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Linking Psychological Capital, Structural Empowerment and Perceived Staffing Adequacy to New Graduate Nurses' Job Satisfaction

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A thesis submitted in partial fulfillment of the requirements for the degree in Master of Science

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LINKING PSYCHOLOGICAL CAPITAL, STRUCTURAL EMPOWERMENT AND PERCIEVED STAFFING ADEQUACY TO NEW GRADUATE NURSES' JOB SATISFACTION

(Spine title: Psychological Capital, Empowerment, Perceived Staffing Adequacy and Job Satisfaction in New Graduate Nurses)

(Thesis format: Integrated Article)

By

Lisa M. P. Stam

Graduate Program in Nursing

A thesis submitted in partial fulfilment
of the requirements for the degree of
Master of Science

The School of Graduate and Postdoctoral Studies
The University of Western Ontario
London, Ontario, Canada

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THE UNIVERSITY OF WESTERN ONTARIO SCHOOL OF GRADUATE AND POSTDOCTORAL STUDIES

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entitled:

Linking Psychological Capital, Structural Empowerment, Perceived Staffing Adequacy and Job Satisfaction to New Graduate Nurses' Job Satisfaction

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ABSTRACT

Reports indicate that new graduate nurses (NGNs) are experiencing stressful work environments, affecting job satisfaction and retention in current positions. New nurses are a health human resource that must be retained in order to ensure the replacement of retiring nurses, and to address impending shortages. As a result, creating supportive work environments that promote NGNs' job satisfaction may play an important role in the retention and recruitment of skilled, satisfied nursing staff. The purpose of this study was to test the relationships between new graduates' self-reported psychological capital (PsyCap), access to empowerment structures, perceptions of staffing adequacy and job satisfaction. A secondary analysis of data collected using a non-experimental predictive survey design was conducted on a sample of 205 NGN's working in the province of Ontario. Hierarchical multiple regression was used to test the study hypothesis. Results indicated that PsyCap, structural empowerment and perceptions of adequate nurse staffing were significant independent predictors of NGNs' job satisfaction (β= .38, β= .50 and β=.17 respectively), explaining 41% of the total variance. Study findings suggest that support for personal and structural resources in the workplace will enhance overall job satisfaction in new nurses.

Keywords: psychological capital, new graduate nurses, structural empowerment, job satisfaction, nurse staffing

NURSING'S TRADITION OF SACRIFICE

"Nursing's tradition of sacrificing self to the health care system does nothing to prepare professionals who are creative, positive, and who enjoy what they do. The fluctuations in individual, social, work, and worldly influences demand that we create our own turning point to create a more resilient future for the profession" (Hodges, Keeley, & Troyan, 2008, p. 89).

DEDICATIONS

To my parents, Fred, Lynette, and Joanne whose unfailing support, guidance, and life lessons have helped me become the person and the nurse I am today.

To my younger brothers André, Simon, and Pieter, thank you for your words of support, never ending confidence and the movie marathons that have helped me unwind throughout my education and ongoing nursing career.

To my sister Monica, and older brother Eric – May you find your happiest paths in life.

To Oma Maria, whose keen interest and support are truly appreciated. You are steadfast, always present and a remarkable woman.

&

Lastly, to my colleagues in the Emergency Department for your constant, recurring question "how is school going?" Be proud of the work you do, even if others are not. Your efforts make a world of difference.

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TABLE OF CONTENTS

Certificate of Examination……..ii

Abstract…….....iii

Epigraph: Nursing's Tradition of Sacrifice……....iv

Dedications...……...v

Acknowledgements……vi

Table of Contents……..vii

List of Tables…….....ix

List of Figures……..x

List of Appendices……..xi

Part 1: Introduction……...1

References……....6

Part 2: **Manuscript……...10**

Background and Significance……10

Theoretical Framework……..12

Related Research……...18

Structural Empowerment and Nurse Job Satisfaction……...18

Nurse Staffing Adequacy and Outcomes……...20

Psychological Capital……21

The Combined Effects of Personal and Structural Resources……...23

Nurse Worklife and Job Satisfaction……24

Summary of the Literature……26

Hypothesis and Rationale……..26

Methods……28

Design and Sample……28

Instrumentation……..30

Data Collection……..32

Data Analysis……32

Results……33

Descriptive Results……33

Pearson Correlations……..34

Hierarchical Multiple Regression ……....34
Discussion…….37
Implications for Healthcare and Nurse Leaders……....38
Limitations……....38
Conclusion…….39
References…….40
Part 3: Discussion……49
Implications for Healthcare and Nurse Leaders……....49
Recommendations for Future Research……53
Conclusion……54
References…….55
APPENDICIES
APPENDIX A: Study Instruments……...58
APPENDIX B: Letters of Information...…….....65
APPENDIX C: Ethics Approval…….....70
Curriculum Vitae…….....72

LIST OF TABLES

Table 1 – Demographic and Descriptive Characteristics.....29

Table 2 – Correlation Matrix.....35

Table 3 – Hierarchical Multiple Regression Analysis.....36

LIST OF FIGURES

Figure 1 – Hypothesized Model……....27

Figure 2 – Final Model…….....36

LIST OF EPPENDICES

APPENDIX A: Study Instruments……..58

A.01 Psychological Capital Questionnaire (PCQ)

A.02 Conditions of Work Effectiveness Questionnaire-II (CWEQ-II)

A.03 Perceived Staffing Adequacy Measure

A.04 Job Satisfaction

A.05 Demographics Questionnaire

APPENDIX B: Letter of Information...……...65

B.01 Letter of Information for New Graduate Nurses

B.02 Reminder Letter to New Graduate Nurses

APPENDIX C: Ethics Approval……...70

Curriculum Vitae……...72

PART ONE

INTRODUCTION

As one of the largest health professional groups, nurses play an integral role in the delivery of healthcare services, influencing patient health and well-being (Aiken, Clarke, Sloane, Lake, & Cheney, 2008; Tourangeau, 2005). Unfortunately, new graduate nurses (NGNs) are experiencing difficulties transitioning into healthcare work environments, resulting in high levels of burnout, turnover intentions and lower job satisfaction than older nursing generations (Cho, Laschinger, & Wong, 2006; Rhéaume, Clément, & LeBel, 2011; Wilson, Squires, Widger, Duval, & Tourangeau, 2008). In 2010, 25.5% of Canadian registered nurses (RN) were between the retirement ages of 55 to 65 years (Canadian Institute for Health Information [CIHI], 2012). In addition, anticipated nursing shortages, current aging populations, and increasing complexity of patient care needs requires the recruitment and retention of new nurses for the continued supply of skilled staff and the delivery of quality patient care (Canadian Nurses Association [CNA], 2009b; Canadian Nursing Advisory Committee, 2002; O'Brien-Pallas et al., 2008; Statistics Canada, 2011). Supportive work environments that promote job satisfaction in NGNs may play an important role in the retention of new nurses, ultimately supporting the delivery of quality healthcare (Duffield et al., 2011; Laschinger, 2011; Peterson, McGillis-Hall, O'Brien-Pallas, & Cockerill, 2011; Rhéaume et al., 2011; Purdy, Laschinger, Finegan, Kerr, & Olivera, 2010). The purpose of this study is to examine the relationship of personal and organizational resources with NGN job satisfaction.

A NGN is a novice in the profession, with low familiarity in managing self-sufficiency and accountability required of practicing nurses (Benner, 1984/2001; Dyess,

& Sherman, 2009). New graduates are particularly vulnerable to healthcare work environments, as they are reliant on precise rules and clear guidelines to perform tasks and must develop both competence and confidence in independent practice (Benner, 1984/2001; Dyess, & Sherman, 2009; Hodges, Keeley, & Troyan, 2008). Adequate access to the organizational resources of structural empowerment and adequate staffing levels, along with support and development of their personal resources – self-efficacy, resiliency, hope and optimism (Psychological Capital) – have been shown to support NGNs' transitions into and retention in healthcare work environments by enhancing job satisfaction, increasing commitment to the organization, and reducing burnout (Cho et al., 2006; Laschinger, 2011; Laschinger, Grau, Finegan, & Wilk, 2011; Ning, Zhong, Libo, & Qiujie, 2009).

One organizational resource associated with positive nurse outcomes, is structural empowerment (Laschinger et al., 2001). Kanter's (1993) theory of power in organizations maintains that organizational structures encountered in the workplaces will influence employee perceptions of power. Power involves the ability to "mobilize resources" and to access what is necessary to complete tasks (Kanter, 1993, p. 166). Those with power are described as the individuals who have "mastery or autonomy" rather than dominance or control over others (Kanter, 1993, p. 166).

Kanter's theory (1993) includes the four workplace empowerment structures of opportunity, information, support, and resources. Providing access to opportunities involves creating occasions for advancement, and the development and enhancement of new skills (Kanter, 1993; Laschinger, 1996). Providing adequate access to information requires supplying the necessary knowledge about the job and the organization for

successful completion of the work (Kanter, 1993; Laschinger, 1996). Adequate support involves providing structures that contribute to employee function, such as constructive feedback on performance, and the support for independent decisions making about one's work role (Kanter, 1993). Lastly, providing access to the resources of time, money, materials, and rewards allows for successful completion of tasks and role expectations (Kanter, 1993; Laschinger, 1996). A work environment conducive to structural empowerment will support employee effectiveness, productivity and satisfaction, supporting the overall success of the organization (Kanter, 1993; Laschinger, 1996).

Another organizational resource is adequate staffing to accomplish meaningful work. As a function of health human resources, adequate staffing has implications for nurse outcomes, such as reduced job satisfaction, and poor retention (Canadian Health Services Research Foundation [CHSRF], 2006; O'Brien-Pallas, Murphy, Shamian, Li, & Hayes, 2010; Scott, Engelke, & Swanson, 2008). Lower numbers of nursing staff have been linked with patient morbidity and mortality risks, suggesting greater risks for patient health complications and death when nurses shortages and higher patient to nurse ratios are present (Aiken et al., 2008; Aiken, Clarke, Sloane, Sochalski, & Silber, 2002, Tourangeau, 2005). Additional studies with nurses have found significant relationships between nurses' perceptions of adequate staffing, and nurse job satisfaction (Aiken et al., 2002; Scott et al., 2008). Given the link between perceptions of adequate staffing, job satisfaction and patient health outcomes, staffing is a key resource in nursing work environments in support of effective nursing care (Aiken et al., 2008; Aiken et al., 2002; CHSRF, 2006; Scott et al., 2008; Tourangeau, 2005).

