Satisfaction Questionnaire and the Organizational Commitment Questionnaire to measure job satisfaction and organizational commitment amongst participants. Their findings indicated that job satisfaction was positively correlated with organizational commitment (β_{11} = 76, t=5.26).

Propensity to Leave

Few studies have examined the propensity to leave of new graduate nurses participating in mentoring programs. Of these studies, Newhouse, Hoffman, Suflita, and Hairston's (2007) research looked at the anticipated turnover of new nurse graduates who completed a one-year internship program. The researchers did not specify the geographic location of the hospital in which the study took place. The Anticipated Turnover Scale was utilized by researchers in order to collect data at baseline (n=73), 6 months (n=237), and 12 months of employment (n=212). The Anticipated Turnover Scale consists of a 12-item, 7-point Likert scale, with responses ranging from agree strongly (1) to disagree

strongly (7). Results indicated that nurse interns were more likely to consider leaving their positions at baseline than at 6 months of employment (p=.009). Mean scores over time were 3.60, 3.19, and 3.38 at baseline, 6, and 12 months respectively, with lower scores being more favourable.

Scott, Engelke, and Swanson (2008) also examined intent to leave in 329 new graduate nurses working in various setting in North Carolina. They discovered that the new nurses' intent to leave their current jobs was predicted by job and career satisfaction. New nurses who expressed the intent to leave their current positions in the next three years were 2.2 and 2.9 times more likely to be dissatisfied with their job and the career of nursing.

The remainder of the studies addressed, although not specific to new graduate nurses, were included within the literature review due to the relevance of their findings. Of these studies, Tourangeau and Cranley's (2006) research examined the intent to remain employed in 8,456 registered and practical nurses of all ages from 75 Ontario hospitals by utilizing the Ontario Nurse Survey. Their results demonstrated that number of years employed within the hospital (p<.001) and the level of teamwork (p=.015), were statistically significant predictors of intent to remain employed. Level of teamwork was included as an indicator for group cohesion and collaboration and was measured by rating a single statement pertaining to teamwork on a 4-point Likert scale. Overall job satisfaction (p<.001), as measured by the McClosky-Mueller Satisfaction Scale, age (p<.001), and full time employment (p<.001) were also statistically significant predictors of intent to remain employed.

In a non-randomized study performed by Nogueras (2006) in the United States, the occupational commitment and intent to leave of 908 nurses of all ages was measured and analyzed. The Occupational Commitment Survey 2000 and the Measure of Career Change Cognition Survey were utilized to collect data from the study's participants. Nogueras' findings indicated that higher levels of occupational commitment were associated with lower levels of intent to leave the nursing profession (r=-.31, p<.01). Results also indicated that increased age was associated with higher levels of occupational commitment (r=-.25, p<.01). Overall, Nogueras concluded that occupational commitment is a predictor of intent to leave the nursing profession.

Sourdif's (2004) research aimed to examine the predictors of nurses' intent to stay within a Montreal university health center. A total of 108 nurses of all ages completed the Nurses' Intent to Stay Questionnaire as a means of data collection. Results demonstrated that nurses with a diploma had higher levels of intent to stay in comparison to baccalaureate prepared nurses (p=.03). Findings also indicated that the effect of satisfaction at work accounted for 22.2% of the variance of intent to stay (p<.01). Likewise, satisfaction with administration explained 21.5% of the variance of intent to stay (p<.01).

Job Satisfaction

Several recent studies have examined job satisfaction among new graduate nurses but few studies have evaluated the impact of mentoring or internship programs on job satisfaction. Aiken et al. (2001) surveyed all ages of nurses in five countries to obtain information on organizational climate, nurse staffing, and nurse and patient outcomes.

Researchers developed a core nurse questionnaire, which was completed by a total of

17,450 nurses from Canada. Results indicated that 32.9% of respondents were dissatisfied with their present job, overall 16.6% planned on leaving their current job in the next year, and 29.4% of respondents under the age of 30 years planned on leaving their current positions within the next year. Of the respondents from Canada, only 35.2% indicated that there are enough Registered Nurses to provide high-quality care within their institutions and only 42.5% indicated that there are adequate support services in place.

Roberts, Jones, and Lynn (2004) examined the job satisfaction of new graduate nurses working in various outpatient and inpatient specialty areas in the southeastern United States, by utilizing the McCloskey-Mueller Satisfaction Scale (MMSS). Their results, obtained from 123 new graduate respondents, revealed that nurses who intended to stay in their current positions were significantly more satisfied with 7 of the 8 dimensions measured by the MMSS, in comparison to those who intended to leave. Graduates employed in the pediatric setting were found to be significantly more satisfied than those working in the medical-surgical setting with regards to coworkers, interactions, praise, recognition, control and responsibility (Roberts et al.).

Halfer and Graf's (2006) study aimed to examine the perceptions of new graduate nurses regarding their work experiences. They designed the Halfer-Graf Job/Work Satisfaction Survey that consisted of 21 Likert-scale and four open-ended questions. They collected data from new graduate nurses at 3, 6, 12, and 18 months of employment. Distribution of the surveys yielded a convenience sample of 84 new graduate nurses employed at a tertiary care children's hospital in the United States, in the specialty areas of pediatric and neonatal intensive care, the emergency department, the operating room.

and on the resource team. Researchers discovered that satisfaction increased as novice nurses mastered the stressful areas of work organization and clinical tasks. The following variables demonstrated dissatisfaction according to mean scores: participation in solving unit issues (6 months), staff schedule (6 and 12 months), days and hours scheduled (6 and 12 months), and participation in programs for professional development (3, 6, and 12 months). The qualitative comments made by participants in the first 3 to 6 months reflected the focus on mastering tasks and getting the job done. At 12 months of employment, feeling satisfied with job competence, professional respect, access to information, and becoming part of the team were seen in several written comments. Dissatisfaction with scheduling was evident in qualitative remarks made at 6 and 12 months but resolved by 18 months of employment. Upon completion of the study, a 20% turnover was demonstrated within the sample of new graduates that were examined. Halfer and Graf indicate that organizations can positively influence nurse turnover by targeting and addressing the area of job satisfaction.

Casey, Fink, Krugman, and Propst (2004) surveyed nurses employed at six

Denver acute care hospitals in order to identify the stresses and challenges experienced by new graduates. The Casey-Fink Graduate Nurse Experience Survey was developed and piloted by the researchers in order to examine many aspects of the new graduate's experiences including 9 items regarding the dimensions of job satisfaction. The surveys were distributed to 270 participants at baseline, 3 months, 6 months, and 12 months.

Researchers determined that respondents became less satisfied with their jobs as they accumulated experience in the nursing role. Participants from the academic teaching hospital reported significantly higher levels of job satisfaction than respondents from

non-teaching sites, though no specifics were provided. Of the new graduates examined, 40% perceived that they lacked opportunities for future career development within their employment settings.

Winter-Collins and McDaniel's (2000) study examined the relationship between sense of belonging and new graduate nurse job satisfaction by administering a survey to 250 randomly selected new graduate nurses from Indiana. The survey utilized consisted of the McCloskey-Mueller Satisfaction Scale and the Hagerty-Patusky Sense of Belonging Instrument. Of the data collected from 95 respondents, researchers discovered that a strong relationship exists between sense of belonging and total job satisfaction of the new graduate nurse (r=.40, p<.001). The home healthcare setting demonstrated the highest levels of sense of belonging and total job satisfaction. Total job satisfaction of participants, measured on a 5-point Likert scale, ranged from 1.9 to 4.5 with a mean of 3.5. The results demonstrated that new graduate nurses were most satisfied with their coworkers (M=4.0) and least satisfied with the professional opportunities available for advancement (M=2.9). Winter-Collins and McDaniel indicated that employers who invest in their nurses by means of staff development, orientation programs, and an improved work environment will be more cost effective and lead to a valuable savings of healthcare dollars.

In a recent study, Scott, Engelke, and Swanson (2008) aimed to examine the transition of the new graduate nurse. Their study looked at the influence of several variables including orientation, continuing education, and staffing shortage on the satisfaction and intent to leave their jobs, and intent to leave the profession of a group new graduate nurses. A sample of 329 new graduate nurses, with experience ranging

employed and newly licensed by the North Carolina Board of Nursing. A survey instrument, that included seven questions regarding job and career satisfaction, was developed by researchers to gather data from new graduate nurses. Their results indicated that 54.1% of new nurses surveyed were dissatisfied with their current job and 55.0% had already left their first place of employment. Of the nurses surveyed, 58.7% indicated that the orientation they received had not completely met their needs. Job satisfaction and career satisfaction were demonstrated as predictors of participants' intent to leave their current position. New nurses who expressed the intent to leave their current positions in the next three years were 2.2 and 2.9 times more likely to be dissatisfied with their job and the career of nursing.

Altier and Krsek (2006, p.70) indicate that "administrators need to recognize the importance of understanding the issues of recruitment and retention and how these affect the new graduate nurse" In an era of nursing shortage, residency programs are considered an important feature in attracting and retaining the much needed new graduate nurse. Altier and Krsek's study examined the effects of a one-year residency program on the job satisfaction and retention rates of new graduate nurses. Researchers utilized the McCloskey-Mueller Satisfaction Scale to collect data on 316 participants, from six academic medical centers across the United States, at baseline and upon completion of a one-year residency program. Results indicated that satisfaction with praise (p=.001) and satisfaction with professional opportunities (p=.007) demonstrated a significant decrease in score over time. The overall scores for eight domains of job satisfaction displayed consistency throughout the first year of employment. A high retention rate of 87% was

demonstrated upon completion of the one-year program. Reasons for turnover included illness (n=5), relocation (n=10), dissatisfaction (n=11), and no explanation (n=5).

Turnover of New Graduates

According to O'Brien-Pallas et al. (2006), "turnover is considered dysfunctional when it involves the unavoidable separation of nursing staff that the organization prefers to retain, and when it occurs at high rates, contributing to reduced continuity of care, reduced productivity, and increased risk" (p. 170). Bowles and Candela (2005) examined turnover and the first job experiences of recent Registered Nurse graduates by developing and mailing The Survey of Nurses' Perceptions of First Job Experience to 3,077 nurses licensed in the state of Nevada who graduated within the previous five years. Of the 352 respondents, 30% reported leaving their first job within one year and 57% left by two years. The most frequently reported reasons for leaving included: patient care issues (26%), work environment (22%), location or nursing area move (22%), and employment factors (21%). Issues related to patient care included reports of stress associated with the acuity of patients, high nurse-to-patient ratios, and feelings of unsafe patient care. Reasons for leaving relating to the work environment included management issues, lack of support and guidance, and feelings regarding high levels of personal responsibility. Employment factors cited as reasons for leaving included salary, schedule, and benefits. Turnover and Mentoring Programs

Numerous studies have examined the impact of mentoring programs on the retention of new graduate nurses. Beecroft, Kunzman, and Krozek (2001) looked at the outcomes of a one-year nurse internship pilot program that was implemented within a United States hospital. The internship program consisted of approximately 716 hours of

clinical experience with a one-on-one preceptor, a mentor who sponsored the new nurse into the profession, debriefing sessions to discuss difficulties encountered during the program, and an average of 224.5 classroom hours that included hands-on skills training. The experimental group utilized for the purpose of this study consisted of 50 new graduate nurses, and the control group was comprised of 28 new nurses. Beecroft et al. concluded that turnover rates for nurse interns were 22% lower in comparison to the control group. Researchers also discovered that after six months of employment, nurses participating in the internship program demonstrated a lower probability of voluntary termination in comparison to those in the control group.

Almada, Carafoli, Flattery, French, and McNamara's (2004) study examined the effectiveness of the Vermont Nurse Intern Project (VNIP) that was implemented within a community hospital in Massachusetts. The program, in which 40 new graduate nurses participated, consisted of one week of classroom training, two weeks of rotation into other departments, and eight weeks of mentoring in which the new nurse and the preceptor worked together in a "married state" for the entire orientation (Almada et. al, p.269). Results from the study demonstrated an increase in retention from 60% to 89% and a 9.5% decrease in vacancy rates.

