PART-TIME NURSE FACULTY INTENT TO REMAIN EMPLOYED IN THE ACADEMIC ORGANIZATION

by

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ABSTRACT

Part-time Nurse Faculty Intent to Remain Employed in the Academic Organization

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Part-time nurse faculty play an important role in the production and quality of the nursing workforce. However, the shortage of nurse faculty exacerbates current shortages of nurses. In Canada, the shortage is predicted to reach 60,000 full-time equivalent registered nurses by 2022. Therefore, retaining qualified part-time nurse faculty in academia is a key component in managing the shortage problem.

The purpose of this study was to test and refine a model of part-time nurse faculty intent to remain employed in the academic organization.

Cross-sectional survey methods were employed. A total of 282 part-time nurse faculty employed within Ontario, Canada colleges or universities were invited to participate. Survey instruments and items measured demographic, workplace, nurse responses to the workplace, and external variables. Correlation and multiple regression analyses were conducted using data from 119 participants (47.6% true response rate).

Of the 19 variables hypothesized to affect intent to remain employed in the academic organization, seven influenced intent to remain. The resulting model indicated that the older the part-time nurse faculty member, the lower the level of intent to remain and the more years worked in the organization, the higher the level of intent to remain. The more
opportunities perceived to exist outside of the employing organization, the higher the level of intent to remain. Additionally, the more satisfied part-time nurse faculty were with their job overall, the higher their level of intent to remain. In the workplace, the more support from the leader, the more formal or informal recognition received, and the more fair work procedures were perceived to be, the higher levels of part-time nurse faculty intent to remain employed in the academic organization, mediated by job satisfaction.

Although age, organizational tenure, and external career opportunities are non-modifiable variables, deans and directors can encourage part-time nurse faculty to remain employed in their academic job by focusing on enhancing overall job satisfaction. Effective strategies may include formal or informal acknowledgement of good performance, consistent verbal and behavioural support, and implementation of procedural practices, such as performance evaluations and pay raises in a fair manner.
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CHAPTER ONE: INTRODUCTION

The purpose of this doctoral study is to develop, test, and refine a theory of part-time nurse faculty intent to remain employed in the academic organization. The aim of this chapter is to discuss the state of the research concerning part-time nurse faculty intent to remain employed in the academic organization. The objectives of the introduction are to:

1. Examine the determinants and consequences of the shortage of nurses more broadly, and the shortage of nurse faculty more specifically.
2. Discuss the significance of nurse faculty to the nursing profession.
3. Identify the problem in and gap in nursing literature regarding part-time nurse faculty intent to remain employed in the academic organization.

Various terms are used in the literature, such as nurse educator and nurse teacher, in reference to nurse faculty. Throughout this thesis, only the term, nurse faculty is used.

Shortage of Nurses

There is a global shortage of nurses (Buchan & Aiken, 2008; Buchan & Calman, 2005; Oulton, 2006). A number of factors influence the shortage, such as an aging registered nurse (RN) workforce nearing retirement (Bellack, 2004; Curl, Smith, Chisholm, Hamilton, & McGee, 2007; Falk, 2007; Garey, 2007; Hinshaw, 2001; Horton, 2003); declining enrolments in nursing schools (Hinshaw, 2001); poor work environments (Hinshaw, 2001); poor salaries (Brady, 2007; Falk, 2007; Gazza & Shellenbarger, 2005; Merwin, Stern, & Jordan, 2008; Starnes-Ott & Kremer, 2007); an increase in turnover rates (Bednash, 2000; Cooksey, McLaughlin, Russinof, Martinez, & Gordon, 2004; Goodin, 2003, Sochalski, 2002); and a deficit of nurse faculty (Bellack, 2004; Brady, 2007; Curl et al., 2007; DeYoung, Bliss, & Tracy, 2002; Dunham-Taylor, Lynn, Moore, McDaniel, & Walker, 2008; Falk, 2007; Shipman & Hooten, 2008; Smith & Zsohar, 2007). The shortage in Canada is expected to reach its highest projected shortfall of 60,000 RN full-time equivalents by 2022 (Canadian Nurses Association [CNA], 2009). Voluntary nurse turnover behaviour contributes to the shortage and is a phenomenon that has been studied for decades. Several literature reviews (Hayes, O’Brien-Pallis, Duffield, Shamian, Buchan et al., 2006; Tai, Bame, & Robinson, 1998) and meta-analyses (Irvine & Evans, 1995; Yin & Yang, 2002) have been published on the turnover phenomenon, demonstrating its significance in the supply and demand of the nursing workforce. In Canada, acknowledgement of current and
projected shortages has resulted in implementation of several initiatives financially supported by government agencies to manage the projected shortfall (e.g., Ontario’s Ministry of Health and Long-term Care’s Nursing Graduate Guarantee Initiative and Late Career Nurse Initiative).

There has been an increase in the number of graduates from diploma and baccalaureate programs, master’s and doctoral nursing programs, and RNs in practice (CNA/Canadian Association of Schools of Nursing [CASN], 2008). According to a Canadian Nurses Association and Canadian Association of Schools of Nursing (2008) report, approximately 12,000 graduates are needed each year to address the projected shortage. Since Canada’s 29-year low of 4,833 RN graduates eligible for licensure in 1999, there has been a steady increase in nursing graduates. In 2010, 10,827 students graduated from Canadian entry-to-practice nursing programs. While there has been a marked increase in the nursing workforce, the Canadian health care system continues to function on a deficit of nurses. According to the Canadian Institute for Health Information (CIHI, 2012), there were approximately 291,000 RNs delivering care in Canada in 2011. However, with a current shortfall of approximately 22,000 nurses (Winsten, 2011), Canada needs more nurses to meet the changing health care needs of the population.