In addition to organizational resources, employee personal strengths or resources are important for successful functioning in the workplace. Luthans, Avolio, Avey, and Norman (2007), maintain that positive employee psychological states will influence employee perceptions and behaviours in the workplace. Psychological capital (PsyCap) is a construct describing positive individual propensities that inspire and support successful completion of work (Luthans et al., 2007). PsyCap components include self-efficacy, hope, resiliency and optimism (Luthans et al., 2007). Self-efficacy is the confidence one has in one's ability to complete tasks and take action (Luthans & Youssef, 2004, p. 153). Hope is a "motivational state" that allows an individual to create goals, and provides the willpower, and ability to create paths to reach goals (Luthans, & Youssef, 2004, p. 153). Resiliency is the ability to overcome adversity, failure, or overwhelming change and achieve success (Luthans & Youssef, 2004). Optimism is one's ability to explain events by viewing negative situations as temporary, resulting from external causes, and to see positive events as occurring from lasting internal causes, boosting self-esteem and morale (Luthans & Youssef, 2004).

PsyCap addresses the need for human resources development in the workplace, emphasizing the need to support and develop each component for improved employee performance, contributing to overall organizational success (Luthans et al., 2007; Luthans & Youssef, 2004). PsyCap has been linked with better employee productivity, performance, job satisfaction, reduced stress and turnover rates (Avey, Luthans, & Jensen, 2009; Luthans et al., 2007; Luthans & Youssef, 2004).

Job satisfaction is representative of the extent to which the job meets the employee's expectations of the work (Murrells, Robinson, Griffiths, 2008). As an

essential part of nursing worklife, job satisfaction has been linked to nurse and hospital outcomes such as the quality of patient care, nurse morale, performance, and commitment to the organization (Murrells et al., 2008; Peterson et al., 2011). Workplace factors such as stress, empowerment, staffing levels and leadership quality have been found to contribute to NGN's job satisfaction, ultimately influencing their decision to remain in current nursing positions (Laschinger, 2011; Murrells et al., 2008; Peterson et al., 2011; Rhéaume, Clément, & LeBel, 2011; Scott et al., 2008).

In summary, structural empowerment has been shown to be an important component of effective nursing work environments, and associated with nurses' health and well-being (Laschinger, 1996; Laschinger et al., 2001; Cho et al., 2006; Ning et al., 2009). Therefore, Kanter's (1993) theory provides a relevant framework for this study to explore the relationships between NGNs' access to workplace resources and job satisfaction. Nurse staffing adequacy has been examined in a number of studies that have found significant relationships between adequate staffing levels and nurse and patient health and well-being (Aiken et al., 2008; Aiken et al., 2002; CHSRF, 2006; Duffield et al., 2011). Staffing adequacy is representative of an important human resource that may influence NGNs' job satisfaction. Finally, PsyCap is a valuable personal resource of employees working in large organizations, and may shape perceptions of workplace quality that ultimately influence new graduate satisfaction with their jobs (Luthans et al., 2007). The aim of this study is to examine the relationships between three key aspects of NGN work environments (structural, human, and personal resources) to new graduate nurse job satisfaction.

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PART TWO

MANUSCRIPT

Background and Significance

Ongoing concerns in the healthcare system include poor retention of nurses, untenable nursing work environments, and patient safety risks (Canadian Nurses Association [CNA], 2009b; O'Brien-Pallas, Murphy, Shamian, Li, & Hayes, 2010). As nurses are key providers in the delivery of healthcare services, their work will influence patient health and healing (Aiken, Clarke, Sloane, Lake, & Cheney, 2008; Tourangeau, 2005). In 2010, nurses aged 50 to 60 years made up 40% of the Canadian nursing workforce (Canadian Institute for Health Information [CIHI], 2011). With aging experienced nurses, and a possible shortage of 60 000 registered nurses (RN's) in Canada by the year 2022 (CNA, 2009b), it is essential to recruit and retain new graduate nurses (NGNs) in practice for continued provision of quality healthcare.

Recent reports indicate that NGNs are experiencing high levels of stress as a result of their work environments, leading to poor job satisfaction and challenges retaining nurses in current positions (Baxter, 2010; Laschinger, 2011; Lavoie-Tremblay, O'Brien-Pallas, Gélinas, Desforges, & Marchionni, 2008; Rhéaume, Clément, & LeBel., 2011). Stressful work environments are attributed to a large extent, to co-worker incivility or bullying (Laschinger, Grau, Finegan, & Wilk, 2010; Smith, Andrusyszyn, & Laschinger, 2010), high patient to nurse ratios, increasing patient acuity, nurse staffing shortages, and high perceived workload (Aiken et al., 2008; Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; O'Brien-Pallas et al., 2010; Tourangeau, 2005). These factors

add to NGNs' stress, creating greater difficulty transitioning into independent practice (Halfer & Graf, 2006; Lavoie-Tremblay et al., 2008b; Roberts, Jones, & Lynn, 2004).

Research has shown that organizational and personal resources may facilitate NGNs' adjustment to the professional work environment (Laschinger, Grau, Finegan, & Wilk, 2011; Laschinger & Grau, 2011), and greater job satisfaction (Halfer & Graf, 2006; Laschinger, 2011; Roche, Lamoureux, & Teehan, 2004). Job satisfaction has been directly linked with staffing levels, turnover intentions, and may support longer retention of new graduates in their current nursing positions (Cho, Lee, Mark, & Yun, 2012; O'Brien-Pallas et al., 2010; Roberts et al., 2004).

Kanter's (1993) theory of structural power in organizations has been shown as a useful framework for studying perceptions of empowerment in nursing work environments (Laschinger, 1996; Laschinger, & Finegan, 2005; Laschinger, Finegan, Shamian, & Wilk, 2001). Theoretically, when empowerment structures (opportunity, information, resources, and support) are in place there will be a reduction in employee perceptions of powerlessness, increasing the odds for positive perceptions of the work role (Kanter, 1993). Structural empowerment has been linked to greater nurse job satisfaction, increased work engagement, organizational commitment, and lower burnout (Laschinger et al., 2001; Laschinger, & Finegan, 2005; Laschinger, Finegan, & Wilk, 2009). In addition to empowerment structures in the workplace, adequate staffing levels represents an organizational human resource that contributes to nurses' ability to provide effective patient care, and influences nurse job satisfaction (Aiken et al., 2002; Aiken et al., 2008; Bowles & Candela, 2005; Tourangeau, 2005).

Psychological capital (PsyCap) theory emphasizes the need to invest in human resources for organizational success (Luthans & Youssef, 2004). The PsyCap construct includes four employee positive psychological states: self-efficacy, optimism, hope and resiliency (Luthans, Avolio, Avey, & Norman, 2007a). PsyCap has been significantly related to improved employee job satisfaction, performance, reduced stress and turnover intentions in business and service industries (Avey, Luthans, & Jensen, 2009; Luthans et al., 2007a). Although not extensively explored in nursing, PsyCap has been linked with improved nurse well-being and positive worklife (Laschinger et al., 2011; Laschinger & Grau, 2011; Luthans & Jensen, 2005; Sun, Zhao, Yang, & Fan, 2011).

PsyCap, structural empowerment and staffing adequacy have all been individually linked with employee job satisfaction (Aiken et al., 2002; Luthans et al., 2007a; Manojlovich, & Laschinger, 2002). However, a review of the literature did not reveal any studies examining the combined effects of all three variables on NGN job satisfaction. Given previous research it is reasonable to expect that higher levels of these personal and organizational resources would be important antecedents of NGN job satisfaction. Therefore, the purpose of this study is to examine the combined influence of PsyCap, structural empowerment and the frequency of perceived adequate staffing to NGNs' job satisfaction.

Theoretical Framework

The theoretical framework for this study integrates both Luthans et al.'s (2007a) psychological capital theory, and Kanter's (1993) structural empowerment to test an explanatory model of personal and organizational influences on new graduate nurse's job satisfaction.

Structural Empowerment

Kanter's (1993) theory of *structural power in organizations* focuses on power as one's ability to access and mobilize necessary resources to achieve goals. Kanter (1993) describes social structures in the work environment that enable employees to accomplish their work in meaningful ways. Both formal and informal powers exist within organizations that provide access to these social structures. Jobs that involve *formal power* are recognized (visible) by others, are deemed relevant (central) to organizational outcomes and allow for discretion (flexibility) and control in decision making (Kanter, 1993; Laschinger, 1996). *Informal power* involves relationships built between colleagues, supervisors and subordinates, allowing for cooperation amongst employees (Kanter, 1993; Laschinger, 1996).

Kanter (1993) maintains that access to *opportunity* for advancement, skill, and knowledge development in the organization is fundamental to job satisfaction and efficiency. A lack of opportunity creates feelings of frustration, hostility, and work disengagement, reflective of lower levels of commitment to the organization (Kanter, 1993). Behaviour in the workplace is considered to occur primarily as a response to environmental structures in place (Kanter, 1993). Access to *resources, information,* and *support* are power structures conducive to employee empowerment (Kanter, 1993). Access to *resources* is an employee's ability to obtain the necessary tools (money, time, materials, and rewards) to fulfill role expectations; access to *information* provides employees necessary technical and organizational knowledge to meet responsibilities; and access to *support*, such as constructive feedback, and opportunities to practice job discretion allows for maximization of job function (Kanter, 1993, Laschinger, 1996).

A lack of access to empowering structures results in powerlessness (Kanter, 1993). Described as the experience of being "accountable without power" employees remain responsible for their actions and outcomes, but lack the opportunity to advance, to mobilize resources or contribute to decisions in the organization, leading to disempowerment (Kanter, 1993; Laschinger, 1996). Positive levels of empowerment support employee motivation to achieve personal and organizational goals, and the creation of a greater sense of autonomy (Kanter, 1993; Laschinger, 1996).

Nurse Staffing Adequacy

Adequate staffing of nurses is essential for the maximization of the nursing role, and for patient health and healing (Aiken et al., 2002; Canadian Health Services Research Foundation [CHSRF], 2006; Tourangeau, 2005; Unruh & Zhang, 2012). Currently the resources component of Kanter's (1993) structural empowerment theory includes money, time, materials, and rewards for successful completion of work. Arguably, with the recognition of nurses as essential health human resources in the delivery of healthcare services (CHSRF, 2006; Fooks, Duvalko, Baranek, Lamothe, & Rondeau, 2002) adequate staffing should be included as a necessary organizational resource for nurse productivity and success in healthcare workplaces.