Marcum and West (2004) looked at the outcomes of a 13-week structured progressive orientation program and discovered a 17% decrease in turnover rates among new graduates employed within an acute care American hospital. Similarly, a study evaluating the effect of the one-year National Post-Baccalaureate Graduate Nurse Residency Program implemented within six academic hospitals within the United States, demonstrated improved retention rates resulting in an overall low turnover rate of 8%

(Krugman et al., 2006). Floyd, Kretschmann, and Young's (2005) study regarding a 4-month structured program for orientation of new graduate nurses employed within a semi-rural hospital in Southern Oregon, revealed a high 1-year retention rate of 94.5%.

Halfer's (2007) study focused on a magnetic strategy for new graduate nurses working in a children's hospital within Chicago. The study evaluated the effectiveness of a multi-faceted orientation program, lasting between 4 and 9 months depending on the units of hire. Results demonstrated a 28% increase in recruitment and a 17.2% decrease in turnover (Halfer). Similarly, Zucker et al. (2006) concluded that as a result of an 18-month Louisville hospital mentoring program for new graduate nurses, retention rates demonstrated an increase of 16% and turnover rates decreased to a low of 10.6%. Hurst and Koplin-Baucum's (2003) study also resulted in a 3.1% decrease in nursing turnover as a result of an 18-month mentoring program that was implemented within a Phoenix medical center.

Few studies examined the retention rates of new graduate nurses throughout the time period following the completion of mentoring programs. Newhouse, Hoffman, Suflita, and Hairston (2007) examined retention rates of new graduate nurses at 12, 18, and 24 months following the completion of a 1-year internship program. The study took place at an academic hospital whose geographical location was not specified by the researchers. When compared to the control group, new graduate nurses participating in the internship program demonstrated higher retention rates at 12 months but retention rates were similar for both groups at 18 and 24 months of employment (Newhouse et al.).

Beecroft, Dorey, and Wenten (2008) also examined a measure of retention in the months following the completion of a residency program. They looked at turnover intent

in 889 new graduate nurses, employed at six American pediatric hospitals, in the 18 months of employment following the completion of a 22-week residency program. Data collected over a seven-year time period was utilized for the analyses performed. The researcher's findings indicated that younger respondents (p<.01), participants with a higher level of education (p=.026), and those who did not receive their first choice of nursing unit (p=.015) were more likely to indicate turnover intent. Results also demonstrated that participants who exhibited turnover intent rated themselves lower on skills and self-confidence (p=.021).

Mentoring Relationships

According to Hurst and Koplin-Baucum (2003), the concept of mentoring is not new to the nursing profession, as Florence Nightingale herself was known to have many mentors as well as being a mentor to others. According to Greene and Puetzer (2002), a *mentor* is an experienced and competent nurse who serves as a resource and role model for the newly hired nurse. On the other hand a *mentee* is the newly hired nurse who participates in a mentoring or orientation program (Greene & Puetzer). In today's healthcare climate, which is characterized by a volatile supply and increasing demands for nurses, the mentorship model is being adopted to attract new nurses into the systems, and to retain and support them in the delivery of quality patient care (Greene & Puetzer). Mentoring relationships are instrumental in the complex profession of nursing as they can provide the support, guidance, and encouragement required by the newest members of the discipline as they gain the knowledge, skills, and confidence required to practice successfully (Thomka, 2001). Although mentoring relationships can provide excellent support and guidance, the achievement of safe and competent practice remains the

ultimate goal of mentoring (Greene & Puetzer). According to Thomka, in order to achieve the outcomes that reflect quality patient care, positive and appropriate mentoring strategies need to be developed for the orientation of new nursing graduates. Halfer and Graf (2006) indicate that mentoring by leaders, colleagues, and preceptors may assist new nurses in adjusting to the demands of the nursing profession during the first critical 18 months of a new nursing career. Upon implementing a structured orientation program, the need is recognized for the development and maintenance of relationships between new and experiences nurses (Greene & Puetzer).

Perceptions of the Mentoring Experience

The following studies have addressed the perceptions of new graduates in regards to the mentoring programs in which they have participated. Almada, Carafoli, Flattery, French, and McNamara (2004) examined the effectiveness of an 8-week Vermont Nurse Internship Program implemented within community hospital in Massachusetts in which 40 new graduate nurses participated. When asked to state the three most important aspects the internship program, new graduate nurses listed length of orientation, matching of preceptor with preceptee, and the availability of professional development supportive staff as most vital.

Smith and Chalker (2005) looked at new graduate nurses' perceptions of preceptor continuity in relation to clinical performance, role transition, satisfaction, and retention. Of the 93 participants employed within a United States military teaching hospital, 61% agreed they would have been more satisfied with the orientation program if they had consistent preceptors in each clinical rotation. No significant difference in

perception of clinical performance, role transition, satisfaction, and retention was demonstrated between the nurses who had an assigned preceptor and those who did not.

Oermann and Garvin (2002) examined the stresses and challenges experienced by 46 new graduate nurses, employed at three hospitals located in the Midwest region of the United States, during their orientation period. Researchers utilized and distributed the Clinical Stress Questionnaire, which asks new graduate nurses to rate their degree of stress and challenge in clinical practice and the extent to which they experience 20 different emotions while learning to care for patients. Responses were rated by participants on a Likert scale from zero (no stress) to four (a great deal). Results indicated that the stresses reported most frequently in rank order were; not feeling confident or competent, making mistakes due to increased workload and responsibilities. and encountering new situations, surroundings, and procedures. Also, new graduates reported applying knowledge learned in school to their patients' care and acquiring new skills as their greatest challenges. Futhermore, new graduates reported feeling frequent anxiety regarding caring for patients and encountering new clinical experiences (M=2.46), being overwhelmed by their assignments (M=2.32), and being apprehensive about caring for patients (M=2.07).

Mentoring Programs

Several studies have examined many outcomes resulting from the implementation of mentoring, internship, and orientation programs. Of theses studies, Blanzola, Lindeman, and King's (2004) research evaluated the effectiveness of a 16-week nurse internship program at a U.S. Navy hospital. The nurse internship program consisted of 100 hours per month that were allocated to clinical practice with one-to-one preceptors

and 20 hours devoted to nursing didactic and theory. A quasi-experimental design was utilized in which a control group, consisting of 10 new graduates, was measured against an experimental group of 40 nurse interns. A self-evaluation instrument, consisting of 26 items rated on a 5-point Likert scale, was distributed to participants as a means of rating performance on organizational attributes. Peers and first-line managers utilized a similar instrument to rate the performance of the nurse interns. Data was collected from participants at baseline, post-internship, and at six months post-assignment to their respective units. Findings indicated that the experimental group had significantly higher mean self and evaluators' scores on core competencies in comparison to the control group. Qualitative data indicated that nurse interns had enhanced levels of confidence as they saw themselves as integral team players and were prepared to take on more complex assignments, heavier patient loads, and charge nurse responsibilities. Control group nurses' qualitative remarks reflected the need for seeking basic knowledge and the desire for ongoing support from senior clinical nurses.

Krugman et al. (2006) examined the outcomes of one-year nurse residency program by utilizing the McCloskey Mueller Satisfaction Scale, the Gerber Control Over Practice Scale, the Casey-Fink Graduate Nurse Experience Survey, and the Investigator Developed Residency Evaluation Form. Of the six American academic hospitals included within the study, overall rates of satisfaction upon completion of the residency program were high at five sites, but researchers did not elaborate on these findings. Stress, as reported by the Casey-Fink Graduate Nurse Experience Survey, was reported as highest at baseline and demonstrated a decrease over time. Researchers concluded that transition into practice is not completed until 9 to 12 months after hire. Of this particular

transition, stress, self-perceived competency, organization of care, and all safety issues in the delivery of patient care are of most importance.

Marcum and West's (2004) study evaluated a 13-week structured orientation program for 20 new graduate nurses hired within a United States acute-care medical unit. Researchers utilized the following comprehensive evaluation tools: the Performance Based Development System (PBDS), the American Society for Training and Development Evaluation Tool (ASTD), and the Professional Judgment Rating Form – Novice/Internship Level. Baseline data was collected along with weekly preceptor evaluations as well as weekly or biweekly meetings with the clinical nurse specialist or educator. Researchers discovered that new graduates demonstrated high levels of critical thinking, as measured by the PBDS assessment tool, following completion of the orientation program in comparison to baseline data. The evaluation of program training and effectiveness, as measured by the ASTD tool, indicated a strong agreement towards program effectiveness. On a scale of 1 to 5, the mean scores for overall program effectiveness were 4.46. The Professional Judgment Rating Form was utilized to evaluate critical thinking skills and revealed that 83.3% of the new graduate nurses examined at one-year post-program completion demonstrated very strong critical thinking abilities. The remaining participants were classified in the second highest category of critical thinking. Researchers also discovered that retention rates of 89% were observed for new graduate nurses at 18 months of employment. This demonstrated rate of retention is significantly higher than the rate found within the medical unit for which the new graduates were hired, which is a low of 38%.

Collins and Thomas (2005) examined a Delaware hospital's 19-week Step-down Nurse Internship Program's (SNIP) development, components, and evaluation strategies. Thirteen new graduates and experienced nurses participated in the program, which consisted of 123 hours of a critical care curriculum component and 637 hours of clinical time on various step-down units. Upon completion of the program, nurse interns rated clinical experiences related to increasing knowledge base, diversity of clinical rotations, and amount of didactic information provided as very satisfying. Areas indicated as requiring improvement included consistency in precepting and program length.

Retention rates were utilized by researchers as an evaluation measure, but they are not reliable since nurse interns signed a two-year contract with the facility prior to starting the internship program.

Herdrich and Lindsay (2006) define a Nurse Residency Program (NRP) as a "joint partnership between academia and practice that is a learner focused, postgraduate experience designed to support the development of competency in nursing practice" (p.55). Herdrich and Lindsay evaluated medical-surgical and cardiac-critical care NRPs implemented within a Wisconsin hospital, varying in length from 6 months to 1 year, with a total of 14 participants. Each program consisted of reflective learning sessions, which lasted a total of 8 hours every month. Although the sample size was small, researchers discovered that critical thinking scores, as measured by the Critical Thinking Inventory, demonstrated a 41% increase from 135 to 190 points at 12 months of employment. Four cardiac/critical care interns were administered a Basic Knowledge Assessment Test and showed an average improvement of 12% upon completion of the NRP High retention rates of 90% were observed for participants at 12 to 24 months of

employment. Although Herdrich and Lindsay's study consisted of a small sample size, their findings demonstrated the importance its use as a pilot for a larger scaled study.

Newhouse, Hoffman, Suflita, and Hairston (2007) examined organizational commitment, sense of belonging, and anticipated turnover in new nurse graduates who completed a one-year internship program at an academic hospital of an unspecified geographic location. The internship program consisted of an intensive socialization and educational experience to support new graduates in their development and transition into practice. Researchers utilized the Organizational Commitment Questionnaire, the Modified Hagerty Patusky Sense of Belonging Instrument, and the Anticipated Turnover Scale to collect data at baseline (n=73), 6 months (n=237), and 12 months of employment (n=212). Results indicated that nurse interns were more likely to consider leaving their positions at baseline than at 6 months of employment (p=.01). No significant difference in organizational commitment was demonstrated over time. Researchers also discovered that nurse interns have a lower antecedent sense of belonging at 6 months in comparison to baseline (p=.03) and 12 months (p=.04) measurements. Lastly, new graduates participating in the internship program demonstrated higher retention rates at 12 months in comparison to those nurses who did not participate in the program (p=.01). Retention rates were similar for both groups at 18 and 24 months.