The Problem

Shortage of Nurse Faculty

Exacerbating the shortage of nurses is the shortage of nurse faculty. The shortage of nurse faculty is becoming widely acknowledged among scholars and nursing associations (Bartels, 2007; Bellack, 2004; Brady, 2007; Brendtro & Hegge, 2000; CNA/CASN, 2008; Curl et al., 2007; DeYoung et al., 2002; Dunham-Taylor et al., 2008; Falk, 2007; Garey, 2007; Gazza & Shellenbarger, 2005; Hinshaw, 2001; Horton, 2003; Marshall, 2001; Merwin et al., 2008; Shipman & Hooten, 2008; Smith & Zsohar, 2007; Starnes-Ott & Kremer, 2007). Nurse and nurse faculty shortages are inherently interwoven (Brady, 2007; Shipman & Hooten, 2008; Starnes-Ott & Kremer, 2007). This relationship sets up a cycle that perpetuates faculty shortages as service sectors adjust salaries and workloads to maintain a competitive edge (Brady, 2007). According to DeYoung et al. (2002), the shortage of faculty, researchers, and doctoral students is one of the most critical problems facing the discipline. Initiatives to increase the nursing workforce by increasing education seats cannot
be sustained without an adequate number of faculty to manage the increase. For instance, due to the shortage of nurse faculty in the US, 41,683 qualified applicants were turned away from baccalaureate and graduate nursing programs during the 2005 – 2006 academic year (Falk, 2007). In 2005, Canadian nursing schools recruited more than 400 full-time and part-time nurse faculty in 2005 (CNA/CASN, 2008). However, 2006 projections indicated that 350 full-time and part-time positions would go unfilled. In a more recent CNA/CASN (2012b) report, Canadian nursing schools were unable to fill 76 full-time positions, representing a 3.3% vacancy in the 2010 – 2011 academic year. Schools projected a need to hire 215 full-time faculty in 2012. The CNA and CASN (2012b) also reported that 644 RNs graduated with a master’s degree and 89 RNs graduated with a PhD. Yet, of those who graduated, it is uncertain whether they were recruited as faculty and retained in academic organizations.

**Contributing Factors of the Nurse Faculty Shortage**

The number of influencing factors of the faculty shortage indicates its complexities. The most commonly cited factor is an aging professoriate, which goes hand-in-hand with retirement (Bellack, 2004; Berlin & Sechrist, 2002; Brendtro & Hegge, 2000; Curl et al., 2007; DeYoung et al., 2002; Falk, 2007; Garey, 2007; Hinshaw, 2001; Horton, 2003; Leonard, Fulkerson, Rose, & Christy, 2008; Smith & Zsohar, 2007; Starnes-Ott & Kremer, 2007). In 2006, 43% of nurse faculty were 50 years of age or older. In the same year, the proportion of nurse faculty 40 years and older exceeded the proportion of nurses 40 years and older of the total RN workforce (CIHI, 2007). American statistics are comparable. According to a 2008 – 2009 report, the average ages of doctorally-prepared nurse faculty holding the ranks of professor, associate professor, and assistant professor were 59.1, 56.1, and 51.7 years, respectively (American Association of Colleges and Nursing, 2010). Trends suggest that the large numbers of faculty preparing to retire will not be replaced proportionately. In 1978, approximately 23% of master’s degree candidates were preparing for nurse faculty roles (DeYoung & Bliss, 1995). By 1991, only 10% of nurses with a master’s degree were preparing for a faculty position. In 2001, this percentage decreased even further to 3.1% (Berlin & Sechrist, 2002). Not only does the retirement of senior faculty deplete the numbers of qualified faculty, but the academic system loses valuable human capital. Senior academics have extensive leadership experience, wisdom, intellectual
capacity, and a wealth of skills and abilities (Falk, 2007). For this reason, coupled with the separate issue of recruiting qualified faculty, some scholars recommend implementing retention strategies specific to faculty nearing retirement (Falk, 2007). Creative retention strategies for this sub-group of faculty include employing them as independent contractors on a part-time basis (Bellack, 2004; Brady, 2007). Innovative use of technology could also retain faculty nearing retirement. Curl et al. (2007) recommended that senior faculty teach through clinical simulations, decreasing physical demands and teaching responsibilities. In this way, teaching in the clinical practice setting can be given to faculty with more physical energy to do so.

Other factors attributed to the nurse faculty shortage include: more lucrative positions in sectors other than education (Bellack, 2004; Horton, 2003); a decline in the number of younger faculty (Curl et al., 2007; Garey, 2007); a decline in the number of graduate nurses selecting academic careers (Hinshaw, 2001); alternative career choices for women (Curl et al., 2007; Hinshaw, 2001); a deficit in the number of graduate-prepared RNs (Bellack 2004; Hinshaw, 2001); workload and work environment issues (Curl et al., 2007; Falk, 2007; Gazza & Shellenbarger, 2005; Leonard et al., 2008; Starnes-Ott & Kremer, 2007); family/personal obligations (Gazza & Shellenbarger, 2005); job stress and faculty burnout (Marshall, 2001; Starnes-Ott & Kremer, 2007); unclear and high role expectations (Leonard et al., 2008; Starnes-Ott & Kremer, 2007); a lack of peer support and emphasis on teaching education principles in master’s and PhD programs (Starnes-Ott & Kremer, 2007); lack of interest in teaching, time required and average age of completing doctoral preparation, shorter academic careers related to later entry (Leonard et al., 2008); and poor compensation (Kaufman, 2007; Lambert, 1991; Leonard et al., 2008; Merwin et al., 2008).

**Nurse faculty turnover.** Exacerbating the nurse faculty shortage is the attrition of faculty from academic organizations. A high rate of voluntary turnover adversely affects organizational effectiveness (Hom & Griffeth, 1995). During the last 10 years, the number of full-time and part-time RNs working as nurse faculty in Ontario college or university nursing programs has increased and decreased several times. The largest decrease in the number of nurse faculty occurred between 2003 and 2004, from 1,390 to 1,018 (College of Nurses of Ontario [CNO], 2003; CNO, 2004).
Findings from nurse faculty studies imply that turnover and retention are affected by distinct determinants, thereby warranting distinct examination of each. Rouse (2006) identified several factors that encouraged faculty to either stay or leave academia. Retention factors included: love teaching, enjoy students, positive relationships with peers and department heads, good retirement benefits, ability to continue clinical practice, flexible schedule, invested in nursing, and long-term goal to be an academic. Of the list of attrition factors identified, none were the same as the retention factors. Similar to Rouse (2006), Lambert (1991) found that the factors contributing to retention and attrition behaviours of nurse faculty varied. Specifically, faculty of the retention groups identified 240 factors that influenced their retention behaviour compared to 53 factors identified by the attrition group that influenced their attrition behaviour.

**Consequences of the Nurse Faculty Shortage**

Because of the inherent connection between the nurse shortage and nurse faculty shortage, the deficit of nurse faculty may limit the enrolment of students to nursing schools contributing to the profession’s challenges to educate future nurses (Hinshaw, 2001; Leonard et al., 2008; Shipman & Hooten, 2008). Other serious negative consequences include the reduction in numbers of nursing programs and erosion of research to advance practice (Brendtro & Hegge, 2000). DeYoung et al. (2002) more ominously stated that the health of the population is at stake without well-prepared faculty.

**Significance**

*Nurse Faculty Attributes*

According to the CNA and CASN (2008), the supply of faculty is an essential factor that is affecting Canada’s ability to increase its educational capacity and subsequent workforce capacity. Although nurse faculty represent a small proportion of nurses (2.8% of the RN workforce was employed in the academic sector in 2006; CIHI, 2007), they are charged with the responsibility of preparing future nurse clinicians, leaders, educators, and researchers while augmenting the quality of nursing through research, role modeling, and scholarship. Cangelosi (2007) demonstrated the impact of nurse faculty (referred to as clinical instructors) on the clinical abilities of former students. According to student participants, what most prepared them for the clinical setting was nurse faculty who took the time to connect theoretical knowledge with workplace realities. Cangelosi (2007) concluded
that pedagogically skilled clinical instructors helped students see the real world of nursing, bridging the theoretical to reality.