Adequate nurse staffing levels influences nurses' ability to appropriately manage patient care needs. Inadequate or poor nurse staffing is a source of nurse frustration, increase in workload and job dissatisfaction (Aiken et al., 2002; Dechant, 2006; Scott, Engelke, & Swanson, 2008). Reduced nurse staffing has also been associated with increased risk for poor patient health, increasing the risk of in-hospital complications, mortality, and morbidity (Aiken et al., 2008; Tourangeau, 2005; Unruh & Zhang, 2012).

Nurse staffing is a complex issue involving the process of "determining the acceptable number and skill mix of personnel needed to meet patients' treatment and care needs" (Dechant, 2006, p. 627). Although work has been done to determine and implement standard numbers for adequate nurse staffing levels (Niday et al., 2012; Spetz, Donaldson, Aydin, & Brown, 2008) the determinants that affect nurse staffing adequacy will differ based on the characteristics of the individual healthcare unit or program (Dechant, 2006). Determining adequate nurse staffing levels requires insight into the characteristics of the patients population being served, such as age, complexity of illness, and the numbers requiring care; the characteristics of the healthcare work environment, such as clinical space or number of beds available, hours of operation, and the unit's specialty and its role in care provision; along with the staff nurses' experience, skill and educational levels (CHSRF, 2006; CNA, 2012; Dechant, 2006).

Adequate nurse staffing is not only instrumental for the maximization of the individual nurse's role, but also plays a large role in NGNs' orientation and transitions into practice. Experienced nurses often have the ability to immediately understand what is occurring in a given situation, allowing for fluidity in care delivery, as additional time to consider the next steps is not required (Benner 1984/2001). NGNs are novices in the profession due to their inexperience working as independent practitioners, and require sufficient orientation, support and time to establish themselves in nursing practice (Baxter, 2010; Benner 1984/2001; Oermann & Garvin, 2002; Roche et al., 2004). Providing enough expert staff for NGN orientation and support in practice is essential for quality skill development, as new graduates' transition into the healthcare workplace and develop into experienced, competent nurses.

Psychological Capital

PsyCap refers to a person's positive psychological states consisting of four components: *self-efficacy, hope, optimism, and resiliency* (Luthans et al., 2007a). PsyCap originates from positive organizational behaviour (POB) research, defined as the study and use of "positive human strengths and psychological capacities" that are measureable, that can be "developed, and managed" for improved employee performance in the workplace (Luthans et al., 2007a, p. 59). For a construct to be considered a part of POB, Luthans (2002) argues that they must involve state-like characteristics as opposed to trait-like characteristics. State-like characteristics are human emotions and moods that are flexible and susceptible to change based on context or situation, such as happiness and pleasure, whereas trait-like characteristics are more static and difficult to change, such as intelligence and talents (Luthans, 2002; Luthans et al., 2007a). Workplace interventions supporting PsyCap's state-like components will theoretically create change sooner and prove to be more cost effective, as changing states requires less time and effort than it does to change traits, increasing the odds for success (Luthans et al., 2007a).

Each PsyCap component is considered a positive human state that can be enhanced and managed for employee and organizational success (Luthans et al., 2007b). *Self-efficacy* was adopted by Luthans et al., (2007b) from Bandura's (1997) work referring to a person's self-confidence in his or her ability to act and perform tasks. PsyCap efficacy is synonymous with the concept of confidence, and involves five behaviours: high goal setting, openness to challenging tasks, high self-motivation, application of the necessary effort for goal accomplishment, and perseverance through adversity (Luthans et al., 2007b). One method to support workplace self-efficacy involves

positive re-enforcement from others for successes, and encouragement to perform skills, with statements such as “you can do it”, and “you are doing well accomplishing…” (Luthans et al., 2007b, p. 47).

Hope was adopted from Snyder’s (1995) work describing a person’s motivation to reach goals, and must be differentiated from what is commonly thought of as “wishful thinking” (Luthans et al., 2007b, p. 66). Hope provides an internal self-motivation and determination to get to where one wants to be and to create realistic pathways (methods) to achieve those goals, even when faced with hardship (Luthans & Youssef, 2004). A method to support hope in the workplace involves the presence of clear pathways for communication, and the presence of “bottom-up” decision making (Luthans et al., 2007b, p. 69). In bottom up decision making employees are provided opportunities to actively participate in decision making processes or are delegated the power to make decisions about their work (Luthans et al., 2007b).

Optimism is the perception that negative situations are caused by external, momentary and situational sources, whereas positive situations are the result of internal, lasting and pervasive causes (Luthans & Youssef, 2004). Optimistic people will credit themselves with positive life events, elevating self-esteem, and separating themselves from the negativity of unfavourable situations, providing some protection from depression, self-blame and despair (Luthans & Youssef, 2004). A way to support optimism in the workplace consists of organizational decision making that is founded on ethics and morality and not solely on the fiscal bottom line (Luthans et al., 2007b).

Resiliency involves the ability to recover from “adversity, uncertainty, failure or overwhelming changes” (Luthans & Youssef, 2004, p. 154). Resilient people have the

flexibility to move through set-backs, and are able to perform at higher levels once they have moved through the challenges (Luthans & Youssef, 2004). Resiliency allows for the acceptance of reality, development of strong beliefs, perception of life as meaningful, and the development of flexibility for adaptation to significant change (Luthans & Youssef, 2004). A method to support resiliency involves prevention and/or reduction of stress by increasing organizational and personal resources (Luthans, Vogelgesang, & Lester, 2006). Strategies for this include endorsing the development of employee knowledge and skills through financial support of continuing education courses, encouraging workshop participation and rewarding those who seek self-improvement (Luthans et al., 2006).

Related Research

Structural Empowerment & Nurse Job Satisfaction

Significant relationships between structural empowerment and job satisfaction have been established internationally. In a sample of Italian mental health nurses Lautizi, Laschinger, and Ravazzolo (2009) found empowerment to be significantly related to job satisfaction (r=.506, p<.01) and work stress (r=-.28, p<.05), both empowerment and work stress were independent predictors of job satisfaction. In a sample of Chinese nurses from six different hospitals, empowerment was significantly correlated to job satisfaction (r=.547, p<.01), nurses were moderately empowered (M=19.14, SD=4.35), and reported highest dissatisfaction with the job facets of workload and compensation (Ning, Zhong, Libo, & Qiujie, 2009). In a third study of nurses working in urban hospitals in Ontario, both structural and psychological empowerment were significant independent predictors of job satisfaction (β=.39 and β=.33, p<.001; Manojlovich, & Laschinger, 2002). A total of 38% of the variance in nurses' job satisfaction was predicted by psychological and

structural empowerment (Manojlovich, & Laschinger, 2002). Psychological empowerment as described by Spreitzer (1995) is the motivation behind an employee choosing to become involved at work and feeling able to shape their role. Psychological empowerment is considered the state of mind resulting from experiences with structural empowerment (Laschinger et al. 2001).

In second study of Ontario nurses working in urban teaching hospitals, Laschinger, Finegan, Shamian, and Wilk (2004) examined the effects of structural and psychological empowerment on job satisfaction at two times points, three years apart. The study results demonstrated that changes in nurses' structural empowerment produced significant changes in psychological empowerment ($\beta = 0.38$, $p < .05$) and job satisfaction ($\beta = 0.70$ $p < .05$), yet changes in psychological empowerment did not significantly change job satisfaction above that of structural empowerment ($\beta = -0.08$; Laschinger et al., 2004). This study's results provide additional support for structural empowerment as a significant predictor of nurse job satisfaction.

Structural empowerment was used as a framework by Roche et al., (2004) to develop an orientation program for NGNs. The program model was developed to support each component of the empowerment theory in practice, and included 12 weeks of orientation with a preceptor, support groups, communication activities, and access to clinical and educational learning (Roche et al., 2004). Of the new graduate participants 95.4% indicated satisfaction with the "orientations effectiveness at preparing them for work on the unit", and 92.5% of NGNs were retained after six months (Roche et al., 2004, p. 30). This study demonstrates application and use of the structural empowerment theory as a method for supporting NGNs' transition into the workplace.

Nurse Staffing Adequacy & Outcomes

Nurses' perceived staffing adequacy has been linked with job satisfaction, retention, positive nursing worklife and may be related to nurses' belief in the value of quality patient care (Bowles & Candela, 2005; Shaver & Lacey, 2003). Shaver and Lacey (2003) found that nurses who believed staffing affected the quality of their patient care, also reported less overall job (β=-.49, p<.0001) and career satisfaction (β=-.32, p<.0001). Another study by Bowles and Candela (2005) found that perceptions of unsafe patient to nurse ratios was viewed as the most negative part of the workplace for nurses in their first year of work, and was the most common reason for turnover. Of the nurse respondents, 79% reported experiencing inadequate nurse staffing (Bowles & Candela, 2005). Higher patient to nurse ratios was also suggested to influence job satisfaction, nurses who had worked on units with less than 20 patients reported better experiences in their first year of work than did those who had worked on units with 30 or more (p=.013; Bowles & Candela, 2005).

Empirical evidence supports the need for adequate nurse staffing and positive nursing work environments for patient safety. Aiken et al., (2008) found associations between poor nurse staffing, unsupportive work environments and lower nurse education levels with 30-day patient mortality, finding a 14% reduction in mortality rates for hospitals reported to have better nursing work environments. In a longitudinal study, Unruh and Zhang (2012) found that when adjustments to nurse staffing levels were made based on the number of patients requiring care, and when more full-time nurses were working, there was a decrease in patient safety risks of failure to rescue (FTR), infections post-surgery and ulcer development (p<.05). Nurse staffing had the strongest relationship

to FTR risks (Unruh & Zhang, 2012). FTR refers to the likelihood of patient death when health complications occur, and reflects healthcare staffs' ability to quickly identify, and properly treat the complicating problem (Silber, Romano, Rosen, Yang, Even-Shoshan, & Volpp, 2007). The quality of care provided by healthcare organizations is often reported using FTR rates (Silber et al., 2007). While FTR rates are not solely the result of nurse staffing characteristics, nurse to patient ratios and nursing skill mix (number of RN's versus licenced practical nurses) are two key nurse staffing factors that can significantly impact this patient safety measure (Silber et al., 2007).

Nurse staffing has also been linked to nurse job satisfaction. In a study exploring nurses' work experiences in their first two years of practice Scott et al. (2008) found the strongest predictor of job satisfaction was frequency of staffing shortages ($\beta = 1.755$, $p < .001$). Nurses reporting higher levels of job satisfaction were six times more likely to report less frequent experiences with staffing shortages (Scott et al., 2008). In a study of staff nurses, Aiken et al. (2002) found that higher patient to nurse ratios increased the risk for job dissatisfaction by 15%. Authors found that nurses working in hospitals with patient to nurse ratios of 8:1 are 1.75 times more likely to experience job dissatisfaction than those working with ratios of 4:1 (Aiken et al., 2002). These studies support the need to include nurse staffing levels as predictor in NGNs' job satisfaction, with the potential to improve both patient and nurse outcomes.