Rosenfeld, Smith, Iervolino, and Bowar-Ferres (2004) performed a follow-up survey to examine the strengths and weaknesses of a one-year nurse residency program implemented at the New York University Hospitals Center. Researchers achieved this by designing and mailing a survey, consisting of open and closed-ended questions, to all nurse residents who participated in the program between the years of 1996 to 2001. The

key components of the nurse residency program included clinical practice with mentors, clinical education days, and course offerings that were unit specific. When asked to select the most valuable component of the nurse residency program, the most common response in 47.5% of the 112 participants was "experience as independent nurse" (p.192). Recognition was most commonly selected as the least valuable component of the program (34.5%). The open-ended questions included in the surveys yielded two common themes: the role of the mentor and the inconsistency of clinical education days. Respondents indicated the need for increased preceptor continuity and education days that are uninterrupted by staffing issues that arise on the units.

Hayes and Scott (2007) explored an innovative new graduate mentoring program implemented in a Georgian hospital that consisted of five weeks of one-on-one support from a university faculty member whom participants knew from their undergraduate nursing program. Weekly one-hour seminars were held in which participants could share experiences, validate decisions, and acquire additional knowledge. Upon being employed for one year, new graduates demonstrated retentions rates of 100%. Retention rates remained at this level following two years of employment.

Smith (2008) performed the single Canadian study that was found within the literature, regarding the implementation and evaluation of an orientation program. Smith's study examined the outcomes of a mentoring program that was implemented in an Ottawa hospital. The Ottawa hospital utilized the Ontario Ministry of Health and Long-Term Care Nursing Enhancement Funds to develop and implement a nursing internship program that was offered in the medical/surgical and mental health units. The program consisted of 12-weeks with a preceptor, which included orientation for both the

preceptor and the intern, as well as education days provided off the unit. Although the sample size was not provided by the researcher, results indicated low turnover rates of 6% and 10% at one and two years of employment respectively. Prior to implementation of the internship program a turnover rate of 23% was present amongst new graduate nurses after two years of employment, indicating a 13% decrease in two-year turnover rates. Although measures were not specified, Smith indicated that upon completion of the internship program, new nurses reported increased job satisfaction, confidence, sense of belonging, critical thinking, time-management, and organizational skills, as well as reduced stress.

Cost-Effectiveness

Mentoring and internship programs are increasing in popularity, as they tend to result in increased retention leading to a savings of valuable health dollars. The following studies addressed the cost-effectiveness and cost-savings that can result from the implementation of such programs. Hall and Marshall (2006) evaluated a 16-week critical care internship program while utilizing a Staff Development Program Effectiveness Evaluation Tool (SDPEE). The program encompassed a total of 16 new graduates nurses employed within a Pennsylvania hospital in the intensive care unit, telemetry unit, and emergency department. The SPDEE tool was developed with the goal of providing a concise, detailed evaluation of the program design, financial cost, and clinical outcomes to ensure appropriate utilization of resources. Results indicated that the total cost of the 16-week internship program was \$23.08 per hour per intern. This in turn was given a cost value rating of 4 on a scale from 1 to 5. The program's overall effectiveness was also assessed by utilizing the following measures: written

examinations, daily logs, weekly evaluations, and direct observation by the clinical nurse specialist. The program's effectiveness was assigned a value of 5 on scale from 1 to 5.

The resulting cost value/program effectiveness ratio was 4:5, indicating a good use of resources and excellent clinical outcomes.

Zucker et al. (2006) examined the effectiveness of an 18-month mentoring program that was implemented as a means of addressing high rates of turnover within a Louisville hospital. Researchers indicated that for every nurse retained, a cost savings of \$40,000, or more for nurses in specialty areas, was demonstrated.

Likewise, Pine and Tart (2007) evaluated the return on investment (ROI) of a Methodist Hospital one-year nurse residency program. According to Pine and Tart, ROI compares the cost in dollars of the residency program to the net benefits resulting from the program. Researchers calculated the ROI by comparing the traditional method of recruiting new graduates to the hospital and having a resultant 50% turnover rate, with the new residency program and a low turnover rate of 13%. The resultant ROI was 8.85 with a cost savings of \$823,680, as calculated for 48 residents.

Summary

Upon reviewing and appraising the literature, it is evident that several gaps are present. Few studies have examined the impact of mentoring on the job satisfaction, organizational commitment, and propensity to leave reported by new graduate nurses. Most studies addressed in the literature review pertaining to new graduate nurses were performed in the United States. A single article was found within the current literature that examined a nurse internship program that was implemented in an Ottawa hospital (Smith, 2008). It is therefore evident that further Canadian research regarding the

effectiveness of mentoring programs is required, especially in this era where the recruitment and retention of the new graduate nurse is key.

CHAPTER III

METHOD

Design

A survey methodology was utilized to collect data from newly hired nurses in order to elicit information regarding organizational commitment, propensity to leave, and job satisfaction. This study is part of a separate repeated measures longitudinal 3-year study that aims to collect data from newly hired nurses at 3, 9, 18 months, and 3 years of employment. This study encompassed data collection from newly hired nurses after being employed for approximately 9 months. The resulting data was analyzed and compared with the data retrieved at the 3-month data collection period.

Sample and Setting

The surveys were distributed to all nurses who were new graduates or new hires at an acute care hospital, and began employment within the months of May, June, July, and August of 2007 New graduate nurses were defined as nurses who completed an undergraduate nursing program in the year 2007. New hires were defined as nurses who possessed greater than one year of nursing experience prior to being hired. A total of 55 surveys were distributed, 45 to new graduate nurses and 10 to new hires. The surveys were distributed to nurses after being employed for approximately 9 months and were similar to those distributed at the 3-month data collection phase.

All nurses who participated in the survey were provided with an orientation program based on the principles of the VNIP A total of 120 nurse preceptors were provided with two, eight-hour workshops regarding the principles and processes of the VNIP The following topics were addressed in the mentor workshops: accountability and

decision making, effective communication and feedback skills, experiences in mentoring, assessment and critical thinking, novice to expert, and competency development issues. The length of orientation provided to all newly hired nurses varied according to previous experience, unit of hire, and availability of Nursing Graduate Guarantee positions. The Ministry of Health and Long-Term Care (2008) introduced Ontario's Nursing Graduate Guarantee in February of 2007 The initiative provides new nurses with a guaranteed 7.5-month work placement with a goal of transitioning into a full-time permanent position upon completion of the term (Ministry of Health and Long-Term Care).

Protection of Human Subjects

Ethical approval (Appendix A) was sought and obtained from the University of Windsor and the participating acute care hospital (Appendix B) prior to data collection. A letter of information (Appendix C) was included within the survey packages and addressed the study's purpose, methodology, potential risks and discomforts, and potential benefits to subjects and society. A potential discomfort that may result from the study includes the possibility that participants may be concerned or worried that the information they provide in their completed surveys may be disclosed to their respective managers or peers. Subjects were reassured in the letter of information that all individual survey responses would be anonymous. Anonymity was achieved by ensuring that no identifying information is included in the survey questionnaires. Subjects were asked to assign a code to their questionnaires, which consists of their mother's first and last initial, and year and month of birth. Coding the questionnaires allowed the primary investigator of the longitudinal study to track participants' responses over time in a confidential

manner. To further ensure confidentiality, completed surveys were kept in a locked drawer, accessible only to the primary researchers.

Data Collection Procedures

Dillman's (1978) recommendations for maximizing survey response were followed and an e-mail informing eligible participants of the upcoming 9-month data collection and inviting them to participate was formulated (Appendix D). The hospital's Human Resources department sent the e-mail to potential participants one week prior to data collection. Survey packages were also distributed by Human Resources to the 55 eligible participants and included: a letter of information, the Organizational Commitment Questionnaire, the Propensity to Leave Questionnaire, the McCloskey/Mueller Satisfaction Survey, a demographic questionnaire and two openended questions (Appendix E). A self-addressed envelope was included inside the survey packages and participants were asked to enclose their completed questionnaires and deposit the envelope in the nearest Canada Post mailbox. An e-mail with a link to the online form of the questionnaire was formulated by the researcher and was sent to potential participants by the hospital's Human Resources department at the time of data collection (Appendix F). The electronic version of the survey provided subjects with the flexibility of completing the questionnaire on-line and in the privacy of their own homes.

A reminder e-mail was sent to potential participants two weeks following the distribution of the surveys, as a means thanking those who completed their questionnaires and encouraging others to participate (Appendix G). A final reminder e-mail notice was also sent after an additional two weeks had passed, in order to remind all potential participants to return their completed questionnaires (Appendix H). As a means of

thanking new graduates and new hires for their participation, three dollars in Tim Horton's gift certificates were included within the survey packages.

Variables

The independent variable, length of orientation, is defined as the number of orientation days provided to a new employee prior to expecting the new hire to function independently with the full assumption of the responsibilities of a given role. The following dependent variables were utilized for the purpose of this study: organizational commitment, propensity to leave, and job satisfaction. Organizational commitment is defined by Mowday, Steers, and Porter (1979) as the "relative strength of an individual's identification with and involvement in a particular organization" (p. 226). Organizational commitment "can be characterized by at least three related factors: (1) a strong belief in acceptance of the organization's goals and values; (2) a willingness to exert considerable effort on behalf of the organization; and (3) a strong desire to maintain membership in the organization" (Mowday, Steers, & Porter, p.226). For the purpose of this study, propensity to leave has been defined as the likelihood that one would leave their current position of employment (Cameron, Horsburgh, & Armstrong-Stassen, 1994). Job satisfaction is defined as the degree of positive affective orientation towards one's employment (Price & Mueller, 1986).

Instrumentation

The measures that were used for this study included: (a) organizational commitment (b) propensity to leave, and (c) job satisfaction. The survey also included a small section in which demographic data was collected from participants.

Organizational commitment was measured with the *Organizational Commitment Questionnaire* (Appendix E, Part 1). The questionnaire developed by Mowday, Steers, and Porter (1979) consists of 15-items measured on a 7-point Likert scale. Responses range from "strongly disagree", scored as a 1, to "strongly agree", which is given a score of 7. When questionnaires are completed, results are summed and divided by 15 in order to arrive at a summary indicator of employee commitment (Mowday et al.). The negatively phrased items are reversed and then scored in order to decrease response bias. In previous research, the reliability coefficients for the Organizational Commitment Questionnaire ranged from .82 to .93 with a median Cronbach alpha of 0.90 (Mowday et al.). Mowday et al. established the convergent validity of the questionnaire by correlating the scale with the Sources of Organizational Attachment Questionnaire. Correlation coefficients ranged from .63 to 74, with a median of .70, indicating consistent evidence of convergent validity (Mowday et al.).

The propensity to leave of new graduates and newly hired nurses was measured by the *Propensity to Leave Questionnaire* (Appendix E, Part 2) (Lyons, 1971). This instrument consists of three items that are rated on a 5-point Likert scale. Three questions are posed to respondents with five alternative answers, with an answer of 1 indicating a strong desire to stay and an answer of 5 suggesting a high propensity to leave. Internal consistency of this scale is supported by a previously reported Cronbach's alpha of .85 (Cameron, Horsburgh, & Armstrong-Stassen, 1994).

In order to measure the perceived job satisfaction of newly hired nurses, the McCloskey Mueller Satisfaction Scale was utilized (Appendix E, Part 4) (Mueller & McCloskey, 1990). The McCloskey/Mueller Satisfaction Scale is a 31-item questionnaire that was originally developed to rank rewards valued by nurses and encourage them to remain in their current jobs (Tourangeau, Hail, Doran, & Petch, 2006). The scale captures the following eight types of satisfaction: satisfaction with extrinsic rewards. scheduling, family/work balance, co-workers, interaction, professional opportunities, praise/recognition, and control/responsibility (Mueller & McCloskey). Respondents use a 5-point Likert scale to indicate satisfaction regarding certain aspects of their current job. A response of "very dissatisfied" is scored a 1 and a response of "very satisfied" is scored a 5. Previously reported item analysis revealed a reliability coefficient (Cronbach's alpha) of .89 (Mueller & McCloskey). Mueller and McCloskey also examined the criterion-related validity of their scale by comparing the MMSS to the following established job satisfaction instruments; Brayfield-Rothe's General Job Satisfaction Scale, and Hackman and Oldham's Job Diagnostic Survey. They reported several positive correlations ranging from .53 to .75, when subscales of the MMSS were compared with subscales of the two existing satisfaction instruments (Mueller & McCloskey).