Nurse faculty also function as mentors and have the ability to enhance the academic success of students. McGann and Thompson (2008) found that the mentorship relationship between nurse faculty and students increased student motivation, self-esteem, and decreased anxiety. Faculty mentors who offered alternative strategies and helped students set priorities were described as honest, direct, and excellent listeners.

**Part-time Nurse Faculty**

Along with full-time nurse faculty, part-time nurse faculty play an important role in producing the nursing workforce by combining their clinical, research, and administration expertise with their teaching abilities, and serve as mentors, leaders, and role models to prepare students for nursing practice (Shipman & Hooten, 2008; Snarr & Krochalk, 1996). Academic part-time employment status, typically determined by the institution, is any percentage less than full-time employment (Creech, 2008).

The number of part-time faculty is on the rise (Omiecinski, 2003). According to Omiecinski (2003), the number of part-time faculty in Canadian universities increased by approximately 10% from 25,700 in the 1990–1991 academic year to 28,200 in 1997–1998. In 1999, just 8.7% of university faculty were working part-time. However, by 2005, this had nearly doubled to 17.5%. The number of college faculty increased also, from 21.4% to 26.4% (Lin, 2008). Thus, as post-secondary nursing programs increase their numbers of part-time nurse faculty, organizational efforts to promote retention behaviour should be a priority.

In nurse faculty studies, full-time participants are typically the focus. If part-time participants are included, their sample size is generally small, minimizing or obscuring differences between part-time and full-time nurse faculty. However, part-time nurse faculty may have experiences, attitudes, and intentions to remain employed that differ from those of full-time faculty. In addition to the defined difference between part-time and full-time employment status (i.e., work hours), part-time and full-time nurse faculty typically differ with regards to demographics. Creech (2008) conducted a descriptive study of the part-time nurse faculty role in the US. Data were collected from part-time faculty (n = 99), full-time faculty (n = 94), and administrators (n = 59) employed in nursing schools in the Mid-west.
Creech (2008) reported that only 6.1% of part-time nurse faculty held a doctoral degree compared to 18.0% of full-time faculty and approximately 39.0% of administrators. Five percent of part-time faculty held a rank of assistant professor and above, while 78.7% of full-time faculty and 93.2% of administrators did. One percent of part-time faculty, 33% of full-time faculty, and 44.1% of administrators had been awarded tenure. Those who were on a tenure track included one percent of part-time faculty, 31.9% of full-time faculty, and 25.4% of administrators. Westera (1992) developed a profile of part-time nurse faculty similar to Creech (2008). In Westera’s (1992) descriptive study of 60 part-time nurse faculty employed in Canadian nursing schools, only two percent held doctoral degrees and 93% were not in tenure track positions.

Part-time nurse faculty also differ with respect to time spent on various faculty role components. Full-time faculty roles are traditionally tripartite in nature, which include the following components: research, teaching, and service (Bartels, 2007; Creech, 2008). The part-time faculty role may or may not include all of these components (Creech, 2008). To demonstrate the differences in full-time and part-time faculty roles, Creech (2008) reported on findings of a 1999 study conducted by the National Center for Education Statistics. Teaching, reported by 88% of part-time academic faculty, was the primary activity as compared with 66% of full-time faculty. Only two percent of part-time faculty indicated research as their primary activity.

Findings from Creech’s (2008) study support the notion that part-time nurse faculty spend the majority of their time in the teaching role. Creech (2008), who measured faculty scholarship (i.e., teaching, research, services, and integration/synthesis) found that part-time nurse faculty spent the majority of their time in service and teaching roles (service role, $M = 2.85$; teaching role, $M = 2.84$; research role, $M = 1.51$; integration/synthesis role, $M = 1.39$, along a one to five scale where 1 = seldom and 5 = always). In addition, performance of the part-time faculty role on all four scholarship domains differed statistically by level of education. Doctorally-prepared part-time faculty performed more research, teaching, service, and integration activities than did less educationally-prepared part-time faculty. In Westera’s (1992) study of part-time nurse faculty employed in Canadian university nursing programs, 60 part-time faculty reported their responsibilities. Three of the four top ranked responsibilities pertained to the teaching role. Specifically, 87% had clinical supervision...
responsibilities, 77% advised students, and 65% had classroom teaching. Similar to Creech’s (2008) findings, the least amount of time was spent doing research (10%).

Research also suggests that the part-time nurse faculty role engenders unique work attitudes. For instance, 78% of 60 part-time nurse faculty in Westera’s (1992) study believed that they should receive a salary at the same rate as their full-time counterparts. The majority of the part-time participants were of the opinion that they should accrue time toward tenure and should be allowed to advance in rank (75% and 89%, respectively). Although part-time employment allowed for flexibility to manage multiple role obligations, part-time nurse faculty expressed dissatisfaction with job security, compensation and fringe benefits, and career advancement opportunities. One participant said: “Part-time allows for little or no career planning. It appears to suit the needs of the university but short-changes it as well…” (Westera, 1992, p. 53). Another commented: “My main frustration is that I cannot advance…as a part-time faculty member I am not eligible for tenure” (p. 53). Westera’s (1992) findings are not surprising. Fagan (2004) stated that part-time work tends to be associated with lower wages, fewer benefits, and less opportunity for career advancement. In an exploratory study into the experience of part-time nurse faculty compared to full-time nurse faculty, Wareham (1996) found that the experience of the part-time faculty role was relatively negative. Using ethnographic methodology, four major themes emerged from interviews with five part-time and five full-time nurse faculty in the United Kingdom. Part-time nurse faculty: (1) feared not being fully informed of important organizational and curriculum issues, (2) felt vulnerable when they felt not included in the formal network system, (3) felt pressured to take work home, and (4) appreciated flexibility to manage multiple obligations.