Psychological Capital

PsyCap has primarily been associated with positive organizational outcomes in business and manufacturing research. In a study of employees working in high-tech manufacturing and service industries, Luthans et al., (2007a) found PsyCap to be

significantly correlated to performance (r=.33, p<.01 in manufacturing employees; r=.22, p<.05 in service employees) and job satisfaction (r=.32, p<.01 in manufacturing employees; r=.53, p<.01 in service employees). The overall measure was more consistently related to performance and job satisfaction than its individual components, suggesting strength in the construct as a whole (Luthans et al., 2007a).

In a 2005 study of nurses, Luthans and Jensen found significant correlations between PsyCap, turnover intentions (r=.454, p<.01), and nurses' commitment to organizational values and goals (r=.376, p<.01). Further research on nurses in China noted significant correlations between PsyCap, job performance (r=.52, p<.01) and job embeddedness (r=.32, p<.01), a construct that includes "psychological, personal and professional" motivations to remain employed in a current position (Sun et al., 2011, p.2). Overall, PsyCap increased the correlational values more than did its individual components (Sun et al., 2011).

Two studies were found exploring PsyCap in samples of NGNs. The first identified predictors of NGNs' well-being, including PsyCap, job demands (workload and bullying), and job resources (control and supportive professional practice environments; Laschinger et al., 2011). Representing NGNs' personal resources, PsyCap was significantly related to higher work engagement (β= .41, p<.05), better mental health (β=-.24. p<.05), and lower emotional exhaustion (β=-.22, p<.05; Laschinger et al., 2011). Contrary to the authors original hypothesis, PsyCap was directly related to higher turnover intentions (β= .19, p<.05; Laschinger et al., 2011). Laschinger et al. (2011) reasoned that those with higher levels of PsyCap are more likely to view themselves as more competent and valuable, thus feeling more optimistic about future job prospects,

and may be more inclined to search for new employment if they find themselves in a negative work environment.

A second study explored the influence of personal (PsyCap) and organizational resources (six areas of worklife: workload, control, reward, community and fairness) on workplace violence, burnout (emotional exhaustion and cynicism), and physical and mental health in NGNs (Laschinger & Grau, 2011). PsyCap was positively related to all areas of worklife (β=.44, p<.05), and negatively related to emotional exhaustion (β=-.23, p<.05; Laschinger & Grau, 2011). Emotional exhaustion was subsequently related to cynicism (β=.52, p<.05) and poor physical health (β=.78, p<.05), both of which had positive direct effects on poor mental health (β=.23, p<.05, and β=.40, p<.05; Laschinger & Grau, 2011). The reviewed literature provides the foundation for this study. Although the literature review did not reveal any publications reporting on both PsyCap and job satisfaction in nursing, PsyCap has been linked to job satisfaction in employees working in service and manufacturing companies.

The Combined Effects of Personal & Structural Resources in the Workplace

Despite a lack of research exploring structural empowerment and PsyCap in the same study, structural empowerment has been linked with similar personal resources in nursing. Core self-evaluations (CSE) is a personal resources construct similar to PsyCap. CSE consists of *self-esteem*, *locus of control*, and *emotional stability* which are theorized to influence a person's perception of themselves and the world around them (Bono & Judge, 2003). Laschinger (2011) explored the influence of CSE and empowerment on job and career satisfaction in NGNs. A combined analysis of both groups indicated that 59% of the variance in job satisfaction was explained by structural empowerment and CSE

(Laschinger, 2011). Structural empowerment, CSE and job satisfaction were all significant predictors of career satisfaction in both groups ($p<.05$; Laschinger, 2011).

Avey, Hughes, Norman, and Luthans (2008) explored the influence of PsyCap and psychological empowerment, along with transformational leadership on intention to quit and cynicism in a general population of working adults. PsyCap ($\beta=.61$, $p<.01$) and transformational leadership ($\beta=.27$, $p<.01$) were significantly related to psychological empowerment (Avey et al., 2008). PsyCap was significantly related to cynicism ($\beta=-.14$, $p<.05$) where psychological empowerment was not. However, the relationship between PsyCap and intent to quit was fully mediated by psychological empowerment (Avey et al., 2008).

Nurse Worklife & Job satisfaction

New graduate nurses are greatly affected by the environment in which they begin their careers (Baxter, 2010; Laschinger et al., 2011; Smith et al., 2010). Learning to balance knowledge application while accepting accountability for care provision can be both an overwhelming and challenging experience (Oermann & Garvin, 2002). As a result, the work environments experienced by new graduates are key predictors of job satisfaction or dissatisfaction (Cho et al., 2012; Lavoie- Tremblay, et al., 2008b).

Locke (1969) defines job satisfaction as the result of the "perceived relationship between what one wants" from the job and "what one perceives" the job to be offering (p. 316). Job satisfaction has been found to be a significant predictor of NGN turnover intentions. Turnover intention is reflective of a nurse's "desire to leave their employer" (Rhéaume et al., 2011, p. 491), and is a strong predictor of turnover rates, the number of nurses who voluntarily leave a position in a given year (O'Brien-Pallas et al., 2008).

Recent Canadian studies report a high number of NGNs with turnover intentions. In a study from Québec, Canada, 61.5% of new graduate respondents reported an intention to leave their current position (Lavoie-Tremblay et al., 2008a). In a second study from Eastern Canada, Rhéaume et al. (2011) turnover intention was reported by 45.5% of those surveyed. High turnover rates are associated with a 38% increase in risk for medical errors, and are reported to a cost from $25 000 to upwards of $67 100 for each nurse lost (Jones, 2005; O'Brien-Pallas et al., 2008).

Cho et al. (2012) explored turnover and job dissatisfaction in NGNs' working in Korean hospitals over the first three years of practice. New nurses reporting higher levels of job dissatisfaction had significantly (p<.001) lower probabilities of remaining in their current position over the three year period (year 1=.541, year 2= .320, year 3= .182) than those reporting lower dissatisfaction (year 1= .882, year 2= .738, year 3= .610). Nurses reported strongest dissatisfaction with interpersonal relationships, work content, and physical work environments (Cho et al., 2012). In a study of American NGNs working in both inpatient and outpatient units, Roberts et al. (2004) found nurses who reported they were likely to stay (n=91) also reported higher levels of overall job satisfaction than those unlikely to stay. NGNs who had been working more than 12 months (n=65) were significantly less satisfied with the job facets of praise and recognition than those who had been working less than six months (n= 32, p<.05; Roberts et al., 2004), suggesting that the longer a NGN is in the profession the more perceptions of appreciation and relevance decrease.

Peterson, McGillis-Hall, O'Brien-Pallas and Cockerill (2011) explored predictors of job satisfaction in NGNs' working in acute care Canadian hospitals. Significant

predictors of job satisfaction included social support, job demands (speed and difficulty of work, time available to complete work, skill discretion, and conflicting work demands) and self-efficacy (Peterson et al., 2011). NGNs working in emergency departments and intensive care units (ICU) reported lower job satisfaction than those working in other specialty unit, suggesting increased job demands in critical care specialties (Peterson et al., 2011).

Summary of the Literature

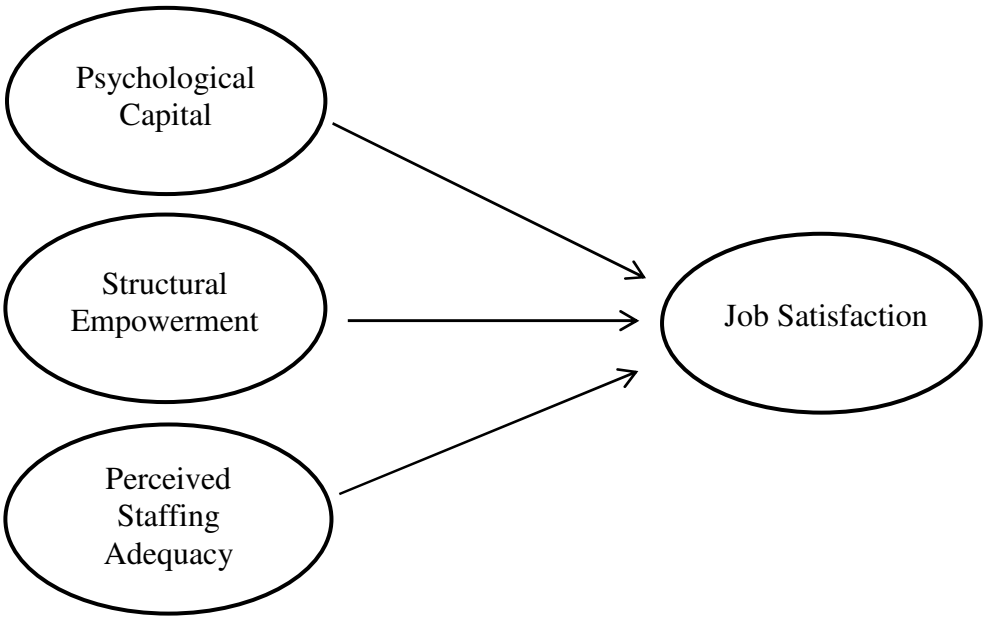
A review of the literature demonstrates the significance of structural, personal and staffing characteristics for improved positivity in nursing work environments. Structural empowerment supports employee involvement in the workplace, providing the necessary structures for successful completion of work roles (Kanter, 1993; Laschinger, 1996). Adequate staffing is an important resource that influences nurses' job satisfaction, quality care and patient outcomes (Aiken et al., 2002; Aiken et al., 2008; Scott et al., 2008). PsyCap emphasizes positive personal strengths for greater employee performance, and better perceptions of the workplace and has been linked to increased job satisfaction in some employee groups (Luthans et al., 2007b).

Hypothesis & Rationale

From Luthans et al.'s (2007a) psychological capital (PsyCap) theory, Kanter's (1993) theory of structural empowerment, and literature linking staffing adequacy with nurse job satisfaction the following model and hypothesis was generated and tested.

1. Psychological capital, structural empowerment, and perceptions of adequate nurse staffing levels will be positively related to new graduate nurses' job satisfaction.