Data Analysis Procedures

Version 16.0 of the Statistical Package for Social Science (SPSS) computer software was utilized in order to examine and analyze the study's data. The data were screened, basic descriptive statistics were performed, and data analyses were executed. Data screening procedures consisted of examining the data for missing entries, outliers, and normality in continuous variables. Descriptive statistics included generating general frequencies for the categorical variables included within the study. The means and standard deviations of the continuous variables were also produced.

The following addresses the methods of data analysis that were utilized in order to examine the research questions posed:

Research Question 1. Does organizational commitment, propensity to leave, and job satisfaction differ between 3 and 9 months of employment?

A repeated measures analysis of variance (RMANOVA) and an independent samples t-test were performed in order to determine if a significant difference exists between 3 and 9-month scores for each of the variables addressed in the research question.

Research Question 2. Does length of orientation impact retention, organizational commitment, propensity to leave, and job satisfaction?

A series of one-way analyses of variance (ANOVA) were executed in order to examine the impact of orientation length on the organizational commitment, propensity to leave, and job satisfaction scores of new graduate nurses who completed the survey at the 9-month data collection period.

Research Question 3. What is the relationship among organizational commitment, propensity to leave, job satisfaction, and turnover?

Bivariate correlations were executed on the data collected at the 9-month time period in order to determine if a relationship was present among organizational commitment, propensity to leave, and job satisfaction.

CHAPTER IV

RESULTS

Data Cleaning Procedures

Missing Data

Upon reviewing the surveys completed at the 9-month data collection period, it was discovered that the hard copies of the questionnaires were missing two items from the MMSS. Questions number seven and seventeen had been deleted from the questionnaires thus resulting in missing data from those participants who completed the hard copies of the survey. The on-line version of the survey did not include any missing questions. Also, upon reviewing the raw data collected at the 3-month evaluation period, it was discovered that question number seven of the MMSS was also missing from the survey.

Prior to the distribution of the surveys, a decision was made to remove question twenty from the MMSS. This question addressed satisfaction with opportunities to interact with faculty of the College of Nursing (Mueller & McCloskey, 1990). Since all new nurses graduated from a University, as the standards for education have changed, and some nurses might interpret this item as indicating interaction with members of the College of Nurses of Ontario. Therefore it was felt that this question was not applicable to the population being examined and would lead to inaccurate results. There were no other missing variables or cases that were found within the data set.

In order to account for the missing data from questions seven and seventeen of the MMSS, a method of mean substitution was utilized. According to Tabachnick and Fidell (1996), the mean is the best estimate about the value of a missing variable. The MMSS

consists of eight subscales of satisfaction. The mean of the subscale to which the missing question belonged, was calculated and imputed as the value for the missing item for each individual participant. Reliability analyses were performed on each subscale in order to ensure the reliability of the newly imputed data.

Outliers and Normality

The data set was reviewed carefully for the presence of outliers and none were found. In order to ensure that normality was present, all continuous variables within the data set were examined for skewness and kurtosis. There were no departures from normality that warranted the transformation of any of the variables that were examined.

Reliability Analyses

Reliability analyses were performed on the scales for organizational commitment, propensity to leave, and job satisfaction and the subscales for job satisfaction. Table 1 illustrates the results of these analyses. The measurement scales utilized to quantify organizational commitment, propensity to leave, and job satisfaction all exhibited very high reliability scores. The Cronbach's Alphas for the Organizational Commitment Questionnaire, the Propensity to Leave Questionnaire, and the McCloskey/Mueller Satisfaction Survey were .92, .91, and .92 respectively. The lowest reliability scores belonged to the subscales of the McCloskey/Mueller Satisfaction Survey The subscales for satisfaction with extrinsic rewards and satisfaction with co-workers exhibited Cronbach's Alphas of .43 and .22 respectively. These subscales were not utilized in the statistical analyses due to their low scores for reliability. The items from these subscales, taken separately, were included within the analyses performed.

Table 1

Internal Consistency Reliability of all Measures

Items	Cronbach's	M	SD
	Alpha		
15	.92	72.67	15.69
3	.91	5.76	2.77
30	.92	101.18	17.67
3	.43	10.86	1.96
6	.80	20.33	5.26
3	.61	9.24	1.86
2	.22	7.81	1.21
4	.82	15.70	2.62
3	.74	8.95	2.96
4	.67	12.76	3.50
5	.88	15.52	4.61
	3 30 3 6 3 2 4	15 .92 3 .91 30 .92 3 .43 6 .80 3 .61 2 .22 4 .82 3 .74 4 .67	15 .92 72.67 3 .91 5.76 30 .92 101.18 3 .43 10.86 6 .80 20.33 3 .61 9.24 2 .22 7.81 4 .82 15.70 3 .74 8.95 4 .67 12.76

Sample Characteristics

This study encompassed the 9-month data collection period, in which a total of 55 surveys were distributed, 45 to new graduate nurses and 10 to new hires. A total of 27 nurses participated in the study, for an overall response rate of 49.09%. Of the 27 respondents, 18.5% (n=5) completed the on-line version of the survey. A total of 21 respondents were new graduates and 6 were new hires. Only the data from new graduate nurses (n=21) was utilized for the purpose of this study. The data collected from experienced newly hired nurses (n=6) may have led to inaccurate results if included within the analysis, as findings would not solely reflected the views of new graduate nurses.

The data that was previously collected from new graduates and new hires after being employed for 3-months was obtained by distributing 65 surveys, 50 to new nurses and 15 to new hires. A total of 29 nurses participated, resulting in an overall response rate of 44.62%. Of those who participated, 22 were new graduates and 7 were new hires. A voluntary turnover of 5 new graduate nurses was exhibited between the 3 and 9-month data collection periods. This accounts for a 10% turnover over a 6-month time period.

Of the 21 new graduate nurses who participated in the study at the 9-month data collection period, one was male and 20 were females. The mean participant age was 24.19 (SD=2.27), with the youngest participant being 22 and the eldest being 31. In regards to marital status, 66.7% of participants report being single and 33.3% indicated being married or common-law. None of the new graduates surveyed reported having children. Respondents reported belonging to the following units of hire: Family Birthing Centre (n=6), Surgical (n=5), Medicine (n=3), Respiratory (n=1), Emergency Room

(n=1), Critical Care (ICU/CCU) (n=1), Float Pool (n=1), and Medical/Surgical (n=3). Among participants, 38% (n=8) reported having full-time employment status, whereas 62% (n=13) indicating working part-time. When asked if they would prefer an alternate employment status, 89.5% of respondents indicated that they would prefer full-time employment. Although 38% of new graduates indicated having a current full-time job, it was not specified if these positions were temporary or permanent. If some of these positions were temporary, this would account for such a large portion of respondents (89.5%) who seek permanent full-time employment status.

In regards to job satisfaction, according to the means of the items of the MMSS, respondents indicated being most satisfied with their salary and their nursing peers. Participants reported being least satisfied with their opportunity to work straight days and the childcare facilities available within their workplace. Also according to the mean scores, respondents reported being neither satisfied nor dissatisfied with several items including their vacation, benefits package, flexibility in scheduling, immediate supervisor, and the physicians whom they work with. The MMSS item means can be found in Table 2.

Table 2

Descriptive Statistics – MMSS Items

Item	<i>M</i>	<i>SD</i>
Salary	4.52	.51
Vacation	3.29	1.15
Benefits package	3.05	1.07
Hours that you work	3.62	1.20
Flexibility in scheduling your hours	3.48	1.37
Opportunity to work straight days	2.33	1.24
Opportunity for part time work	3.14	.71
Weekends off per month	3.81	1.25
Flexibility in scheduling your weekends off	3.38	1.24
Compensation for working weekends	3.71	1.19
Maternity leave time	3.71	.85
Child care facilities	2.38	.92
Your immediate supervisor	3.05	1.36
Your nursing peers	4.38	.81
The physicians you work with	3.43	.81
The delivery of care method used on your unit	3.81	.93
Opportunities for social contact at work	3.98	.63
Opportunities for social contact with your colleagues	4.00	.71

Item	M	SD
	2.00	04
Opportunities to interact professionally with other	3.90	.94
disciplines	2 (8	^-
Opportunities to belong to departmental and	3.67	.97
institutional committees		
Control over what goes on in your work setting	2.76	1.22
Opportunities for career advancement	2.95	1.24
Recognition for your work from supervisors	2.81	1.33
Recognition of your work from peers	3.95	1.12
Amount of encouragement and positive feedback	2.95	1.12
Opportunities to participate in nursing research	2.67	1.53
Opportunities to write and publish	2.62	1.07
Your amount of responsibility	3.71	.90
Your control over work conditions	3.14	1.11
Your participation in organizational decision making	2.95	1.11

^{*} Range: 1-5, 1=very dissatisfied, 5=very satisfied

Quantitative Data Analyses

Research Question #1

Does organizational commitment, propensity to leave, and job satisfaction differ between 3 and 9 months of employment?

A repeated measure analysis of variance (RMANOVA) was performed in order to compare the scores of new graduate nurses who completed the survey at both data collection periods. The data from a total of 12 subjects was included within the analysis. According to Hotelling's Trace (.01), a test of within-subjects effects, no significant difference was present between the variables that were measured after 3 and 9 months of employment, F(1,11)=.15, p=.70. Therefore, organizational commitment, propensity to leave, and job satisfaction remained constant over time. Table 3 depicts the mean scores for all measures included within the analysis.

Table 3

Descriptive Statistics: Three and Nine Month Measures (n=12)

Measure	Me	ean	Standard Deviation	
	3 months	9 months	3 months	9 months
Organizational Commitment	79.03	77.75	8.44	12.28
Propensity to Leave	4.75	4.75	1.76	1.82
Job Satisfaction	102.25	101.49	13.00	17.89

In order to conduct an analysis with greater statistical power, an independent samples t-test was performed and the group means of the 3 and 9-month scores for organizational commitment, propensity to leave, and job satisfaction were compared. All new graduate nurses who participated in the 3-month (n=22) and 9-month (n=21) data collection periods were included within the analysis. Results indicated that no significant difference exists between the 3 and 9-month scores for organizational commitment, propensity to leave, or job satisfaction. Table 4 illustrates the results of the independent samples t-test.

Table 4

Independent Samples T-test: Three and Nine Month Measures

M		SD		T	Sig.
3 months	9 months	3 months	9 months		(2-tailed)
79.00	72.67	11.89	15.69	1.50	.14
4.86	5.76	1.73	2.77	-1.28	.21
104.02	101.17	13.78	17.67	.59	.56
	79.00 4.86	79.00 72.67 4.86 5.76	79.00 72.67 11.89 4.86 5.76 1.73	79.00 72.67 11.89 15.69 4.86 5.76 1.73 2.77	79.00 72.67 11.89 15.69 1.50 4.86 5.76 1.73 2.77 -1.28

Research Question #2

Does length of orientation impact organizational commitment, propensity to leave, and job satisfaction?

For purposes of data analyses, length of orientation was re-coded in order to capture the responses of participants who chose "other", and indicated in writing their accurate orientation length. Responses were originally coded as a) new graduate initiative (7.5 months), b) 3 months, c) 3 weeks, and d) other. The variable was re-coded and assigned the following categories: a) <1 month, b) 1 to <3 months, c) 3 to <6 months, and d) \geq 6 months. The category of \geq 6 months consisted solely of the new nurses who participated in the New Graduate Guarantee and were given approximately 7.5 months of orientation.