In summary, research strongly suggests that the workplace experiences of part-time nurse faculty differ than those of full-time nurse faculty. Therefore, the experiences of part-time nurse faculty affect the determinants of their intent to remain employed and subsequent retention behaviour in different ways than full-time nurse faculty.
Gap in the Literature: Retention/Intent to Remain of Part-time Nurse Faculty

The proportion of part-time faculty is increasing rapidly, yet, the issue of part-time nurse faculty retention has not been studied extensively (Creech, 2008; Lin, 2008). If faculty shortages persist, the nursing profession will be challenged to educate future nurses, with a possible reduction in numbers of programs and erosion of research to advance practice (Brendtro & Hegge, 2000). One critical component to addressing the nurse shortage crisis is a focus on the retention of faculty to the academic organization. According to a Health Canada report (2007), retention is a key factor in the nursing supply issue. Yet, without an empirically tested theoretical framework of determinants of nurse faculty retention to the academic organization, effective retention strategies cannot be initiated and maintained. Deepening our understanding of the determinants of nurse faculty retention will facilitate the development and implementation of effective strategies that are successful in retaining nurse faculty who are essential in educating future nurses, thereby, lessening the projected shortage.

While there is a clear distinction between full-time and part-time nurse faculty employees (e.g., the number of required work hours), full-time employees remain the focus of retention studies with little attention paid to the diverse issues of the part-time nurse faculty workforce (Senter & Martin, 2007). However, a considerable concern of organizations that employ a large number of part-time nurse faculty is retention (Senter & Martin, 2007). Wakefield, Curry, Mueller, and Price (1987) suggested that part-time employees may respond to reward structures differently than full-time workers as their involvement in organizational life is less. Empirical findings support the notion of differential work-attitudes and behaviours between full-time and part-time staff. Zeytinoglu et al. (2007) found that part-time hospital nurses had a greater intention to turnover than full-time nurses. Relationships between various organizational characteristics and outcomes, job satisfaction, and turnover intentions also differed by employment status. For instance, Zeytinoglu et al. (2007) found that workload was a statistically significant negative determinant of full-time nurse job satisfaction, but not a determinant of part-time nurse satisfaction. Among part-time nurses, the external work environment (defined as, nurses’ perceptions of important decisions being made outside of the hospital, limited resources, and budget cuts) was negatively related and stress was positively related to turnover intentions,
yet both were unrelated to turnover intentions of full-time staff. In a study of 1,876 hospital workers, Wakefield et al. (1987) concluded that part-time and full-time workers differed in terms of the importance they assigned to various work outcomes, including variety, pay, fringe benefits, advancement, having close friends at work, being informed about the job, participation in decision-making, fairness of rewards, and doing the job well.

Despite evidence to suggest differential responses to workplace characteristics between part-time and full-time nurses, none of the research that examined determinants of nurse faculty retention clearly differentiated between determinants of full-time and part-time faculty retention. Some scholars examined nurse faculty retention of only full-time faculty (Acorn, 1991; Garbee & Killacky, 2008; Holland, 1992). Other scholars collected retention data of both full-time and part-time faculty (Piskac, 2008; Reynolds, 1997; Rouse, 2006), however, analysis by employment status was omitted.

**Intent to Remain Employed and Retention Behaviour**

This study will not examine retention behaviour directly, but will examine one of its direct precursors, intent to remain employed. Intent to remain employed is the conscious and deliberate wilfulness to remain employed in the organization (Tett & Meyer, 1993). Research indicates that intent to remain is a direct predictor of actual retention behaviour (Kim, Price, Mueller, & Watson, 1996; Mueller & Price, 1990; Price & Mueller, 1981). Thus, if a nurse faculty member intends to remain employed in the academic institution, he or she is likely to follow through with this intention and remain employed with their organization. It is argued that intent to remain is an appropriate indicator of actual retention behaviour, as intention precedes action. Scholars, Ajzen and Fishbein (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) developed a theory of the causal order of intentions and behaviours. The main premise of their *Theory of Reasoned Action* is that behaviour is driven by behavioural intentions, which is a function of attitude and subjective norms surrounding the performance of the behaviour. A significant body of literature suggests that intent to remain is a direct predictor of retention behaviour through which other factors operate (Griffeth, Hom, & Gaertner, 2000; Hinshaw, Smeltzer, & Atwood, 1987; Hom & Griffeth, 1995; Irvine & Martin, 1995; Taunton, Boyle, Woods, Hansen, & Bott, 1997; Tett & Meyer, 1993). Based on empirical research, it is assumed that intent to remain employed is a precursor of retention behaviour as intent to remain directly precedes retention.
The overall aim of this doctoral study is to develop, test, and refine a theory that explains and predicts part-time nurse faculty intent to remain employed in the academic organization. A review of the related nurse faculty literature was undertaken to develop the proposed theoretical model for this study.
CHAPTER TWO: REVIEW OF THE RELATED LITERATURE

The purpose of this chapter is to identify existing knowledge related to intent to remain employed and retention of nurse faculty, other nursing and employee groups; and to synthesize related literature to develop the proposed theoretical model for this study. The objectives of the literature review are to:

1. Examine the theoretical perspectives of intent to remain employed and retention.
2. Investigate previously examined and empirically supported determinants of nurse faculty intent to remain employed in the academic organization.
3. Develop a theoretical model of part-time nurse faculty intent to remain employed in the academic organization based on empirically established determinants of intent to remain of nurse faculty, other nursing groups, and other employee groups.

Scope of the Literature Review

Search Strategy

The review of the related literature began with searching the nursing, health services research, and organizational behaviour database literatures indexed in Cumulative Index to Nursing and Allied Health Literature (CINAHL), Scholars Portal, and ProQuest Digital Dissertations using the keywords *intent to remain, intention to remain, intent to stay, intention to stay or personnel retention, and faculty and nurses*. The initial search resulted in 37 references, which were then limited to English research manuscripts. The narrowed search resulted in 17 manuscripts comprised of 9 journal manuscripts and 8 doctoral dissertations. One recent unpublished study of nurse faculty intent to remain was added. Studies are summarized in Appendix A.

Organization of Literature Review

The literature review consists of two major sections. The first section examines various theoretical models of employee intent to remain employed and retention. The second section reviews and synthesizes the empirical determinants of nurse faculty intent to remain employed and retention. Also included in this section is a brief discussion of concepts, intent to remain and intent to leave the employing institution. This section is divided into ten main categories of determinants of intent to remain employed: (1) nurse faculty demographic characteristics, (2) job characteristics, (3) role characteristics, (4) leadership characteristics,
(5) work group characteristics, (6) organizational characteristics, (7) external characteristics, (8) nurse faculty responses to workplace and external characteristics, (9) relationship between job satisfaction and organizational commitment, and, (10) relationship between workplace characteristics, external characteristics, and nurse faculty responses. Each section concludes with a figure that illustrates hypothesized relationships. The literature review chapter concludes with the hypothesized theoretical model that will be tested and refined in this study.