Figure 1. Hypothesized Model



Luthans et al. (2007b) maintain that the PsyCap components of self-efficacy, hope, optimism, and resiliency will influence positive views and behaviours within the workplace. As a reflection of individual psychological states of being, PsyCap represents personal strengths and capabilities to achieve work goals (Luthans et al., 2007a). As a result, PsyCap is expected to be the first factor to positively influence NGNs' perceived level of job satisfaction. Empowerment structures in the workplace reduce feelings of powerlessness, as employees feel they have sufficient access to opportunity, information, support, and resources at work to successfully accomplish meaningful work (Kanter, 1993; Laschinger, 1996). The structures available to NGNs once they begin work represent organizational resources necessary for efficient and meaningful work (Kanter, 1993), as a result structural empowerment is expected to be an additional influence on NGNs' job satisfaction. Perceptions of adequate staffing in this study are representative of the health human resources aspect of the workplace (Fooks et al., 2002). The

frequency by which NGNs perceive enough access to colleagues for support in meeting patient care needs is hypothesized to be the third factor to influence job satisfaction over and above psychological capitals and empowerment structures.

Methods

Design & Sample

A predictive, non-experimental design was used to explore the relationships between NGNs' self-reported PsyCap, structural empowerment, perceptions of nurse staffing adequacy, and job satisfaction. This study is a secondary analysis of data from a longitudinal study on NGNs working in the province of Ontario. In the larger study, a request to the College of Nurses of Ontario (CNO) was made for a list of nurses who had been working less than three years in the profession. Data for this analysis was obtained from the second wave of the original study. A total of 392 NGNs were surveyed for the wave two data collection, 233 surveys were returned, 24 were because of an incorrect address, and four were blank, indicating a wish not to participate in the study. A total of 205 useable surveys were returned for a response rate of 56%. The required minimum sample size was calculated using the Horatio (Lee, 2004) software program. For a hypothesized moderate effect (R^2=.15), with three predictor variables, at a power of .80, using a .05 alpha level, a minimum sample size (N) of 66 was determined to be sufficient for the analysis.

Demographic and descriptive results are included in Table 1. Consistent with reports on the general population of practicing nurses (CIHI, 2011) the sample was primarily female (89%), with a lesser percentage of males (9.8%). All respondents were university prepared (99%) with baccalaureate degrees in nursing. NGNs averaged 29

years of age, with a mean of 1.9 years of nursing work experience. The majority of nurses were working in full-time positions (n=133, 64.9%), with 70 (34.2%) respondents working in part-time or casual positions. Of the new graduate's surveyed 99 (48.3%) worked in medical or surgical specialties, 45 (22%) reported working in critical care, and 51 (24.8%) respondents reported working in other areas of mental health, maternal child, community health and long-term care.

Table 1.

Descriptive Statistics of New Graduate Nurse Characteristics

		n	%*
Gender	Female	183	89.3
	Male	20	9.8
Education	Nursing Baccalaureate Degree	203	99
Specialty Unit	Medical-surgical	99	48.3
	Critical care	45	22.0
	Other: Mental Health, Maternal Child, Community/Public Health, & Long-Term Care	51	24.8
Current Employment Status	Full-Time	133	64.9
	Part-Time or Casual	70	34.2

Mean and Standard Deviations of New Graduate Nurse Demographic Characteristics

	Mean	SD
Age	29.1	6.7
Years as a Registered Nurse	1.9	.32
Years working in current organization	1.7	.48
Years working on current unit	1.4	.64

**Percentages may not equal 100 due to missing data*

Instrumentation

Four standardized self-reported instruments were used to collect data and measure major study variables (see Appendix A). PsyCap was measured using the Psychological Capital Questionnaire (PCQ), a 24 item Likert scale that ranges from 1, strongly disagree to 6, strongly agree (Luthans et al., 2007a). The PCQ measures respondent's current levels of self-efficacy, hope, optimism, and resiliency, each component is measured using its own 6-item subscale (Luthans et al., 2007a). Subscale scores are calculated by summing and averaging the subscale items. A composite score is calculated by summing and averaging the subscale scores to form one overall score ranging from 1 to 5. Exploratory and confirmatory factor analyses have supported the four factor structure of the PsyCap construct (Luthans et al., 2007a). Cronbach's alphas in past studies with nurses for the total scale have been .90, .89, and .88, with subscale values ranging from .50 to .89 (Laschinger et al., 2011; Luthans & Jensen, 2005; Sun et al., 2011). Reliability for the total PCQ in this study is .89, with subscales ranging from .68 to .87.

The Conditions of Work Effectiveness Questionnaire-II (CWEQ II) was used to measure NGNs' perceptions of access to the core empowerment structures of opportunity, information, support and resources in their current workplace (Laschinger et al., 2001). The original CWEQ-II includes a total of 19 items, measured on a 5-point Likert scale (Laschinger et al., 2001). To measure the four core components of empowerment a 12-item measure was used with four subscales, rated on a 5-point scale, ranging from 1, none, to 5, a lot. Scores for each subscale are calculated by summing and then averaging the items. Total empowerment is calculated by summing the subscale totals. Second-order confirmatory factor analysis has supported the four factor structure

of the CWEQ-II tool (Laschinger et al., 2001). Cronbach's alphas for the total empowerment measure in past nursing studies have ranged from .78 to .90, with subscales ranging from .71 to .87 (Cho et al., 2006; Gilbert et al., 2010; Laschinger & Finegan, 2005; Smith et al., 2010). The reliability coefficient for the CWEQ-II in this study is .84, with subscales ranging from .80 to .85.

New graduates' perception of adequate staffing for the successful provision of care was measured using the single item question: "*In the last month how often has short staffing affected your ability to meet your patient/clients' needs?*" (Scott, 2005; Scott et al. 2008). The item is rated on a five point scale, measuring frequency of 1-never, 2-monthly, 3-weekly, 4- several times a week, and 5-daily (Scott, 2005). To create a positive measure of staffing adequacy, the measure was reverse scored.

Job satisfaction was measured using a four-item Likert scale questionnaire, ranging from 1, strongly disagree to 5, strongly agree. The scale explores respondent's overall satisfaction level with their job, co-workers and work environment. The scale was adapted from Hackman and Oldham's (1975) original General Satisfaction Scale found in their Job Diagnostic Survey (JDS). To determine the job satisfaction level, the average of all four items is calculated. Confirmatory factor analysis has validated this modified scale (Laschinger et al., 2004). Cronbach's alphas in past studies for this modified scale have been .78 and .84 (Laschinger et al., 2004). The reliability coefficient for the job satisfaction scale in this study is .81.

For demographic data, questions were developed by the primary study researcher. Questions included inquiring about age, gender, education level, length of employment as an RN, length on work experience in current organization and on current work unit,

specialty area, employment status, and anticipated length of stay in current position and in the nursing profession. All instruments used are listed in Appendix A.

Data Collection

This study is an analysis of a subset of data from a larger study of Ontario NGNs. Collection of the data began in May 2011. The larger study was initiated following ethics approval (see Appendix B) from the University of Western Ontario Research Ethics Board. Participants were mailed a survey package that contained a letter of information, the questionnaire, a pre-stamped researcher-addressed return envelope, and a pre-paid coffee shop card. A modified Dillman (1991) method was used to send out paper-based questionnaire packages. Three mailings were completed, each four weeks apart. The first included the full survey package, the second included a single reminder letter, and the third included a follow-up letter and replacement survey package with a second pre-paid coffee shop card. All letters of information can be found in Appendix C. Consent was indicated by completion and return of the survey, those who did not wish to participate were asked to return a blank questionnaire. Confidentiality was maintained by identifying participants solely by code number, accessible only to the researcher, this allowed for confidential follow up with non-respondents.

Data Analysis

Data analysis was performed using the Statistical Package for Social Sciences (SPSS) 20, statistical analysis software (IBM, 2011). Skewness and kurtosis analysis demonstrated acceptable distribution of the data (Munro, 2005). Descriptive analysis was conducted on all variables. Pearson correlations were calculated between key study variables and all subscales (see Table 2). A *t*-test was performed to explore the

relationships between current employment status, and all major study variables. The relationships between specialty unit and all major study variables were assessed using analysis of variance (ANOVA). Current employment status and specialty unit were not significant factors in explaining NGN job satisfaction. The hypothesized model was tested using hierarchical multiple regression analysis, where the predictor variables are entered in individual blocks based on theoretical rationale for order of entry.

Results

Descriptive Results

Reliabilities, means and standard deviations for study variables are found in Table 2. New graduate nurses reported high levels of PsyCap (M= 5.16, SD= .68) slightly higher than Laschinger and Grau's (2011) study of NGNs reporting a mean of 4.98 (SD=.90). Of the PsyCap subscales, new graduates reported highest levels of hope (M= 5.43, SD= .87), followed by resiliency (M= 5.38, SD=.76), then optimism (M= 5.05, SD=.81), and self-efficacy (M= 4.79, SD= 1.14) lowest.

New graduates were moderately empowered (M= 13.03, SD= 2.43), similar to Laschinger's (2011) study of NGNs. New graduates reported feeling most access to opportunity (M= 4.01, SD=.86), and least access to support (M= 2.82, SD= .88), with moderate perceptions of access to information (M= 3.18, SD=.86) and resources (M= 3.07, SD= .81), levels consistent with Smith et al.'s (2010) study results.

Sixty one percent (N= 125) of NGN respondents reported experiencing adequate staffing for quality care provision on a weekly basis or several times a week, 17.6% (N=36) experienced staffing adequacy once or twice a month, and 9.8% (N=20) reported staffing adequacy on a daily basis. Close to 11% (N=22) reported never experiencing

staffing adequacy. The mean of staffing adequacy was 3.16 (SD= 1.16). NGNs reported a moderate level of job satisfaction (M=3.11, SD=.91) consistent with Laschinger et al.'s (2004) study.

Pearson Correlations

Structural empowerment was the most strongly related to job satisfaction (r= .55, p<.001), followed by PsyCap (r= .38, p<.001), and perceptions of nurse staffing adequacy (r=.29, p<.001). Small correlations were found between the independent variables. The strongest correlation was between PsyCap and structural empowerment (r=.19, p<.001). Both PsyCap (r=.16, p<.05) and structural empowerment (r=.16, p<.05) were positively related to perceptions of nurse staffing adequacy.

Hierarchical Regression Analysis

Hierarchical multiple regression provided support for the hypothesized model (see Table 3). Variables were entered in blocks based on theoretical consideration. PsyCap was entered as the first block, and accounted for 14% of the variance (F= 32.58, R^2= .14, p<.000) in NGN job satisfaction. Structural empowerment was entered as the second block and accounted for an additional 24% of the variance (F= 60.64, R^2= .38, p<.000). Finally, perceived staffing adequacy was entered as the third block and accounted for an additional 3% of the variance (F=45.34, R^2= .41, p=.002). The final model accounted for 41% of the variance in NGNs' overall job satisfaction. PsyCap, structural empowerment and perceived staffing adequacy were significant independent predictors of NGNs' job satisfaction (β= .38, β= .50 and β=.17 respectively). Final results are found in Table 3 and Figure 2.