A series of one-way analyses of variance (ANOVA) were executed in order to examine the impact of orientation length on the organizational commitment, propensity to leave, and job satisfaction scores of new graduate nurses (n=21). Table 5 illustrates the results of the ANOVAs. It was discovered that a significant difference existed between groups, as categorized by different orientation lengths, in regards to organizational commitment scores, F(3, 17)=4.16, p=.02. Post hoc analyses, which were performed by utilizing Tukey's HSD, revealed a significant difference on organizational commitment scores between groups who received <1 month (M=60.40, SD=12.46) and 3 to <6 months (M=97.00, SD=9.90) of orientation (p=.02). Table 6 includes the means and descriptive statistics for all measures included within these analyses. These results indicate that participants who received 3 to <6months of orientation were significantly more

committed to the organizations to which they belong when compared to participants who received <1 month of orientation.

The ANOVA results also revealed that a significant difference existed between groups, as categorized by length of orientation, in regards to job satisfaction scores, F(3,17)=3.90, p=.03. Tukey's HSD yielded results that indicated a significant difference on job satisfaction scores between groups who received <1 month (M=88.53, SD=12.69) and 3 to <6 months (M=128.17, SD=13.90) of orientation (p=.02). These findings indicate that participants who received 3 to <6 months of orientation were significantly more satisfied with their jobs than those who received <1 month of orientation.

According to the ANOVA results, no significant difference existed between groups, as categorized by orientation length, in regards to propensity to leave scores, F(3,17)=2.54, p=.09.

Table 5

ANOVA Results

Measure		Degrees of	F-value	Sig.
		Freedom		
Organizational	Between Groups	3	4.16	.02
Commitment	Within Groups	17		
	Total	20		
Propensity to	Between Groups	3	2.54	.09
Leave	Within Groups	17		
	Total	20		
Job	Between Groups	3	3.90	.03
Satisfaction	Within Groups	17		
	Total	20		

Table 6

Means and Standard Deviations for Organizational Commitment, Propensity to Leave,

Measure	Orientation Length	N	M	SD
Organizational	< 1 month	5	60.40	12.46
Commitment	1 to $<$ 3 months	6	77.17	13.47
	3 to < 6 months	2	97.00	9.90
	≥ 6 months	8	70.88	13.17
Propensity to	< 1 month	5	8.00	2.82
Leave	1 to $<$ 3 months	6	4.67	1.86
	3 to < 6 months	2	3.00	0
	\geq 6 months	8	5.88	2.85
Job	< 1 month	5	88.53	12.69
Satisfaction	1 to < 3 months	6	107.06	14.53
	3 to < 6 months	2	128.17	13.90
	≥ 6 months	8	97.92	16.06

Research Question #3

What is the relationship among organizational commitment, propensity to leave, and job satisfaction?

Bivariate correlations were examined on the data collected at the 9-month time period in order to determine if there was a relationship amongst organizational commitment, propensity to leave, and job satisfaction. The strongest correlation was

discovered between organizational commitment and propensity to leave, r(19) = -.88, p < .001. These results indicate that participants who are highly committed to the organizations to which they belong are more likely to stay in their current positions. A positive relationship between organizational commitment and job satisfaction was also discovered, r(19) = .83, p < .001, indicating that nurses who report being very committed to the organizations to which they belong are also highly satisfied with their jobs. A significant negative correlation was present between propensity to leave and job satisfaction, r(19) = -.58, p = .006. These results indicate that nurses who had higher job satisfaction were less likely to report being inclined to leave their current jobs.

Qualitative Data

Participant responses to the qualitative question, regarding the reasons that would lead subjects to leave their current place of employment, were reviewed. Several common reasons for leaving were discovered. The most common reason listed by new nurses was the opportunity for full-time employment, as indicated by 62% of participants. Other common reasons for leaving included flexibility in scheduling (33%), higher pay (19%), and relocation (19%). Further reasons for leaving listed by participants include: more educational opportunities, opportunities to work in specialty areas, and permanent positions.

Subjects were also provided with a space where they were able to add further feedback of their choice. Several positive remarks regarding the New Graduate Guarantee were written by participants. One new nurse wrote the following: "The New Grad Initiative was a great learning experience, really prepared me to feel confident when I was on my own!" Another participant added the following: "The New Grad Initiative

was a phenomenal program that allowed me to develop confidence and skills! I am a better nurse because of it."

CHAPTER V

DISCUSSION

Research Questions

Research Question #1

In order to determine if a difference exists between organizational commitment, propensity to leave, and job satisfaction over time, a RMANOVA was performed on the data from participants who completed the questionnaire at both data collection periods (n=12). An independent sample t-test was also performed in order to conduct an analysis with greater statistical power and to compare the group means between the 3 and 9-month participants. Results from both analyses indicated that organizational commitment, propensity to leave, and job satisfaction remained constant over time. These results are consistent with those of Newhouse, Hoffman, Suflita, and Hairston (2007), who examined the organizational commitment of new nurses participating in a one-year internship program. Newhouse et al. discovered that no significant difference in organizational commitment among participants was demonstrated over time.

The consistency of job satisfaction over time, as demonstrated by the results of this study, was also exhibited by the results of Altier and Krsek's research (2006). Their study examined the effects of a 12-month residency program on the job satisfaction and retention rates of new graduate nurses. Altier and Krsek discovered that the overall scores for the eight domains of job satisfaction displayed consistency throughout the first year of employment.

The results regarding the consistency of propensity to leave over time however are not congruent with those found in the current literature. Newhouse, Hoffman, Suflita,

and Hairston's (2007) study examined the anticipated turnover of new nurse graduates who completed a one-year internship program. Their results indicated that nurse interns were more likely to consider leaving their positions at baseline than at 6 months of employment (Newhouse et al.).

Research Question #2

In order to examine if length of orientation impacts organizational commitment, propensity to leave, and job satisfaction, a series of one-way ANOVAs were performed on the 9-month scores of new graduate nurses. Results indicated that participants who received 3 to <6months of orientation were significantly more committed to the organizations to which they belong when compared to participants who received <1 month of orientation. The findings of this analysis also indicated that participants who received 3 to <6 months of orientation were significantly more satisfied with their jobs than those who received < 1 month of orientation. Thus far no literature has been found that examines the impact of orientation length on organizational commitment, propensity to leave, and job satisfaction as reported by new graduate nurses. The results from this analysis indicate that length of orientation may play an important role in shaping the satisfaction and commitment of our future nurses. Further research in regards to this area is required in order to determine if an ideal length of orientation in fact exists.

Research Question #3

As a means of examining the potential relationship between organizational commitment, propensity to leave, and job satisfaction, bivariate correlations among these variables were examined. Significant correlations were discovered between

organizational commitment and propensity to leave, organizational commitment and job satisfaction, and propensity to leave and job satisfaction.

The strongest negative correlation was discovered between organizational commitment and propensity to leave. This finding suggests that nurses who are more committed to the organizations to which they belong are less likely to leave their current positions. These results are similar to Nogueras' (2006) findings that indicated that higher levels of occupational commitment were associated with lower levels of intent to leave the nursing profession. This study's findings are also consistent with those of Sourdif (2004), who aimed to examine the predictors of nurses' intent to stay within a Montreal university health center. Sourdif concluded that satisfaction at work explained the greatest intent to stay, accounting for 22% of the variances in her study.

A significant positive association between organizational commitment and job satisfaction was also discovered. This finding indicates that nurses who are more committed to the organizations to which they belong are more satisfied with their current jobs. These results are consistent with those of Yang and Chang (2007), who examined emotional labour, job satisfaction, and organizational commitment among nurses of all ages in a teaching hospital in Taiwan. Similarly, their findings show that job satisfaction was positively correlated with organizational commitment.

A significant negative correlation was discovered between propensity to leave and job satisfaction. This correlation suggests that nurses who are more satisfied with their jobs are less likely to leave their current place of employment. This relationship between propensity to leave and job satisfaction is consistent with the correlation discovered by Roberts, Jones, and Lynn (2004). Robert et. al examined the job satisfaction of new

graduate nurses working in various outpatient and inpatient specialty areas and found that nurses who intended to stay in their current positions were significantly more satisfied with 7 of the 8 dimensions measured by the MMSS, in comparison to those who intended to leave. These results are also consistent with those of Tourangeau and Cranley (2006), who examined the intent to remain employed of registered and practical nurses of all ages from 75 Ontario hospitals. They discovered that overall job satisfaction, as measured by the MMSS was a statistically significant predictor of intent to remain employed. Lastly, consistency with the results of Scott, Engelke, and Swanson's (2008) study is also apparent. Their study looked at the influence of several variables including orientation, continuing education, and staffing shortage on the satisfaction and intent to leave their jobs, and intent to leave the profession of a group new graduate nurses. Their results indicated that new nurses who expressed the intent to leave their current positions in the next three years were 2.2 and 2.9 times more likely to be dissatisfied with their job and the career of nursing (Scott, Engelke, & Swanson).

Job Satisfaction

The MMSS was utilized to measure the job satisfaction of new graduate nurses. The results of this study indicated that, according to the means of the items of the MMSS, new graduate nurses were most satisfied with their salary and their nursing peers. These findings in regards to job satisfaction are consistent with those of Winter-Collins and McDaniel (2000), whose results demonstrated that new graduate nurses were most satisfied with their coworkers.

The findings in regards to job satisfaction are also consistent with the Neutral Zone in Schoessler and Waldo's (2006) framework entitled "From Novice to Competent

Nurse: A Process Model" According to Schoessler and Waldo, relationships with physicians are viewed as problematic during this phase. New graduate nurses strive to function as patient advocates yet they lack the skills and rapport with physicians that is required to facilitate advocacy (Schoessler & Waldo). A single item of the MMSS addresses satisfaction with physicians. New graduate nurses reported a mean satisfaction 3.4 for this item. These results indicate that overall nurses are neither satisfied nor dissatisfied with the physician with whom they work. This may reflect the challenges new graduates face as they attempt to master the unwritten rules of communicating with physicians.

Qualitative Remarks

Upon reviewing the most common reasons given by new nurses that would cause them to leave their current positions, it was discovered that 62% indicated that the opportunity for full-time employment would be the reason for leaving the hospital at which they are presently employed. Results from this study also indicate that only 38% of those surveyed reported having full-time employment status. This finding is significant as it may explain the cause of future turnover of the new graduate nurse employed at the hospital in which this study was conducted. Other common reasons for leaving included flexibility in scheduling (33%), higher pay (19%), and relocation (19%). Further reasons for leaving listed by participants include: educational opportunities, opportunities to work in specialty areas, and permanent positions. Addressing these common reasons that may cause nurses to leave their current places of employment can lead to a decrease in turnover and result in the retention of the new graduate nurse, who plays a key role in sustaining the nursing workforce of the future.

The qualitative remarks written by new graduate nurses reflected the Neutral Zone of Schoessler and Waldo's (2006) framework. One new graduate nurse wrote the following after being employed for 9-months: "The New Grad Initiative was great learning experience, really prepared me to feel confident when I was on my own!" Another participant added the following: "The New Grad Initiative was a phenomenal program that allowed me to develop confidence and skills!" These remarks are consistent with the Neutral Zone because during this phase new graduates are becoming functioning members of the team and no longer constantly require the support of others (Schoessler & Waldo).

Limitations

This study was limited to a small sample of 21 new graduate nurses from a single acute-care hospital in Ontario. Convenience sampling was used to recruit subjects, as there were only 45 potential participants. Due to the small convenience sample utilized, caution must taken upon constructing generalizable conclusions from the results obtained. This study could be performed on a larger scale, with surveys being distributed to all new graduates working at a number of health care facilities in Ontario.