Overview of the Literature: Part-time Nurse Faculty Intent to Remain Employed

In the context of understanding the determinants of part-time nurse faculty intent to remain employed, common issues in nurse faculty studies were noted. There are limitations in the body of knowledge. First, this literature review underscores the paucity of knowledge specific to the determinants of part-time nurse faculty intent to remain employed. The majority of the nurse faculty studies included in this review did not examine associations between workplace characteristics and intent to remain specific to part-time faculty exclusively. Second, exclusion of this large proportion of nurse faculty limits generalizing study findings of full-time faculty to part-time faculty. Third, studies that did include part-time faculty tended to have a small sample size. Small sample sizes give rise to unreliable and inaccurate results (Polit & Beck, 2010). This study arises at an opportune time as findings will contribute important knowledge to the nurse faculty intent to remain employed body of knowledge. Yet, due to the aforementioned limitations in knowledge, empirical findings of other nursing and other faculty groups that examined intent to remain employed were used to help develop hypotheses for this study. In the literature, the terms intent to remain and intent to stay were used interchangeably. For the remainder of this dissertation, intent to remain will be used.

Theoretical Perspectives of Intent to Remain Employed

Although nurse intent to remain employed (ITR) and retention theories differ in their complexity and inclusion of determinant variables, their commonality lies in the proposition of a multi-stage, attitudinal (e.g., organizational commitment and job satisfaction), decisional (intent to act), and behavioural process (Tourangeau, Cummings, Cranley, Ferron, & Harvey, 2010). These theories draw from the seminal work of researchers, Ajzen and Fishbein (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) who developed the model, Theory of
Reasoned Action, for the prediction of behavioural intentions and/or actual behaviour. The behavioural component relates to the act of retention. The decisional component describes the intention to act viewed as the direct causal variable through which other variables influence actual retention behaviour (Irvine & Evans, 1995; Mueller & Price, 1990). The attitudinal component includes, but is not limited to, job satisfaction and organizational commitment. The main premise of the theory contends that behavioural intentions are the direct and most significant determinants of behaviour. Therefore, nurses who intend to remain employed in the organization are likely to remain employed (Beecroft, Dorey, & Wenten, 2008; Irvine & Evans, 1995; Iverson, 1992; Price & Mueller; 1981; Taunton et al., 1997; Tourangeau & Cranley, 2006).

Nurse Faculty Intent to Remain Models

Tourangeau et al.’s model. Recently, Tourangeau, Ferron, Patterson, Thomson, Saari, Widger, and MacMillan (2013) conducted a cross-sectional survey study to test their conceptual model of predictors of nurse faculty intent to remain employed for five years on 650 full-time and part-time nurse faculty working in colleges or universities in Ontario, Canada. The authors examined 24 variables organized into four categories: (1) personal characteristics, (2) job content, (3) work environment and organizational support, and (4) external characteristics. Using stepwise regression analysis, eight variables were found to predict intent to remain: age, having dependents, quality of education, quality of relationships with colleagues, satisfaction with salary and benefits, satisfaction with job status, access to required materials, and being unionized. These variables explained 19.6% (adjusted $R^2$) of the variance in nurse faculty intent to remain employed for the next five years.

Other Faculty Intent to Remain Models

Al-Omari et al.’s model. Al-Omari, Qablan, and Khasawneh (2008) tested their hypothesized model of faculty intent to remain on a sample of 139 full-time instructional faculty from various departments in a public Jordanian university. They hypothesized that several variables grouped into four categories directly influenced intent to remain: (1) work life variables – autonomy, communication openness, distributive justice, role conflict, workload; (2) psychological variables – job satisfaction and organizational commitment; (3) external variable, job opportunity, and; (4) demographic variables – gender and faculty rank.
They also hypothesized that the work life, external, and demographic variables indirectly influenced intent to remain through job satisfaction and organizational commitment. The researchers found that the model explained 47% of the variance in ITR. Several variables were found to predict faculty intent to remain. Specifically, job opportunity, job satisfaction, and organizational commitment directly predicted intent to remain. Autonomy, communication openness, role conflict, and workload were found to predict intent to remain indirectly through both job satisfaction and organizational commitment. Distributive justice indirectly predicted intent to remain through organizational commitment only.

**Daly and Dee’s model.** In 2006, Daly and Dee tested their model of faculty intent to stay on 768 full-time instructional faculty from 15 public universities in the US. Instructional faculty were defined as members of the instructional/research staff who were employed full-time and whose major regular assignment was instruction. The researchers proposed that intent to remain is directly influenced by several constructs, grouped into four categories: (1) structural variables – autonomy, communication openness, distributive justice, role conflict, and workload; (2) psychological variables – job satisfaction and organizational commitment; (3) demographic variables – gender, race, marital status, academic rank, years in current institution, and years in profession, and; (4) external environment variables – job opportunity and kinship responsibility. Daly and Dee (2006) also hypothesized that the structural and external environment variables indirectly predicted intent to remain through the psychological variables, job satisfaction and organizational commitment. Using path analysis, it was found that job satisfaction, organizational commitment, and job opportunity directly influenced faculty intent to remain employed. Autonomy, communication openness, and role conflict directly predicted both job satisfaction and organizational commitment. Distributive justice indirectly predicted intent to remain through organizational commitment. The model explained 53% of the variance in faculty intent to remain employed.

**Other Nurse Intent to Remain Models**

**Tourangeau et al.’s model.** Tourangeau et al.(2010) hypothesized a model of Determinants of Hospital Nurse Intention to Remain Employed. The model was developed from data gathered from 13 focus groups of 78 nurses working in two Canadian provinces. Using thematic analysis strategies, eight categories emerged reflecting factors nurses described as influencing their intentions to remain employed: (1) relationships with co-
workers, (2) condition of the work environment, (3) relationship with and support from one’s manager, (4) work rewards, (5) organizational support and practices, (6) physical and psychological responses to work, (7) patient relationships and other job content, and (8) external factors. Each category is hypothesized to directly impact intent to remain employed. Direct effects between categories were also hypothesized. Specifically, condition of the work environment is hypothesized to be directly impacted by relationships with co-workers, relationship with and support from managers, and organizational support and practices. Physical and psychological responses to work is directly influenced by condition of the work environment, patient relationships and job content, and work rewards.

Tourangeau and Cranley’s model. In 2006, Tourangeau and Cranley tested their theoretical model of Determinants of Nurse Intention to Remain Employed among a sample of 8,456 nurses from 75 hospitals in Ontario, Canada. The researchers proposed that various personal, workplace, and psychological characteristics influence nurses’ intentions to remain employed in the hospital setting. In turn, intent to remain employed was hypothesized to predict retention behaviour, although this relationship was not tested. Using stepwise regression, the following variables were found to predict intent to remain employed: age, years employed in hospital, baccalaureate or higher degree, employed full-time, registered nurse, male, overall job satisfaction, satisfaction as a nurse, satisfaction with praise and recognition, satisfaction with co-workers, satisfaction with interaction opportunities, and teamwork. Thus, nurses who were older, employed in the hospital longer, employed full-time, did not have a baccalaureate degree or higher, were registered practical nurses rather than registered nurses, female, generally satisfied with their job, satisfied as a nurse, satisfied with praise and recognition they received, satisfied with their co-workers, satisfied with interaction opportunities at work, and reported more effective teamwork were more likely to remain employed until retirement. Evidence was not found to support Tourangeau and Cranley’s (2006) hypotheses that burnout and manager ability and support directly predicted intent to remain. They did hypothesize, post hoc, that burnout and manager ability and support are determinants of job satisfaction, which in turn predicts intent to remain. The model explained 34% of the variance in intent to remain employed.