Table 2.

Reliability Analysis, Means, Standards Deviations, and Correlation Matrix for Total Instrument Scales and Subscales

	Alpha	**Mean**	**SD**	1	2	3	4	5	6	7	8	9	10	11	12
1. **PsyCap**	**.89**	**5.16**	**.68**	1											
2. Self-Efficacy	.87	4.79	1.14	.78**	1										
3. Hope	.85	5.43	.87	.82**	.52**	1									
4. Resiliency	.68	5.38	.76	.71**	.32**	.49**	1								
5. Optimism	.69	5.05	.81	.73**	.34**	.50**	.46**	1							
6. Structural Empowerment	**.84**	**13.03**	**2.43**	.19**	.18**	.19**	- .09	.25**	1						
7. Opportunity	.85	4.01	.86	.12	-.02	.11	-.10	.10	.69**	1					
8. Information	.81	3.18	.86	.12	.13	.10	-.02	.15*	.74**	.40**	1				
9. Support	.80	2.82	.88	.15*	.23**	.14	-.17*	.19**	.77**	.34**	.50**	1			
10. Resources	.80	3.07	.81	.21**	.16*	.19**	.01	.27**	.58**	.15*	.18*	.33**	1		
11. Staffing Adequacy	**-**	**3.16**	**1.16**	.16*	.11	.12	.01	.23**	.16**	.12	.05	.21**	.29**	1	
12. Job Satisfaction	**.81**	**3.11**	**.91**	.38**	.27**	.36**	.10	.45**	.55**	.24**	.30**	.47**	.53**	.29**	1

*p<.05, **p<.01

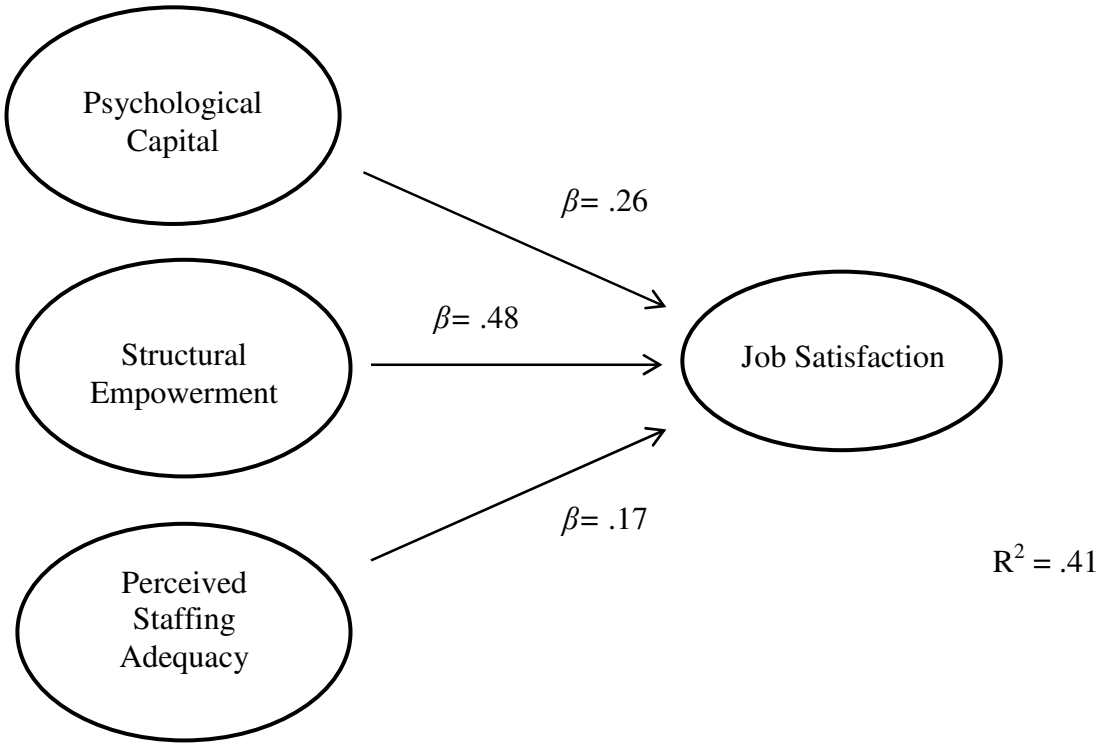
Table 3.

Hierarchical Multiple Regression Analysis

		R^2	ΔR^2	B	β	*Sig.*
Model 1	PsyCap	.14	.14	.50	.38	.000
Model 2	PsyCap			.38	.28	.000
	Empowerment	.38	.24	.19	.50	.000
Model 3	PsyCap			.34	.26	.000
	Empowerment			.18	.48	.000
	Staffing Adequacy	.41	.03	.13	.17	.002

Dependant variable: Job Satisfaction

Figure 2. *Final Model*



Discussion

Results support the hypothesized model, suggesting that higher levels of PsyCap, structural empowerment and perceived staffing adequacy support higher job satisfaction in NGNs. Structural empowerment explained the largest amount of variance (24%) however, PsyCap and perceived staffing adequacy were also significant independent predictors, explaining 17% of the variance in NGNs' job satisfaction.

The strong relationship between empowerment and job satisfaction highlights the value nurses place on access to empowerment structures in the workplace. Greater access to opportunity, support, information, and resources will provide the necessary tools for NGNs' adjustment to the workplace and development of nursing skills (Roche et al., 2004). Fundamental to the ability to fully function in any work role is having access to the necessary tools for the position (Kanter, 1993). As nurses have a large impact on healthcare services delivery, leadership must remain vigilant in monitoring the quality of their work environments, and ensure the availability of the necessary resources for quality provision of nursing care. Limited or reduced access to empowering workplace structures reduce the quality of nursing work experiences (Cho et al., 2006; Laschinger & Finegan, 2005; Laschinger & Grau, 2011; Smith et al., 2010) increasing the risk of negative patient health outcomes (Silber et al., 2002; Aiken et al., 2002; Tourangeau, 2005), reflecting poorly on the healthcare organization.

The significant relationship between PsyCap and job satisfaction highlights the importance of positive states of mind for enhanced NGN job satisfaction. Although PsyCap had a smaller effect on job satisfaction than structural empowerment, it was still a significant independent predictor. The link between PsyCap and NGN job satisfaction

is consistent with Luthans et al., (2007a) who found significant relationships between PsyCap and job satisfaction in employees of manufacturing and business industries. Higher levels of PsyCap may support NGNs' transitions into the workforce, allowing the development of confident, flexible and resilient practitioners (Luthans & Jensen, 2005; Laschinger et al., 2011).

Perceived staffing adequacy explained an additional 3% of the variance in job satisfaction, above that of PsyCap and structural empowerment. This suggests that the more NGNs experience adequate staffing levels that assist them in meeting the needs of their patients the more likely they are to be satisfied with their job. This result highlights the need to pay particular attention to frontline nurses' perceptions of and experiences with staffing levels for quality work environments.

Implication for Healthcare and Nurse Leaders

Kanter's (1993) structural empowerment theory can be used by healthcare and nurses leaders to create NGN orientation and transition program to provide adequate access to organizational resources, support, information and opportunities for greater job satisfaction. Furthermore, PsyCap (Luthans et al., 2007b) can be used along with structural empowerment in NGN orientation and transition programs to develop and enhance their personal resources of self-efficacy, hope, optimism and resiliency to further support greater job satisfaction. A detailed discussion of the implications for healthcare and nurse leadership is included in part three of this manuscript.

Limitations

The cross-sectional study design precludes the ability to infer causation as data were collected at a single point in time (Polit & Beck, 2008). The survey was self-

reported, and may include a response bias (Polit, & Beck, 2008). In addition, those surveyed for this data set were those who had previously responded to the first wave of the larger longitudinal study, which could reduce the generalizability of the results. The staffing adequacy measure used in this study is a proxy measure of nurse staffing, and future research should use a more objective measure of staffing levels.

Conclusion

Study results support the premise that both personal and structural workplace factors are important in NGNs' job satisfaction. PsyCap, structural empowerment and perceived staffing adequacy all individually influenced new graduates' overall job satisfaction. Given these results, it is suggested that nursing work environments supportive of all three aspects of the workplace will create higher levels of job satisfaction in NGNs' than would an environment addressing a single aspect. Furthermore, addressing these factors may assist in the creation of positive work environments that promote the retention of efficient, confident and satisfied staff, while ensuring the delivery of quality nursing care.

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PART THREE

DISCUSSION

This study examined the influence of psychological capital (PsyCap; Luthans, Avolio, Avey, & Norman, 2007a), structural empowerment (Kanter, 1993), and perceptions of adequate staffing to new graduate nurses' (NGNs') job satisfaction. Implications for theory, practice and future research are discussed here in relation to NGNs' transition and retention into professional nursing practice.

Implications for Healthcare and Nurse Leaders

In this study new graduates reported highest access to the empowerment structures of opportunity, information and resources. This may be the result of NGNs recently being provided an orientation to the workplace (new work opportunity), and have been given new instructions on organizational and unit processes and care guidelines (information and resources) that create higher perceptions of access to these empowerment structures. As NGNs will learn immensely in the early years of practice and meet with clinical situations that challenge them to take on unfamiliar tasks, ensuring continuous hands on learning, the development of new knowledge, and increasing awareness of available resources (Benner, 1984/2001; Oermann, & Garvin, 2002; Gill, Deagan, & McNett, 2010). Access to sufficient practice information, to resources for completion of work roles and the opportunity for continued growth and development will be instrumental in developing NGNs' identity as independent care providers, ultimately supporting job satisfaction (Cho, Laschinger, & Wong, 2006; Roche, Lamoureux, & Teehan, 2004; Smith, Andrusyszyn, & Laschinger, 2010).

NGNs' perceived the lowest access to support structures. Support for NGNs' transitions to the workforce is a strong predictor of job and career satisfaction (Baxter, 2010; Laschinger, 2011; Giallonardo, Wong, & Iwasiw, 2010). Support structures are in place when employees are given what they require for role function and successful completion of tasks (Kanter, 1993). For NGNs having approachable colleagues and mentors/preceptors, who provide constructive feedback, and are open to providing answers to questions and support in care delivery are vital to the transition process (Baxter, 2010; Hodges, Keeley and Troyan, 2010; Oermann & Garvin, 2002). In Hodges et al.'s (2008) study, NGNs' perceived positive work experiences when their units were seen as accepting of new nurses, and provided personal direction and guidance. NGNs who experience co-worker incivility or bullying and poor leadership support are more likely to have negative perceptions of the work environment (Giallonardo et al., 2010, Laschinger et al., 2010; Smith et al., 2010). As a result, orientation and retention strategies that address the specific support needs of NGNs are more likely to create positive work environments and higher job satisfaction.