Implications and Recommendations

Several implications and recommendations have stemmed from the findings of this study. Not only does this study add to the current body of Canadian nursing knowledge and literature in regards to mentoring and job satisfaction, it also has the potential to serve as a pilot for a larger project. The following will address the implications and recommendations for practice and research that have resulted from the findings of this study

Recommendations for Practice

Several recommendations for practice have been formulated from the findings of this research study. Firstly, a recommendation for practice includes adapting the focus of nurse managers to include the assessment of job satisfaction in their employees, particularly in new graduates. From their assessments nurse managers can alter their practice to support and promote the presence of job satisfaction in their nurses. Managers can be open and receptive to the ideas and suggestions of nursing staff that may result in increased satisfaction within the workplace. Ultimately, as this study's results have shown, nurses who are more satisfied are less likely to leave their current place of employment. Therefore a renewed focus on job satisfaction by nursing management may result in a decrease in turnover.

Further recommendations for practice would include the dissemination of this study's findings to the human resource and management staff at the hospital in which this research was conducted. Managers and mentors need to be aware that the more satisfied their nurses are, the less likely they are to leave their current place of employment. A decrease in nurse turnover thus in turn may result in a savings of health care dollars and staff who are experienced and competent. Also, managers and human resource staff need to be made aware of the finding that 62% of their new nurses would consider leaving their current place of employment if a full-time job opportunity arose elsewhere. Furthermore, 89.5% of new graduates indicated that they would prefer full-time employment to their current positions. Although challenging, altering the current workforce to include more full-time positions may be the key to retaining these nurses.

Retention of the new graduate nurse will become increasingly important as the looming nursing shortage approaches.

Recommendations for Research

This study can serve as a pilot for a research project that can be performed on a larger scale. A more rigorous design, such as a randomized controlled trial, can be used to collect data from numerous new graduate nurses in various healthcare settings across Ontario. The hard copy as well as the electronic version of the survey can be utilized in order to increase participant responses. Exit interviews can also be included within future studies, as a means of determining the rationale behind staff turnover.

Recommendations for future research also include a greater focus the job satisfaction of new graduate nurses. Results from this study indicate that nurses who are more satisfied are more likely to remain in their current positions. Future research with a focus on the factors that contribute to job satisfaction or dissatisfaction amongst new graduate nurses would be of value.

One can also examine length of orientation more closely with the aim of determining the duration that corresponds with the highest levels job satisfaction and organizational commitment. The findings from this study indicate that nurses who received 3 to <6 months of orientation were significantly more committed to the organizations to which they belong and more satisfied with their jobs, when compared to participants who only received <1 month of orientation. Since Ontario's Nursing Graduate Guarantee provides nurses with 7.5 months of orientation, a study that examines length of orientation with more rigor would be of value. If the ideal length of

orientation is approximately 6 months, then Nursing Graduate Guarantee can be shortened resulting in a savings of valuable health care dollars.

Lastly, a recommendation for future research would include the thorough testing of Schoessler and Waldo's (2006) framework entitled "From Novice to Competent Nurse: A Process Model" Schoessler and Waldo's model was recently constructed and refined through reflecting on the practice experiences of new nurses. A large, rigorous study testing the model and its phases would be value in the future development and refinement of this framework.

Conclusion

Mentoring programs are increasing in popularity as a means to attract and retain new graduate nurses. The purpose of this study was to evaluate the VNIP mentoring program by examining the impact of length of orientation on job satisfaction, organizational commitment, and propensity to leave. The findings of this study demonstrated that organizational commitment, propensity to leave, and job satisfaction remained constant over time. Results also indicated that participants who received 3 to <6 months of orientation were significantly more committed to the organizations to which they belong and more satisfied with their jobs, when compared to participants who only received <1 month of orientation. The findings of this study also revealed that nurses who reported high levels of organizational commitment and job satisfaction were less likely leave their current place of employment. Furthermore, nurses who reported being highly committed to the organizations to which they belong were more satisfied with their current jobs. Another noteworthy finding includes the fact that the most common reason for leaving their current place of employment listed by new nurses was

the opportunity for full-time employment, as indicated by 62% of participants. This finding highlights the importance of altering the current workforce to include more full-time opportunities for new nurses. Overall, the results of this study can be utilized to build and shape mentoring programs of the future and to guide further research in this area.

References

- Aiken, L., Clarke, S., Sloane, D., Sochalski, J., Busse, R., Clarke, H., Giovannetti, P., Hunt, J., Rafferty, A., & Shamian, J. (2001). Nurses' report on hospital care in five countries. *Health Affairs*. 20(3), 43-53.
- Almada, P., Carafoli, K., Flattery, J., French, D., & McNamara, M. (2004). Improving the retention rate of newly graduated nurses. *Journal for Nurses in Staff*Development. 20(6), 268-273.
- Altier, M. & Krsek, C. (2006). Effects of a 1-year residency program on job satisfaction and retention of new graduate nurses. *Journal for Nurses in Staff Development*. 22(2), 70-77.
- Beecroft, P., Dorey, F., & Wenten, M. (2008). Turnover intention in new graduate nurses:

 A multivariate analysis. *Journal of Advanced Nursing*. 62(1), 41-52.
- Beecroft, P., Kunzman, L. & Krozek C. (2001). RN internship: Outcomes of a one-year pilot program. *Journal of Nursing Administration*. 31(12), 575-582.
- Blanzola, C., Lindeman, R., & King, M. (2004). Nurse internship pathway to clinical comfort, confidence, and competency. *Journal for Nurses in Staff Development*. 20(1), 27-37.
- Bowles, C. & Candela, L. (2005). First job experiences of recent RN graduates. *Journal of Nursing Administration*. 35(3), 130-137
- Boyer, S. (2002). Vermont nurse internship project: A collaborative enterprise developed by nurse leaders from education, practice, and regulation *Nursing Education*Perspectives. 23(2), 81-85

- Cameron, S., Armstrong-Stassen, M., Bergeron, S., & Out, J. (2004). Recruitment and retention of nurses: Challenges facing hospital and community employers.

 Canadian Journal of Nursing Leadership. 17(3), 79-92.
- Cameron, S., Horsburg, M., & Armstrong-Stassen, M. (1994). Job satisfaction, propensity to leave and burnout in RNs and RNAs: A multivariate perspective.

 Canadian Journal of Nursing Administration. 7(3), 43-64
- Canadian Nurses Association. (2006). 2005 workforce profile of Registered Nurses in Canada. Retrieved October 10, 2007 from http://www.cnanurses.ca/CNA/documents/pdf/publications/workforce-profile-2005-e.pdf
- Canadian Nurses Association. (2002). Canada's nursing shortage deepens: CNA study.

 Retrieved Dec 10, 2008 from http://www.cna-aiic.ca/CNA/news/releases/
 public release e.aspx?id=62
- Casey, K., Fink, R., Krugman, M., & Propst, J. (2004) The graduate nurse experience. *Journal of Nursing Administration* 32(6), 303-311.
- Cho, J., Laschinger, S., & Wong, C. (2006). Workplace empowerment, work engagement and organizational commitment of new graduate nurses. *Canadian Journal of Nursing Leadership.* 19(3), 43-60.
- CIHI. (2006). Measuring the retention of Registered Nurses in Canada: A study of 2000-2004 registration data. Retrieved October 12, 2007 from http://secure.cihi.ca/cihiweb/products/Measuring_RN_Retention_e.pdf
- CIHI. (2007). Highlights from the Regulated Nursing workforce in Canada, 2006.

 Retrieved November 28, 2007 from http://secure cihi ca/cihiweb/products/

 2006 Highlights_RN_Report_e.pdf

- CIHI. (2008). Regulated nurses: Trends, 2003 to 2007. Retrieved November 29, 2008 from http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=hhrdata_nursing_e
- Cline, D., Reilly, C., & Moore, J. (2003). What's behind RN turnover? Nursing

 Management. 34(10), 50-53.
- College of Nurses of Ontario. (2008). *Membership statistics report 2008*. Retrieved

 November 29, 2008 from http://www.cno.org/docs/general/43069_stats/43069_

 MemberStats2008-final.pdf
- Collins, M. & Thomas, T. (2005). Creation of a stepdown nurse internship program.

 Journal for Nurses in Staff Development. 21(3), 115-119.
- Dillman, D. (1978). Mail and telephone surveys. The total design method. New York:

 John Wiley & Sons.
- Duchscher, J. & Cowin, L. (2004). Multigenerational nurses in the workplace. *Journal of Nursing Administration*. 34(11), 493-501.
- Floyd, B., Kretschmann, S., & Young, H. (2005). Facilitating role transition for new graduate RNs in a semi-rural healthcare setting. *Journal for Nurses in Staff Development*. 21(6), 284-290.
- Greene, M. & Puetzer, M. (2002). The value of mentoring: A strategic approach to retention and recruitment. *Journal of Nursing Care Quality*. 17(1), 63-70.
- Halfer, D. (2007). A magnetic strategy for new graduate nurses. *Nursing Economics*. 25(1), 6-12.
- Halfer, D. & Graf, E. (2006). Graduate nurse perceptions of the work experience.

 Nursing Economics. 24(3), 150-155.

- Hall, D., & Marshall, R. (2006). Evaluation of a 16-week critical care internship program using a staff development program effectiveness evaluation tool. *Journal for Nurses in Staff Development*. 22(3), 134-143.
- Hayes, J. & Scott, A. (2007). Mentoring partnerships as the wave of the future for new graduates. *Nursing Education Perspectives*. 28(1), 27-29.
- Herdrich, B. & Lindsay, A. (2006). Nurse residency programs. *Journal for Nurses in Staff Development*. 22(2), 55-62.
- Hurst, S. & Koplin-Baucum, S. (2003). Role acquisition, socialization, and retention.

 Journal for Nurses in Staff Development. 19(4), 176-180.
- Krugman, M., Bretschneider, J., Horn, P., Krsek, C., Moutafis, R., & Smith, M. (2006). The national post-baccalaureate graduate nurse residency program.

 **Journal for Nurses in Staff Development. 22(4), 196-205.
- Lyons, T. (1971). Role clarity, need for clarity, satisfaction, tension, and withdrawal.

 Organizational Behavior and Human Performance. 6, 99-110.
- Mangold, K. (2007). Educating a new generation: Teaching baby boomer faculty about millennial students. *Nurse Educator*. 32(1), 21-23.
- Marcum, E. & West, R. (2004). Structured orientation for new graduates: A retention strategy. *Journal for Nurses in Staff Development*. 20(3), 118-124.
- Ministry of Health and Long-Term Care. (2008). Nursing Graduate Guarantee 86

 Percent of Participants Gain Full Time Employment. Retrieved November 30,

 2008 from: http://www.health.gov.on.ca/english/media/news_releases/archives/

 nr 08/mar/nr_20080306.html

- Mowday, R., Steers, R., & Porter, L. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior* 14, 224-247.
- Mueller, C. & McCloskey, J. (1990). Nurses' job satisfaction: A proposed measure.

 Nursing Research. 39(2), 113-117
- Newhouse, R., Hoffman, J. Suflita, M., & Hairston, D. (2007). Evaluating an innovative program to improve new nurse graduate socialization in to the acute healthcare setting. *Nursing Administration Quarterly*. *31*(1), 50-60.
- Nogueras, D. (2006). Occupational commitment, education, and experience as a predictor of intent to leave the nursing profession. *Nursing Economics*. 24(2), 86-93.
- O'Brien-Pallas, L., Griffin, P., Shamian, J., Buchan, J., Duffield, C., Hughes, F.,

 Laschinger, H., North, N., & Stone, P. (2006). The impact of nurse turnover on
 patient, nurse, and system outcomes: A pilot study and focus for a multicenter
 international study. *Policy, Politics, & Nursing Practice*. 7(3), 169-179.
- Oermann, M. & Garvin, M. (2002). Stresses and challenges for new graduates in hospitals. *Nurse Education Today*. 22, 225-230.
- Owens, D., Turjanica, M.A., Scanion, M., Sandhusen, A., Williamson, M., Hebert, C. & Facteau, L. (2001). New graduate RN internship program: A collaborative approach for system wide integration. *Journal for Nurses in Staff Development*. 17(3), 144-150.
- Pine, R. & Tart, K. (2007). Return on investment: benefits and challenges of a baccalaureate nurse residency program. *Nursing Economics*. 25(1), 13-18.
- Price, J., & Mueller, C. (1986). Absenteeism and Turnover of Hospital Employees.