Boyle et al.’s model. Boyle, Bott, Hansen, Woods, and Taunton (1999) hypothesized that intensive care nurses’ intent to remain is influenced by four sets of variables: (1)
manager characteristics – power, influence, and leadership style; (2) organizational characteristics – distributive justice, promotional opportunity, control over practice, and unit characteristics; (3) nurse characteristics – opportunities elsewhere, job decision priorities, nursing education, tenure, years in position, years in hospital, years in profession, and marital status, and; (4) work characteristics – autonomy, instrumental communication, work group cohesion, and routinization. The four sets of variables were hypothesized to influence intent to remain indirectly through job stress, job satisfaction, and commitment. The model was tested on a sample of 255 intensive care unit staff nurses. Using causal modeling and multiple regression path analysis, Boyle et al. (1999) found that five variables directly predicted intent to remain: manager position power, manager influence over work coordination, promotional opportunity, opportunity elsewhere, and job satisfaction. Although indirect effects were found between manager characteristics, organizational characteristics, work characteristics, intervening variables, and intent to remain, none of the path coefficients were statistically significant. The model explained 52% of the variance in intent to remain.

**Tallman and Bruning’s model.** Retention of hospital nurses stretches beyond urban areas as it is equally of concern for managers in northern and rural hospitals. Recognizing this problem, Tallman and Bruning (2005) developed a theory of intent to remain which they tested on a sample of 122 nurses from 13 northern hospitals in Western Canada. The researchers proposed the following: (1) affective commitment (i.e., emotional attachment to the organization), continuance commitment (i.e., costs associated with staying or leaving the organization), work experiences (job and decision latitude, feedback, perceptions of how nurses are viewed and treated by others, fairness of policies, and safety of the job environment), and community ties are directly related to intent to remain; (2) work experiences are directly related to job satisfaction and affective commitment; (3) job satisfaction is directly related to affective commitment, and; (4) age, tenure, and community ties are directly related to continuance commitment. Using regression analysis, Tallman and Bruning (2005) found the following direct predictors of intent to remain employed: affective commitment, continuance commitment, and ties to the community. Direct predictors of affective commitment and continuance commitment were as follows: job satisfaction and management actions, and ties to the community, age, and tenure, respectively. Management
actions and job latitude directly influenced job satisfaction. Unlike several other scholars (e.g., Cross & Billingsley, 1994; Tourangeau & Cranley, 2006), Tallman and Bruning (2005) did not hypothesize a direct relationship between job satisfaction and intent to remain.

Ellenbecker et al.’s model. Ellenbecker, Porell, Samia, Byleckie, and Milburn (2008) tested their Theoretical Model of Home Healthcare Nurse Job Retention on a sample of 1,912 of home care nurses. Ellenbecker et al. (2008) hypothesized that characteristics of job satisfaction (e.g., relationship with administration, stress, and workload), individual nurse characteristics, and agency and market characteristics (e.g., agency ownership, opportunities elsewhere) are directly related to intent to remain and directly and indirectly related to retention. Using structural equation modeling to test the theoretical model, Ellenbecker et al. (2008) found several direct predictors of retention: job tenure, job satisfaction, intent to remain, living arrangement, retirement plan, position of direct patient care, non-profit agency, and wages. Intent to remain was directly predicted by job satisfaction, position in direct patient care, education, and agency size.

Empirical Determinants of Nurse Faculty Intent to Remain Employed

Intent to Remain and Intent to Leave

In the literature, there are two main schools of thought regarding the conceptualization of intent to remain and intent to leave. Some scholars consider intent to remain and intent to leave as concepts along the same continuum (Iverson, 1992; Price & Mueller, 1981; Reynolds, 1997; Zeytinoglu et al., 2007). Zeytinoglu et al. (2007) explicitly articulated this assumption, stating that intent to remain and intent to leave are opposite sides of the same coin. Scholars who hold to this hypothesis contend that predictors of intent to remain, affect intent to leave in the opposite direction. Many researchers adopt this assumption, which is reflected in their research (Gurney, Mueller, & Price, 1997; Reynolds, 1997). Gurney et al.’s (1997) interpretation of findings provides an illustrative example. The researchers interpreted a negative path coefficient between promotional opportunities and intent to leave employment to mean that when promotional opportunities are high, intent to remain is also. While this finding makes theoretical sense, it is not a precise interpretation of the empirical finding as the finding indicates that when promotional opportunities are high, intent to leave is low. Conversely, other scholars conceptualize intent to remain and intent to leave as distinct concepts (Cho, Johanson, & Guchait, 2009; Irvine & Evans, 1995;
Kim et al., 1996). Irvine and Evans (1995) empirically supported this hypothesis in their meta-analysis of nurse studies that examined job satisfaction and turnover. Irvine and Evans (1995) examined studies that operationalized behavioural intentions in one of the following ways: intent to leave, intent to stay, or intent to search. The manner in which behavioural intentions were measured (e.g., intent to remain versus intent to leave) had a differential effect on job satisfaction. Specifically, the mean correlation for intent to remain was .43 compared to intent to leave’s correlation coefficient of -.54.

Findings from Cho et al.’s (2009) study of 416 hospitality employees support the assumption that decreasing the degree of a variable affecting intent to leave influences intent to remain is not always true. Findings indicate that intent to remain and intent to leave are affected by job content and work environment characteristics differently. Specifically, perceived organizational support was related to lower levels of intent to leave (b = -.16, t = -2.26) and was related to higher levels of intent to remain almost double in magnitude (b = .36, t = 5.15). Organizational commitment was associated with lower levels intent to leave (b = -.38, t = -5.39) but was not associated with higher levels intent to remain. Results of Cho et al.’s (2009) study implies caution against the assumption that determinants empirically established as affecting one cognition automatically affect the opposite cognition.

In sum, there is sufficient discussion among scholars, supported by empirical evidence, to suggest that intent to remain and intent to leave are distinct, yet related concepts, warranting investigation of each separately. Therefore, only literature that examined the determinants of intent to remain and retention are included in this dissertation.