This study examined the perceived frequency by which NGNs experienced access to sufficient numbers of colleagues in order to meet their patients' care needs. Despite the small percentage of variance that adequate staffing added to job satisfaction, staffing frustrations, and the associated patient safety risks remain significant, and prevalent in the healthcare system (Aiken et al., 2002; Aiken et al., 2008; Scott, Engelke, & Swanson, 2008; Tourangeau, 2005; Unruh & Zhang, 2012). Ensuring adequate staffing levels will secure NGNs access to an adequate number of colleagues for guidance and

support in the provision of patient care, helping to reduce frustrations, and enhance job satisfaction (Scott, et al., 2008; Shaver, & Lacey, 2003; McGillis Hall et al., 2007).

Of the PsyCap components NGNs reported highest levels of hope. Recall that hope provides the ability to create realistic pathways for achieving goals, even in the presence of adversity (Luthans et al., 2007b). Accordingly, the higher level of hope may be indicative of new graduates' self-motivation to succeed in practice as they are keen learners and eager to become competent care providers (Halfer & Graf, 2006; Gill et al., 2010). Appropriate goal setting is one step towards supporting hope (Luthans et al., 2007b). The employee may create their own goal(s), they may be co-developed, or assigned, however, the goal(s) must be logical, specific, measurable, and challenging, while remaining achievable (Luthans et al., 2007b). For NGNs a goal may be to improve on one or more particular nursing skill. Identifying goals may become a part of the orientation process, where mentors assist NGNs with goal creation and achievement.

New graduates reported high levels of resiliency, undoubtedly reflective of the need to cope with the many challenges and stressors faced in the early stages of practice. In their qualitative study Hodges et al., (2008) identified the development of resiliency in NGNs. NGNs reported spending high amounts of energy reflecting on and finding meaning from negative work outcomes, seeking to learn from negative events (Hodges et al., 2008). Exploring adverse events is one approach to developing resiliency, described as a "risk-focused" strategy that requires staff development for the prevention and management of adverse events (Luthans et al., 2007b, p. 125). This is relevant to NGNs, as resiliency will help them cope with increasing responsibility and accountability. Support for resiliency involves organizational support for continuing education and skill

development courses, along with making workshops available for enhanced employee skill and performance (Luthans et al., 2007b). This is seen as a means to prevent undesirable outcomes by investing in highly skilled staff, with the information, and knowledge to navigate through conflict, change, failure and even success (Luthans et al., 2007b).

Optimism was the second lowest PsyCap level reported by NGNs respondents. Recall that optimism is the ability to discriminate between causes of negative and positive situations, crediting negative outcomes as temporary and can be overcome (Luthans et al., 2007b). Luthans et al. (2007b) maintain that optimism requires "…strong self-discipline, analysis of past events, contingency planning and preventive care…" (p. 96). These skills are very characteristic of expert nurses. The expert nurse has the ability to anticipate and plan for future patient needs, while rapidly addressing problems by gaining an immediate understanding of the situation (Benner, 1984/2001). Since NGNs are less familiar with their patients' care needs, it is understandable that they report lower levels of optimism. Optimism development may require leniency for mistakes (Luthans et al., 2007b). Leniency for mistakes involves acknowledging the reality of an event, and examining it in the best possible way (Luthans et al., 2007b). The controllable and uncontrollable factors are identified, resources and skills reviewed, and goals set for the prevention of future negative outcomes, and enhanced performance (Luthans et al., 2007b). For NGNs, this may be organized as a debriefing or private meeting, where time is allotted for discussion with a nurse leader, mentor or preceptor about the experience who can help the NGN discriminate between the negative and positive aspects of the situations, and credit themselves for any successes. Optimism allows an organization and

employee to overcome negativity, and create successes without generating self-blame and pessimism (Luthans et al., 2007b).

Self-efficacy was the lowest reported score of the PsyCap components. Arguably, NGNs are still developing a sense of confidence, and are in the process of forming self-reliance the application of knowledge to practice. A method to support self-efficacy involves "vicarious learning/modelling", where an employee builds confidence by observing others demonstrate and successfully complete tasks (Luthans et al., 2007b, p. 45). This can be applied to NGNs' orientation into work environments by ensuring that they work with experienced nurses who demonstrate confidence and skill in task completion (Baxter, 2010). For self-efficacy development, Luthans et al. (2007b) suggest the need to match peer-mentors with the learners, as opposed to a manager or higher level leader. Mentors with similar backgrounds, abilities and role function are likely to have a bigger impact on the learner's growth and development than would a mentor at a different level in the organization (Luthans et al., 2007b). This is the result of the learner being able to identify their role with that of their mentor's (Luthans et al., 2007b).

Implications for Future Research

As a limited amount of research was found previously examining the relationships between PsyCap and nurse outcomes, further research is needed validate the construct in other nursing populations and work settings outside of acute care.

Conclusion

Results support the need to provide NGNs with enough access to empowerment structures, and colleagues to assist them in the provision of patient care for enhanced job satisfaction. Addressing the personal aspect of the workplace, orientation and transition

processes developed to support NGNs' personal resources of self-efficacy, hope, optimism and resiliency will provide additional perceptions of positivity in the workplace, enhancing job satisfaction. NGNs are a fundamental health human resource for the future of Canada's healthcare system, and require experiences that support them in practice as they adapt to the complexities of modern nursing.

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APPENDICES

APPENDIX A

Study Instruments

A. 01 Psychological Capital Questionnaire (PCQ)

A. 02 Conditions of Work Effectiveness Questionnaire-II (CWEQ-II)

A. 03 Perceived Staffing Adequacy Measure

A. 04 General Satisfaction Scale

A. 05 Demographics Questionnaire

A. 01

PSYCHOLOGICAL CAPITAL QUESTIONNAIRE (PCQ)

(Luthans, Youssef, & Avolio, 2007b)

1= Strongly Disagree	2= Disagree	3= Somewhat Disagree	4= Hard to Decide	5= Somewhat Agree	6= Agree	7= Strongly Agree

1. I feel confident analyzing a long-term problem to find a solution.	1	2	3	4	5	6	7
2. I feel confident in representing my work area in meetings with management.	1	2	3	4	5	6	7
3. I feel confident contributing to discussions about the hospital's strategy.	1	2	3	4	5	6	7
4. I feel confident helping to set targets/goals in my work area.	1	2	3	4	5	6	7
5. I feel confident contacting people outside the hospital to discuss problems.	1	2	3	4	5	6	7
6. I feel confident presenting information to a group of colleagues.	1	2	3	4	5	6	7
7. If I should find myself in a jam at work, I could think of many ways to get out of it.	1	2	3	4	5	6	7
8. At the present time, I am energetically pursuing my work goals.	1	2	3	4	5	6	7
9. There are lots of ways around any problem.	1	2	3	4	5	6	7
10. Right now I see myself as being pretty successful at work.	1	2	3	4	5	6	7
11. I can think of many ways to reach my current work goals.	1	2	3	4	5	6	7
12. At this time, I am meeting the work goals that I have set for myself.	1	2	3	4	5	6	7
13. When I have a setback at work, I have trouble recovering from it, moving on.	1	2	3	4	5	6	7
14. I usually manage difficulties one way or another at work.	1	2	3	4	5	6	7
15. I can be "on my own," so to speak, at work if I have to.	1	2	3	4	5	6	7
16. I usually take stressful things at work in stride.	1	2	3	4	5	6	7

17. I can get through difficult times at work because I've experienced difficulty before.	1	2	3	4	5	6	7
18. I feel I can handle many things at a time at this job.	1	2	3	4	5	6	7
19. When things are uncertain for me at work, I usually expect the best.	1	2	3	4	5	6	7
20. If something can go wrong for me work-wise, it will.	1	2	3	4	5	6	7
21. I always look on the bright side of things regarding my job.	1	2	3	4	5	6	7
22. I'm optimistic about what will happen to me in the future as it pertains to work.	1	2	3	4	5	6	7
23. In this job, things never work out the way I want them to.	1	2	3	4	5	6	7
24. I approach this job as if "every cloud has a silver lining."	1	2	3	4	5	6	7

A. 02

CONDITIONS FOR WORK EFFECTIVENESS QUESTIONNAIRE-II (CWEQ-II)

(Laschinger, Finegan, Shamian, & Wilk, 2001)

1 = None	**2**	**3 = Some**	**4**	**5 = A Lot**

1.	Challenging work.	1	2	3	4	5
2.	The chance to gain new skills and knowledge on the job.	1	2	3	4	5
3.	Tasks that use all of your own skills and knowledge.	1	2	3	4	5
4.	The current state of the hospital.	1	2	3	4	5
5.	The values of top management.	1	2	3	4	5
6.	The goals of top management.	1	2	3	4	5
7.	Specific information about things you do well.	1	2	3	4	5
8.	Specific comments about things you could improve.	1	2	3	4	5
9.	Helpful hints or problem solving advice.	1	2	3	4	5
10.	Time available to do necessary paperwork.	1	2	3	4	5
11.	Time available to accomplish job requirements.	1	2	3	4	5
12.	Acquiring temporary help when needed.	1	2	3	4	5

A. 03

PERCEIVED STAFFING ADEQUACY MEASURE

(Scott, 2005)

In the last month, how often has short staffing affected your ability to meet your patients/clients' needs?

□ never

□ once or twice a month

□ weekly

□ several times a week

□ daily

A. 04

GENERAL SATISFACTION SCALE

(Hackman & Oldham, 1975)

Please indicate the extent to which you agree or disagree with the following statements.

1 = Strongly Disagree	**2 = Disagree**	**3 = Hard to Decide**	**4 = Agree**	**5 = Strongly Agree**

1. I feel very satisfied with my job.	1	2	3	4	5
2. I feel that my coworkers are satisfied with their jobs.	1	2	3	4	5
3. I feel I would be happy to work here until I retire.	1	2	3	4	5
4. I feel that the health care facility provides a supportive work environment in which to work.	1	2	3	4	5

A. 05

DEMOGRAPHICS QUESTIONNAIRE

Please tell us a little bit about yourself and your workplace.