 Greenwich: JAI Press.

- Roberts, B., Jones, C., & Lynn, M. (2004). Job satisfaction of new baccalaureate nurses. *Journal of Nursing Administration*. 34(9), 428-435.
- Rosenfeld, P., Smith, M., Iervolino, L., & Bowar-Ferres, S. (2004). Nurse residency program. *Journal of Nursing Administration*. 34(4), 188-194.
- Schoessler, M. & Waldo, M. (2006). The first 18 months in practice: A developmental transition model for the newly graduated nurse. *Journal for Nurses in Staff*Development. 22(2), 47-52.
- Scott, E., Engelke, M., & Swanson, M. (2008). New graduate nurse transitioning: necessary or nice? *Applied Nursing Research*. 12(2008), 75-83.
- Scott-Findlay, S., Estabrooks, C., Cohn, D., & Pollock, C. (2002). Nursing human resource planning in Alberta. What went wrong? *Policy, Politics, & Nursing Practice*. 3(4), 348-357.
- Sibbald, B. (1998). The future supply of Registered Nurses in Canada. *The Canadian Nurse*. 94(1), 22-23.
- Smith, C (2008). Implementing a nurse internship program. *Healthcare Quarterly* 11(2), 76-79
- Smith, A & Chalker, N (2005) Preceptor continuity in a nurse internship program

 Journal for Nurses in Staff Development. 21(2), 47-52.
- Sourdif, J. (2004). Predictors of nurses' intent to stay at work in university health center.

 Nursing and Health Sciences 6, 59-68
- Tabachnick, B, & Fidell, L. (1996) Using Multivariate Statistics (3rd ed). New York Harper Collins College Publishers

- Thomka, L. (2001). Graduate nurses' experiences of interactions with professional nursing staff during transition to the professional role. *The Journal of Continuing Education in Nursing*. 32(1), 15-19.
- Tourangeau, A., Hall, L., Doran, D., Petch, T. (2006). Measurement of nurse job satisfaction using the McCloskey/Mueller Satisfaction Scale. *Nursing Research*. 55(2), 128-136.
- Tourangeau, C., & Cranley, L. (2006). Nurse intention to remain employed: understanding and strengthening determinants. *Journal of Advanced Nursing*. 55(4), 497-509.
- Vermont Nurse Internship Project. (2005). *About the project*. Retrieved November 8, 2007 from: http://www.vnip.org/internshipproject.html
- Wagner, C. (2007). Organizational commitment as a predictor variable in nursing turnover research: literature review. *Journal of Advanced Nursing*. 60(3), 235-247.
- Winter-Collins, A. & McDaniel, A. (2000). Sense of belonging and new graduate job satisfaction. *Journal for Nurses in Staff Development*. 16(3), 103-111.
- Wong, F (2000). Learning group: facilitating the adaptation of new nurses to the specialty unit. *Journal of Continuing Education in Nursing*. 31, 209-212.
- Yang, F & Chang, C. (2007). Emotional labour, job satisfaction and organizational commitment amongst clinical nurses: A questionnaire survey. *International Journal of Nursing Studies*. 45(6), 879-887.

Zucker, B., Goss, C., Williams, D., Bloodworth, L., Lynn, M., Denker, A., & Gibbs, J. (2006). Nursing retention in the era of nursing shortage. *Journal for Nurses in Staff Development*. 22(6), 302-306.

Job Satisfaction and Retention 78	3
- University of Windsor	
	Job Satisfaction and Retention 78 - University of Windsor

Office of the Research Ethics Board

c 13



Today's Date: March 6, 2008

Principal Investigator: Ms. Kristy Bialkowski

Department/School: Nursing **REB Number: 08-029**

Research Project Title: Examining Job Satisfaction, Organizational Commitment, and

Propensity to Leave in new Graduate Nurses

Project End Date: June 30, 2008

Progress Report Due:

Final Report Due: June 30, 2008

Outstanding Documents Required:

This is to inform you that the University of Windsor Research Ethics Board (REB), which is organized and operated according to the Tri-Council Policy Statement and the University of Windsor Guidelines for Research Involving Human Subjects, has reviewed your project and the outstanding issues are listed above. Once these issues have been addressed, a clearance letter will be sent to you.

A Progress Report and/or Final Report is due by the dates noted above. The REB may ask for monitoring information at some time during the project's approval period.

During the course of the research, no deviations from, or changes to, the protocol or consent form may be initiated without prior written approval from the REB. Minor change(s) in ongoing studies will be considered when submitted on the Request to Revise form.

Investigators must also report promptly to the REB;

a) changes increasing the risk to the participant(s) and/or affecting significantly the conduct of the study;

b) all adverse and unexpected experiences or events that are both serious and unexpected;

c) new information that may adversely affect the safety of the subjects or the conduct of the study.

Forms for submissions, notifications, or changes are available on the REB website: www.uwindsor.ca/reb. If your data is going to be used for another project, it is necessary to submit another application to the REB.

We wish you every success in your research.

Dr. Maureen Muldoon

Maureen Muldoon, Ph.D. Chair, Research Ethics Board

Dr. Deborah Kane, Nursing Research Ethics Coordinator

This is an official document. Please retain the original in your files



Appendix B: Research Ethics Board Approval - Hospital

REB Review Form

Meeting Review Date: September 20, 2007

Project Title: Examining the Impact of a Mentoring Program on RNs' Job

Satisfaction and Organizational Commitment

Principal Investigator: Debbie Kane, R.N., Ph.D., Faculty of Nursing

University of Windsor

REB File Reference: 07-120-15

SUBMISSIONS REVIEWED:

- Ethics Submission Form for Research Involving Humans dated August 31, 2007.
- Letter of Information for Consent to Participate in Research
- > Organizational Commitment Questionnaire

TYPE OF APPROVAL:

[X]	Category A:	Approved
	Category B:	Approval - with some concerns addressed - Board Comments attached - Page 2
()	Category C:	Decision deferred. More information/revisions required - Comments - see Page 2
		Not Approved

Thank you for attending to discuss your research. A quorum was present and only Research Bihics Board members who are independent of the investigator(s) conducting the study participated in decisions relating to this research.

This Research Ethics Board is constituted and operated in accordance with the Tri-Council Policy Statement for Ethical Conduct of Research Involving Humans (TCPS), Canadian Food & Drug Regulations, Division 5 (Clinical Trials), ICH Good Clinical Practice Guidelines E6, U.S. Code of Federal Regulations Title 21 & 45. also holds a Federal Wide Assurance Registration with the U.S. Office of Human Research Protection.

All adverse events and any amendments to existing approved materials must be submitted for REB approval. Please use above REB reference number on all correspondence. This approval is for one year and expires on September 20, 2008, Should you wish to continue the research beyond this, application for renewal must be submitted. Applicable forms are available by email from

Best Wishes in your research.

internal REB Project No. 07-120-15

AMENDMENT REQUEST

ALL changes to research protocols or information/consent documents, advertisements, study instruments, etc. must have REB review and approval prior to implementation, except where necessary to eliminate immediate risk to study participants.

INSTRUCTIONS FOR COMPLETION

Amendments to Consents must be submitted in such a way that:

- The old wording is clearly identified (for example, bolded strikethrough text).
- . The new wording is clearly identified (for example, Malicinet grey chaded text).
- It is clear why each amendment has been made.
- . It is clear whether each amendment increases risk or discomfort for the subject in any way.
- 15 copies of amended consent plus 1 clean copy, 15 plus original of this request form Provide Copies Summary of Changes with Amendments to Protocol and Investigator's Brochure. Plus:
- A cover letter (synopsis) from the Investigator is helpful, but not mandatory.
- . 4 amendment request forms (one original signature) plus 4 clean copies of amended Protocol:
- 4 amendment request forms (one original signature) plus 2 copies of amended Investigator Brochure.

New documents:

An explanation / rationale must be provided for any newly added document (e.g. protocol, information sheet/consent form, drug or device brochure, advertisement, study instrument, questionnaire, etc.).

(Please Type)

- 1. Research Project Title:
- Examining the Impact of a Mentoring Program on RNs' Job Satisfaction and Organizational Commitment

Principal Investigator: Debbie Kane R.N., Ph.D.

Student Investigator: Kristy Bialkowski (Master's Nursing Student)

	Trial PhaseOther
1.	Is this an amendment to protocol? YES NO Date & Version #
2.	Is this an amendment to consent? YES NO Date & Version # Amended previously? YES NO Date & Version #
4.	Is this an amendment to Investigator Brochure? YES NO Date & Version Amended previously? YES NO Date & Version #

Only Research Ethics Board members considered independent of the investigator(s) conducting the study participated in deliberations or voting in relation to review of these reports. This Research Ethics Board carries out its functions in a manner consistent with ICH Good Clinical Practice Guidelines, applicable regulations and the Tri-Council Policy Statement for Ethical Conduct of Research Involving Humans.

Amendments approved. The study may continue.

Explain*:

☐ Please address concerns as attached to this form

Job Satisfaction and Retention 84

Appendix C: Letter of Information



LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH

Examining the Impact of a Mentoring Program on RNs' Job Satisfaction and Organizational Commitment

You are asked to participate in a research study conducted by Kristy Bialkowski, a student from the Faculty of Nursing and Dr. Debbie Kane, a professor from the Faculty of Nursing at the University of Windsor. Results from this study will be contributed to the primary researcher's Masters' thesis.

If you have any questions or concerns about the research, please feel to contact Dr. Debbie Kane at (519) 253-3000 extension 2268 or by e-mail at dkane@uwindsor.ca or e-mail Kristy Bialkowski at bialko1@uwindsor.ca.

PURPOSE OF THE STUDY

The purpose of this study is to examine how orientation programs impact new RN's job satisfaction over a 3 year time period. The knowledge gained from this study will enable hospitals to evaluate their current practices in order to increase job satisfaction of new RN's and increase their retention rates.

PROCEDURES

This survey encompasses the 9-month evaluation period of a longitudinal study. A similar survey was distributed to you 6 months ago. Although you may have not completed the initial survey, we invite you to participate at this time. This survey will take approximately 15 minutes to complete. You have the option of completing this hard copy of the survey or the on-line version that can be found at www.uwindsor.ca/newgrads. The following user ID and password will allow you to access this on-line survey: user ID - password - If you leave the institution prior to the 3-year period we would ask that you complete a survey at the time of your exit interview.

POTENTIAL RISKS AND DISCOMFORTS

If you choose to participate in this study you may be worried that the information you provide will be disclosed to your mangers or peers. No identifying information will be included in the questionnaires. You are asked to create a code on your survey in order for analysis of data over time. You are not identifiable by this code. You may complete this hard copy or the on-line version of this survey in the privacy of your own home.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

There will be no immediate benefit to you for participating in this study. Although no benefits will be instantly apparent, this research has the potential to provide hospitals with valuable information regarding the recruitment and retention of new graduate nurses. If the driving force behind the dissatisfaction of new graduate nurses is revealed by this study, hospitals can utilize this information to change the current practices and environments in order to increase job satisfaction and retain more nurses. This study also has the potential to provide support for the effectiveness of orientation programs.