**Nurse Faculty Characteristics and Intent to Remain**

In this section, the demographic characteristics include: age, organizational tenure, and graduate-level education.

a. Age

**Nurse faculty.** Studies have shown that age influences nurse faculty intent to remain. Tourangeau et al. (2013) conducted a cross-sectional study to test their model of nurse faculty intent to remain employed. On a sample of 650 full-time and part-time nurse faculty employed in colleges and universities in Ontario, Canada, using stepwise regression, the authors found that age negatively predicted intent to remain (ITR) for five years (β = -
.30, $p < .001$), therefore, the older the nurse faculty member, the lower the level of ITR for the next five years.

**Other nursing groups.** In Tourangeau and Cranley’s (2006) cross-sectional descriptive study of 8,456 acute care nurses from 75 hospitals, age positively predicted intent to remain employed ($\beta = .32, p < .001$).

**Other employee groups.** Cho et al. (2009) conducted a study of 416 hospitality employees in the US. The authors found that age was positively related to intent to remain employed ($r = .29, p < .01$). Therefore, the older the hospitality employee, the higher the level of intent to remain.

b. Organizational tenure

**Other nursing groups.** Tourangeau and Cranley (2006) found that increased years of employment at the current hospital was one of the most significant predictors of acute care nurses’ intent to remain in the hospital ($\beta = .18, p < .001$).

**Other employee groups.** Cho et al. (2009) found that organizational tenure were positively related to intent to remain among hospitality employees ($r = .15, p < .01$). Therefore, the more years in the organization, the higher the level of ITR.

c. Graduate-level education

**Other nursing groups.** Findings from studies of other nursing groups suggest that the higher a nurse’s level of education, the lower the level of intent to remain employed. In Tourangeau and Cranley’s (2006) study, the higher the level of education achieved, the lower the level of intent to remain employed. Specifically, hospital nurses with a baccalaureate degree or higher had lower levels of ITR ($\beta = -.01, p < .001$). Ellenbecker et al. (2008) conducted a descriptive correlation study of 1,912 home care nurses from six US states. Similar to Tourangeau and Cranley (2006), Ellenbecker et al. (2008) found that educational level negatively predicted intent to remain ($\beta = -.06, p < .05$).

**Other employee groups.** In studies of other employee groups, level of education has been found to be related to intent to remain. Cho et al. (2009) found that education was negatively related to intent to remain ($r = -.12, p < .05$). Employees with a master’s degree had the lowest level of intent to remain whereas employees with a high school diploma as their highest education level had the highest level of intent to remain.
While demographic characteristics provide some explanatory power for retention, they have few policy or practice implications. Furthermore, findings from the nurse faculty study and studies of other nursing and non-nursing groups that examined relationship, age and intent to remain, differ. However, inclusion of demographics in the study of nurse faculty intent to remain employed will provide a description of which sub-groups of nurse faculty are more likely to remain and those who are not. Therefore, the following demographics are included in the model: age, organizational tenure, and graduate-level education. The following relationships are hypothesized (Figure 1):

H1. Age is positively related to part-time nurse faculty intent to remain employed in the academic organization.
H2. Organizational tenure is positively related to part-time nurse faculty intent to remain employed in the academic organization.
H3. Graduate-level education is negatively related to part-time nurse faculty intent to remain employed in the academic organization.

Figure 1. Demographic characteristics and intent to remain employed.

Workplace Characteristics and Intent to Remain

In this section, workplace characteristics hypothesized as determinants of nurse faculty intent to remain are categorized as the following: job characteristics, role
characteristics, leadership characteristics, work group characteristics, and organizational characteristics.

**Job characteristics.** Job characteristics include: workload and resource adequacy.

a. Workload

Workload refers to the amount of work nurses are required to do in order to fulfill their work role requirements.

**Nurse faculty.** Empirical evidence suggests that heavy workloads diminish nurse faculty intent to remain employed in the academic organization (Brewer, Zayas, Kahn, & Sienkiewicz, 2006; Garbee & Killacky, 2008). In Brewer et al.’s (2006) qualitative study of 50 nursing professionals, which included nurse faculty, work intensity was the primary retention challenge. Work intensity consisted of various themes such as long hours and high volumes of very sick patients. Garbee and Killacky (2008) examined predictors of intent to remain among a sample of 316 full-time nurse faculty. Using Tukey’s HSD to test differences in intent to remain mean scores, they found that faculty who worked 40 hours per week had statistically significantly higher levels of intent to remain three years than faculty who worked 60 hours per week.

**Other nursing groups.** Empirical evidence suggests that workload is also a determinant of intent to remain employed among other nursing groups. For instance, in Tourangeau et al.’s (2010) descriptive study, the influence of workload was discussed among 78 acute care nurses across 13 focus groups. The influence of workload on intent to remain employed emerged in discussions which Tourangeau et al. (2010) categorized under two different themes, *patient relationships and other job content* and *physical and psychological responses to work*.

**Other faculty and employee groups.** According to Daly and Dee (2006), heavy workloads decrease faculty intent to remain employed. Using correlation analysis in their study of 768 full-time instructional faculty from various departments or faculties, they found that workload was negatively correlated with intent to remain ($r = -.12, p < .01$). Therefore, the heavier the workload for faculty, regardless of the discipline they work in, the lower the level of ITR.
b. Resource adequacy

Resource adequacy refers to the degree to which resources are provided that are necessary to perform the job (Gurney et al., 1997).

*Nurse faculty.* Williamson, Cook, Salmeron, and Burton (2010) conducted a phenomenological study to identify factors that influence nurse faculty intent to remain employed past the age of retirement. The authors conducted structured interviews with six nurse faculty from one US state, who were 62 years of age or older and worked full-time. A series of open-ended questions were posed, including: *What motivates you to continue teaching? How long do you plan to continue teaching? What things would you need in place for you to continue teaching?* One of the major themes that emerged from the interviews was a theme that Williamson et al. (2010) labelled, *health promotion.* According to the authors, the basic need for safety was defined by nurse faculty as a health issue. A component of health promotion included support for physical changes. As nurse faculty age, their physical needs changed; therefore the quality of resources needed to perform their role may need to change as well. For instance, one faculty member shared how her employer provided a ball-shaped computer mouse and a speaker phone to accommodate arthritis in her hands.

As part of a larger nurse faculty study (Tourangeau et al., 2013), Tourangeau et al. (2012) conducted focus groups with 37 nurse faculty. Participants discussed the positive impact that access to adequate resources has on their intent to remain employed in their academic role. Faculty participants expressed their need of inanimate resources such as office space, parking, library services, equipment and technology (e.g., phones, computers, simulation laboratory), as well as human resources such as teaching assistants, administrative staff, and technical support.