Gender: Age: _____ years

□ Female

□ Male

Date of Graduation (Month, Year):
_____

Degree Received:
□ Diploma
□ BScN
□ Other _____

How long have you worked:

As an RN:	_____Years	_____Months
As an RN at your current organization	_____Years	_____Months
As an RN on your current unit	_____Years	_____Months

Specialty area of your current unit:
□ Med-Surgery
□ Critical Care
□ Maternal-Child
□ Mental Health

Current employment status:
□ Full time
□ Part time
□ Casual

Average hours worked per week?
□ less than 20 hours
□ 20-39 hours
□ over 40 hours

How long do you expect to stay in your current nursing position? _____ years

How long do you expect to stay in the nursing profession? _____ years

APPENDIX B

Letters of Information

B. 01 Letter of Information for New Graduate Nurses

B. 02 Reminder Letter to New Graduate Nurses

B. 01

New Graduate Experiences of Incivility and Burnout in the Workplace: Impact of Empowering Professional Practice Environments on New Graduates' Health and Wellbeing

Letter of Information for New Graduate Nurses

Principal Investigator:
Heather K. Laschinger, RN, PhD
The University of Western Ontario

Funding: Social Sciences and Humanities Research Council (SSHRC)

Introduction
We are inviting you to take part in our research study named above. This form provides information about the study. You do not have to take part in this study. Taking part is entirely voluntary (your choice). You may contact the Principal Investigator at the contact below with any questions you have. You may decide not to take part or you may withdraw from the study at any time. This will not affect your employment status in any way.

Purpose of the Study
A considerable portion of our lives will be spent at work. In order to gain a richer understanding of the current nursing work environment it is essential to identify key workplace and personal factors affecting work-life quality.

Procedures for this Study
The proposed project consists of two waves of surveys over a period of 2 **years. The survey consists of a comprehensive questionnaire** examining the combined effect of aspects of the work environment on new graduate nurses' physical and mental health. **We will obtain a random sample of 900 new graduate nurses from the Ontario College of Nurses.**

You will be asked to complete a survey, which should take approximately 20 minutes of your time. You may decide whether to complete the survey on your own time or at work. Survey questions may ask about your current work environment, and your reactions to your working environment. Once you have completed your survey, please place it in the self-addressed envelope provided and put it in the mail. You may keep the enclosed $5 Starbucks card whether or not you choose to complete the survey.

Our research team will receive participant contact information from the Ontario College of Nurses. All data will automatically be sent to the Nursing Research Unit at The University of Western Ontario. Only members of our research team will be able to access the data. All data will be stored in a locked cabinet in a secure room. Representatives of The University of Western Ontario Health Sciences Research Ethics Board may contact you or require access to your study-related records to monitor the conduct of the research.

Risks and Discomforts to You if You Participate in the Study
There are no anticipated burdens, harms or potential harms for participation in this study. There is a chance that you may feel uncomfortable answering questions about your work

environment on the survey. Care will be taken to ensure confidentiality of survey data and we will respect your privacy. Also, you will not have to answer any questions if you feel uncomfortable. You may refer to your Employee Assistance Plan representative if you need to talk to someone further about these issues.

Benefits to You if You Participate in the Study
You are not guaranteed any direct benefits as a result of their participation in this study. However, this study will provide data to document the extent of workplace incivility in current nursing workplaces that could inform policy development and workplace interventions to prevent this negative and counterproductive workplace behavior. The results will be useful for nursing administrators in creating positive work environments that support new graduates as they enter the profession.

Voluntary Participation and Withdrawing from the Study
Before deciding to participate, you should know that you do not have to take part in the study. Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions or withdraw from the study at any time with no effect on your employment status. If, during the course of this study, new information becomes available that may relate to your willingness to continue to participate, this information will be provided to you by the investigator.

Costs Associated with the Study
Participation in this study will not result in any expenses to you.

Information about Study Results
The results of the study will also be given at conferences held in 2011 and 2012.

Confidentiality and Privacy
For the surveys, no identifying information of participants will be linked to the data. Only grouped data will be reported during the dissemination of our findings. Individual responses will not be reported. If the results of the study are reported in a publication, this document will not contain any information that would identify you. Representatives of The University of Western Ontario Health Sciences Research Ethics Board may contact you or require access to your study-related records to monitor the conduct of the research.

Each participant will be given a personal identification number (PIN) in order to link individual data across timeframes for the survey. The Research Assistants at The University of Western Ontario will link study PINs to your name only for the purposes of distributing information letters and surveys to you. Data will be sent directly to Western with only the PIN as the identifier. All participant names and assigned PINs will be destroyed as soon as the data collection is complete. The survey distribution will consist of the survey as well as a reminder letter, followed by a reminder letter a few weeks later, and finally a second distribution of the survey asking non-respondents to complete the survey if they haven't yet done so.

Contacts for Study Questions or Problems
If you have any further questions about this study, please feel free to contact Dr. Heather Laschinger at the contact below. We would very much appreciate your participation in this

research project. If you choose to participate in the survey, please use the pre-addressed, stamped envelope enclosed to return your completed written questionnaire to the research office. If you choose not to participate, please return the blank questionnaire, after which you will not be contacted further. Thank you very much for considering our request.

You indicate your voluntary agreement to participate by completing and returning this questionnaire. This letter is yours to keep. If you have any questions about your rights as a research participant or the conduct of the study, you may contact Dr. David Hill, Scientific Director, Lawson Health Research Institute, or The Office of Research Ethics

Sincerely,

Heather Laschinger, RN, PhD
Professor, Co-Principal Investigator
School of Nursing
University of Western Ontario

B. 02

Reminder Letter to New Graduate Nurses

New Graduate Experiences of Incivility and Burnout in the Workplace: Impact of Empowering Professional Practice Environments on New Graduates' Health and Wellbeing

Principal Researcher:
Heather Laschinger, RN, PhD, FAAN, FCAHS
University of Western Ontario

Funding: The University of Western Ontario

Dear Nursing Colleague,

Four weeks ago, you were sent a package containing an information letter and questionnaire for a research study we are conducting at The University of Western Ontario. If you have already completed and returned your survey, we thank you very much for your time and valuable participation in our study.

Your answers to the questions are important to the results of the study. The questionnaire has been sent to a small, but representative sample of new graduate nurses in Ontario. Therefore, it is important that your answers be included in the study if the results are to accurately represent the opinions of new graduate nurses. While participation is strictly voluntary, we understand that you may have chosen not to take part. If you do not wish to participate, please return the blank questionnaire in the pre-addressed, stamped envelope. In doing so, you will not be contacted further. You may keep the gift certificate enclosed with the survey whether or not you choose to participate. Completion and return of the questionnaire indicates your consent to participate in the study.

If you have any questions about this study, feel free to contact the project coordinator, _____. Thank you very much for considering our request.

Sincerely,

Heather Laschinger, RN, PhD, FAAN, FCAHS
Distinguished University Professor and Arthur Labatt Family Nursing Research Chair in Health Human Resource Optimization
Principal Investigator
Arthur Labatt Family School of Nursing
University of Western Ontario

APPENDIX C

Ethics Approval

C. 01 The University of Western Ontario Review Board of Health Sciences Research Involving Human Subjects Certificate of Approval

C. 01

ETHICS APPROVAL NOTICE

Western

Office of Research Ethics

The University of Western Ontario
Room 4180 Support Services Building, London, ON, Canada N6A 5C1
Telephone: (519) 661-3036 Fax: (519) 850-2466 Email: ethics@uwo.ca
Website: www.uwo.ca/research/ethics

Use of Human Subjects - Ethics Approval Notice

Principal Investigator: Dr. H.K.S. Laschinger
Review Number: 16093E **Review Level:** Expedited
Review Date: April 16, 2009
Protocol Title: New Graduate Experiences of Incivility and Burnout in the Workplace: Impact of Empowering Professional Practice Environments on New Graduates' Health and Wellbeing
Department and Institution: Nursing, University of Western Ontario
Sponsor: MOHLTC-MINISTRY OF HEALTH
Ethics Approval Date: April 28, 2009 **Expiry Date:** March 31, 2012
Documents Reviewed and Approved: UWO Protocol, Letter of Information (Survey), Letter of Information and Consent (Interview), Contact for Interview Form
Documents Received for Information:

This is to notify you that The University of Western Ontario Research Ethics Board for Health Sciences Research Involving Human Subjects (HSREB) which is organized and operates according to the Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans and the Health Canada/ICH Good Clinical Practice Practices: Consolidated Guidelines; and the applicable laws and regulations of Ontario has reviewed and granted approval to the above referenced study on the approval date noted above. The membership of this REB also complies with the membership requirements for REB's as defined in Division 5 of the Food and Drug Regulations.

The ethics approval for this study shall remain valid until the expiry date noted above assuming timely and acceptable responses to the HSREB's periodic requests for surveillance and monitoring information. If you require an updated approval notice prior to that time you must request it using the UWO Updated Approval Request Form.

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 HSREB except when necessary to eliminate immediate hazards to the subject or when the change(s) involve only logistical or administrative aspects of the study (e.g. change of monitor, telephone number). Expedited review of minor change(s) in ongoing studies will be considered. Subjects must receive a copy of the signed information/consent documentation.

Investigators must promptly also report to the HSREB:

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.

If these changes/adverse events require a change to the information/consent documentation, and/or recruitment advertisement, the newly revised information/consent documentation, and/or advertisement, must be submitted to this office for approval.

Members of the HSREB who are named as investigators in research studies, or declare a conflict of interest, do not participate in discussion related to, nor vote on, such studies when they are presented to the HSREB.

Chair of HSREB: Dr. Joseph Gilbert

Ethics Officer to Contact for Further Information

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

cc: ORE File

CURRICULUM VITEA

Name: Lisa Stam

Post-secondary Education and Degrees:

The University of Western Ontario
London, ON, Canada
2004-2008, BScN

The University of Western Ontario
London, ON, Canada
2010-2012, MScN

Related Work Experience:

Emergency Department Nurse
London Health Sciences Centre, London, ON
2008-2012

Research Assistant
The University of Western Ontario, London, ON, 2010-2012

Nursing Clinical Instructor
The University of Western Ontario, London, ON, 2011

Professional Memberships:

- College of Nurses of Ontario
- Registered Nurses Association of Ontario
- The Honours Society of Nurses, Sigma Theta Tau International: Iota Omicron Chapter
- Emergency Nurses Association of Ontario
- National Emergency Nurses Affiliation

Publication:

Laschinger, H. K. S., Wong, C. A., Grau, A. L., Read, E. A., & Stam, L. M. P. (2011). The influence of leadership practices and empowerment on Canadian nurse managers. *Journal of Nursing Management* (Early Online Publication)