PAYMENT FOR PARTICIPATION

As a small token of our appreciation we have included a \$3.00 gift certificate to Tim Horton's in this survey package. Please treat yourself to a snack upon completion of the questionnaire.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential. Survey participants will be identified by code numbers only. Participants may complete the survey on site or in the privacy of their home. Each survey package will include a self-addressed envelope for the participant to return the questionnaire by mail, or in a secure drop-off box on their unit. Completed questionnaires will be kept in a locked drawer at the University of Windsor that will only be accessible by the primary researcher. Upon transferring the data from the questionnaires into a computer file the surveys will be shredded. The option of completing the surveys on-line is also available for you convenience. On-line data will be stored in a password protected file until it can be transferred into SPSS. Once data is in the form of the SPSS file, the original file will be destroyed.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so. You will be unable to withdraw your responses once your completed survey has been submitted, as there will be no identifying information on the survey.

FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS

A summary of the study results will be available on Dr. Debbie Kane's University of Windsor's website in December, 2010.

SUBSEQUENT USE OF DATA

This data will be used in subsequent studies. This survey is part of a longitudinal 3-year study

RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario, N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

Please keep this LETTEI	OF INFORMATION	for future reference
-------------------------	----------------	----------------------

These are the terms under which I will conduct r	research.
Signature of Investigator	Date

Appendix D: E-mail Notice of Upcoming Study



ATTENTION ALL NEW GRADUATES AND NEWLY HIRED NURSES!!!

WE WANT TO HEAR WHAT YOU THINK!!!

A survey, similar to the one that you received six months ago, will be distributed to you within the next two weeks. This survey aims to capture your satisfaction with your current position and the orientation that you have received at Although you may have not participated in the first survey, we welcome you to participate at this time. An on-line version of the survey will also be available for completion. We thank you for your time and participation in advance.

Sincerely,

Kristy Bialkowski R.N. (MSc - nursing student) &

Debbie Kane R.N., Ph.D.

Job Satisfaction and Retention 90

Appendix E: Survey

Survey

PLEASE NOTE: A code needs to be assigned to your questionnaire answers in order to maintain confidentiality and to track your answers if you choose to participate in the survey at future dates. The code will consist of your mother's first and last initial, her year and month of birth. For example, J.K. 63 09.

Mother's first and last initial:	
Mother's year of birth:	
Mother's month of birth:	

PART 1: Listed below are a series of statements that represent possible feelings that individuals might have about the organization for which they are employees. With respect to your feelings, please indicate the degree of agreement or disagreement with each statement by circling from (1) if you strongly disagree, to (7) if you strongly agree with the statement.

	ngly			\$		ngly ree
1.) I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful			4	5		
2.) I talk up this organization to my friends as a great organization to work for	2	3	4	5	6	7
3.) I feel very little loyalty to this organization	2	3	4	5	6	7
4.) I would accept almost any type of assignment in order to keep working for this organization1	2	3	4	5	6	7
5.) I find that my values and the organization's values are very similar	2	3	4	5	6	7
6.) I am proud to tell others that I am part of this organization	2	3	4	5	6	7
7.) I could just as well be working for a different organization as long as the type of work experience was similar	2	3	4	5	6	7
8.) This organization really inspires the very best in me with respect to work performance	1 2	: 3	4	5	6	7
9.) It would take very little change in my present circumstance to cause me to leave this organization	1 2	3	4	5	6	7

Stron disa	~ .			St	ron agr	•
10.) I am extremely glad that I chose this organization to work for, over others that I was considering at the time I joined1	2	3	4	5	6	7
11.) There is not much to be gained by sticking with this organization indefinitely	2	3	4	5	6	7
12.) Often, I find it is difficult to agree with this organization's policies on important matters relating to its members	2	3	4	5	6	7
13.) I really care about the fate of this organization1	2	3	4	5	6	7
14.) For me, this is the best of all possible organizations to work for	2	3	4	5	6	7
15.) Deciding to work for this organization was a definite mistake on my part	2	3	4	5	6	7

PART 2: Please choose one of the five alternatives as a means to answer the following three questions:

- 1.) If you were completely free to choose, would you prefer to continue working in this hospital or would you prefer not to?
 - (1) I would prefer very much to continue working in this hospital
 - (2) I would prefer to work here
 - (3) I would not care either way
 - (4) I would prefer not to work here
 - (5) I would prefer very much not to continue working here
- 2.) How long would you like to stay in this hospital?
 - (1) I would like to stay for as long as I can work
 - (2) I would like to stay for quite awhile longer
 - (3) I would like to stay for a little longer
 - (4) I would like to leave soon
 - (5) I would like to leave as soon as possible

- 3.) If you had to quit work for a while (for example, because of pregnancy), would you return to this hospital?
 - (1) Yes, I definitely would come back here
 - (2) Yes, I probably would
 - (3) Perhaps, but I would look around first
 - (4) No, I probably would not
 - (5) No, I definitely would not come back here

PART 3: If you were to choose to leave the hospital in which you are employed, what would be the reason behind this choice? Please indicate below. (examples: more money offered for a position in the U.S., flexibility in scheduling, full-time employment, co-worker relationships)

PART 4: How satisfied are you with the following aspects of your current job? Please circle the number that applies.

	Very Satisfied	Moderately Satisfied	Neither Satisfied nor Dissatisfied	Moderately Dissatisfied	Very Dissatisfied
1. salary	5	4	3	2	1
2. vacation	5	4	3	2	1
3. benefits package (insurance, retirement)	5	4	3	2	1
4. hours that you work	5	4	3	2	1

	Very Satisfied	Moderately Satisfied	Neither Satisfied nor Dissatisfied	Moderately Dissatisfied	Very Dissatisfied
5. flexibility in scheduling your hours	5	4	3	2	1
6. opportunity to work straight days	5	4	3	2	1
7. opportunity for part-time work	5	4	3	2	1
8. weekends off per month	5	4	3	2	1
flexibility in scheduling your weekends off	5	4	3	2	1
10. compensation for working weekends	5	4	3	2	1
11. maternity leave time	5	4	3	2	1
12. child care facilities	5	4	3	2	1
13. your immediate supervisor	5	4	3	2	1
14. your nursing peers	5	4	3	2	1
15. the physicians you work with	5	4	3	2	1

	Very Satisfied	Moderately Satisfied	Neither Satisfied nor Dissatisfied	Moderately Dissatisfied	Very Dissatisfied
16. the delivery of care method used on you unit (ie. functional, team, primary)	5	4	3	2	1
17. opportunities for social contact at work	5	4	3	2	1
18. opportunities for social contact with your colleagues after work	5	4	3	2	1
19. opportunities to interact professionally with other disciplines	5	4	3	2	1
20. opportunities to belong to department and institutional committees	5	4	3	2	1
21. control over what goes on in your work setting	5	4	3	2	1
22. opportunities for career advancement	5	4	3	2	1
23. recognition for your work from supervisors	5	4	3	2	1

	Very Satisfied	Moderately Satisfied	Neither Satisfied nor Dissatisfied	Moderately Dissatisfied	Very Dissatisfied
24. recognition of your work from peers	5	4	3	2	1
25. amount of encouragement and positive feedback	5	4	3	2	1
26. opportunities to participate in nursing research	5	4	3	2	1
27. opportunities to write and publish	5	4	3	2	1
28. your amount of responsibility	5	4	3	2	1
29. your control over work conditions	5	4	3	2	1
30. your participation in organizational decision making	5	4	3	2	1

1.	Gender:
	a.) Male
	b.) Female
2.	Age:
3.	Marital Status:
	a.) Single
	b.) Married/Common-law
	c.) Separated/Divorced
	d.) Widowed
4.	Children:
	a.) No
	b.) Yes How many Ages
5.	Date of graduation from nursing program:
6.	N. I. C. and Campaignes in numerical in the following settings:
	Number of years of experience in nursing in the following settings:
	a) acute care: full-time part-time
	a) acute care: full-time part-time
7	a) acute care: full-time part-time b) community full-time part-time
	a) acute care: full-time part-time b) community full-time part-time c) Long term care: full-time part-time
8	a) acute care: full-time part-time b) community full-time part-time c) Long term care: full-time part-time Start date at your current hospital of employment:
8	a) acute care: full-time part-time b) community full-time part-time c) Long term care: full-time part-time Start date at your current hospital of employment: Current nursing position (area):
8	a) acute care: full-time part-time b) community full-time part-time c) Long term care: full-time part-time Start date at your current hospital of employment: Current nursing position (area): Length of orientation: a.) New graduate initiative (7.5 months) b.) 3 months
8	a) acute care: full-time part-time b) community full-time part-time c) Long term care: full-time part-time Start date at your current hospital of employment: Current nursing position (area): Length of orientation: a.) New graduate initiative (7.5 months)

10. Current employment status:

- a.) Part-time
- b.) Casual part-time
- c.) Full-time
- d.) Full-time new graduate initiative
- e.) Category B (2 days/month)
- f.) Weekend worker
- g.) Job share

11. If you prefer an alternate status what would it be?

- a.) Part-time
- b.) Casual part-time
- c.) Full-time
- d.) Full-time new graduate initiative
- e.) Category B (2 days/month)
- f.) Weekend worker
- g.) Job share

12. Current shifts worked (more than answer can be selected):

- a) Days (8 hours)
- b.) Days (12 hours)
- c.) Evenings (8 hours)
- d.) Midnights (8hours)
- e.) Midnights (12 hours)
- f.) Permanent shift
- g.) Rotating shift

13. If you prefer an alternate schedule, what you it be?

- a.) Days (8 hours)
- b.) Days (12 hours)
- c.) Evenings (8 hours)
- d.) Midnights (8hours)
- e.) Midnights (12 hours)
- f.) Permanent shift
- g.) Rotating shift

14. What is the approximate amount of experience that your preceptor has in nursing?

- a.) Less than 2 years
- b.) Between 2 and 5 yearsc.) Between 5 and 7 yearsd.) Between 7 and 10 years

- e.) Greater than 10 years f.) Unknown

PART 6: If there is anything further that you would like to add please feel free to do so in the following area provided:								
					··			

Job Satisfaction and Retention 100

Appendix F: Survey E-mail Notice



ATTENTION ALL NEW GRADUATES AND NEWLY HIRED NURSES!

The new graduate and newly hired nurse surveys are now being distributed. If you prefer to complete the survey on-line please do so at:

www.uwindsor.ca/newgrads



Thank you for considering participating!

Sincerely,

Kristy Bialkowski, MSc (Nursing - Student) &

Debbie Kane, RN, PhD.

Job Satisfaction and Retention 102

Appendix G: Reminder E-mail Notice



ATTENTION ALL NEW GRADUATES AND NEWLY HIRED NURSES!

WE WANT TO HEAR FROM YOU!

For those of you who wish to participate, this is a reminder that we are still accepting completed surveys. If you have misplaced or did not receive a hard copy of the survey, please feel free to complete the on-line version at:

www.uwindsor.ca/newgrads



If you are having difficulty accessing the on-line version, don't forget to scroll down to the end of the Letter of Information in order to continue on to the survey.

Thank you for considering participating!

Sincerely,

Kristy Bialkowski, MSc (Nursing - Student) &

Debbie Kane, RN, PhD.

Job Satisfaction and Retention104

Appendix H: Final Reminder E-mail Notice



ATTENTION ALL NEW GRADUATES AND NEWLY HIRED NURSES!

Thank you to all who have taken the time to complete and return our survey. For those who have not yet had the time to reply, it is not too late! Please consider doing so now. Your reply is very important! If you have misplaced or did not receive a hard copy of the survey, please feel free to complete the on-line version at:

www.uwindsor.ca/newgrads



If you are having difficulty accessing the on-line version, don't forget to scroll down to the end of the Letter of Information in order to continue on to the survey

Thanks again!

Sincerely,

Kristy Bialkowski, MSc (Nursing - Student) &

Debbie Kane, RN, PhD.

VITA AUCTORIS

Kristy Bialkowski was born in 1983 in Windsor, Ontario. After graduating from Belle River District High School in 2002, she went on to obtain a Bachelor's of Science in Nursing from the University of Windsor. Upon completing her Bachelor's in 2006 she was accepted into the Master's of Science (Nursing) program, also at the University of Windsor. She plans to graduate in the spring of 2009.