*Other nursing groups.* In Tourangeau et al.’s (2010) study of hospital nurses, from analysis of their focus group data, the influence of resource adequacy emerged in two different themes, *condition of the work environment* and *patient relationships and job content.* Nurses identified the centrality of the adequacy of both human and material resources necessary to provide patient care. Nurse participants revealed that supportive physical environments, such as comfortable and safe furniture and a physical area designated to nurses encouraged them to remain employed.
Based on findings from nurse faculty studies and supported by study findings of other nursing employee groups, it is proposed that job characteristics of part-time nurse faculty predict intent to remain employed in the academic organization. The following relationships are hypothesized (Figure 2):

H4. Workload is negatively related to part-time nurse faculty intent to remain employed in the academic organization.

H5. Resource adequacy is positively related to part-time nurse faculty intent to remain employed in the academic organization.

**Figure 2.** Job characteristics and intent to remain employed.

**Role characteristics.** Role characteristics include: role ambiguity, role conflict, and autonomy.

a. Role ambiguity and role conflict

Role ambiguity is the extent to which an employee is unclear about their role responsibilities or when role-related expectations are unclear (House & Rizzo, 1972). Role conflict is the degree of incongruity or incompatibility of expectations associated with the role (House & Rizzo, 1972). Empirical findings from both nurse faculty studies (with the exception of one) and studies of other nursing groups, suggest that role ambiguity and role conflict play a significant role in influencing intent to remain employed. Specifically, employees who are unclear of their role responsibilities, behaviours, and obligations, and receive conflicting messages about their role requirements, have lower levels of ITR.

**Nurse faculty.** Ruel (2009) conducted a quantitative study and used correlation analysis to examine determinants of full-time nurse faculty’s intent to remain employed (n =
Ruel (2009) found that role conflict was a significant negative predictor of nurse faculty intent to remain ($b = -0.12, p = 0.03$). Therefore, nurse faculty who perceived that role requirements placed on them were incongruent, were less likely to remain employed in their current job. On the other hand, role ambiguity was not found to be a significant predictor of nurse faculty intent to remain ($b = 0.14, p = 0.73$). In Cavenar’s (1987) study of 225 full-time and part-time faculty who worked in nursing schools that offered a PhD degree program in the US, both role ambiguity ($\beta = -0.19$) and role conflict ($\beta = -0.12$) were negatively associated with retention. Wolfertz (1999) conducted a mixed-methods study to investigate the relationship between institutional climate and recruitment and retention of part-time nurse faculty among 49 part-time, full-time, and nursing program administrators. From the questionnaires and interviews, Wolfertz (1999) found that retention improved when part-time faculty were aware of their expected behaviours, responsibilities, obligations, and compensation.

**Other faculty and employee groups.** Similar to nurse faculty studies, the relationship between role conflict and intent to remain employed has been found among other faculty groups. For instance, Daly and Dee (2006), who tested their intent to remain model among 768 full-time instructional faculty found a significant negative correlation between role conflict and intent to remain ($r = -0.31, p < .01$).

**b. Autonomy**

Faculty autonomy is defined as “The ability of professionals to decide work patterns, to actively participate in major academic decision-making, to have their work evaluated by professional peers, and to be relatively free of bureaucratic regulations and restrictions” (Baldridge, Curtis, Ecker, & Riley, 1973, p. 536). Faculty, like other professionals, want to not only have control over the core tasks of teaching, research, and service, but they want to be able to determine the means by which these tasks are accomplished (Baldridge et al., 1973). A nurse faculty member with a high degree of job autonomy has the freedom to determine the nature of the tasks or problems faced and the way in which to resolve them (Jones & James, 1979). Within the context of organizational employment, the employee is required to abide by a set of rules, regulations, and role responsibilities. Therefore, the degree of job autonomy exercised by nurse faculty is determined, in large part, by the employer.
Nurse faculty. Two studies were located that examined the relationship between flexibility and nurse faculty intent to remain. Flexibility in the work role implies autonomy. Findings from both studies suggest that flexible work schedules contribute to nurse faculty retention. In Rouse’s (2006) study, full-time and part-time participants reported that a flexible schedule and the ability to continue clinical practice contributed to their retention behaviour. Brewer et al. (2006) studied 50 nurses from several nursing sectors. Educators, in particular, identified workplace scheduling practices as rigid and bureaucratic. They desired flexibility to determine their own schedules.

Similar to Rouse (2006) and Brewer et al. (2006), Tourangeau et al. (2012) found that autonomy encouraged nurse faculty intent to remain. During focus groups, nurse faculty described autonomy as the ability to be innovative and creative, and to have flexibility, freedom, and independence in the role, which positively influenced intent to remain. One participant said: “I find autonomy in this position is probably one of my biggest draws and one of the biggest joys because I feel I can grow as a person” (p. 258).

Other faculty and employee groups. In Daly and Dee’s (2006) study of full-time faculty (n = 768), path analysis was used to determine that autonomy predicted intent to remain employed (β = .08, p < .05). Autonomy’s total effect on intent to remain was entirely indirect through job satisfaction (β = .06, p < .01) and organizational commitment (β = .48, p < .01). Similar to Daly and Dee (2006), Schaefer and Moos (1996) found a significant relationship between autonomy and intent to remain. In their study of 405 full-time and part-time long-term care workers comprised of nurses, physicians, social workers, and physical and occupational therapists, Schaefer and Moos (1996) found that autonomy predicted intent to remain (β = .12, p < .05). However, they were not significantly associated when measured eight months later.

Based on findings from nurse faculty studies and supported by study findings of other employee groups, it is proposed that role characteristics predict part-time nurse faculty intent to remain employed in the academic organization. The following relationships are hypothesized (Figure 3):

H6. Role ambiguity is negatively related to part-time nurse faculty intent to remain employed in the academic organization.
H7. Role conflict is negatively related to part-time nurse faculty intent to remain employed in the academic organization.

H8. Autonomy is positively related to part-time nurse faculty intent to remain employed in the academic organization.

Figure 3. Role characteristics and intent to remain employed.

Leadership characteristics. Leadership characteristics include: leader support.

Scholars believe that leader behaviour and various leadership styles function to either positively or negatively affect nurse intent to remain (Boyle et al., 1999; Garbee & Killacky, 2008; Sourdif, 2004; Tourangeau & Cranley, 2006; Tourangeau et al., 2010). Leaders, their leadership styles, and behaviours have wide-spread effects on the nursing workforce and work environments. According to Vogt, Cox, Velthouse, and Thames (1986), excellent leadership is the most important factor in the success or failure of an organization. In their multidisciplinary systematic review of 53 studies published between 1985 and 2009, Cummings et al. (2010) found that there are distinctive leadership styles that influence a wide-range of outcomes, which they grouped into six categories: staff satisfaction with work, role and pay, staff relationships with work, staff health and wellbeing, work environment factors, and productivity and effectiveness. According to Cummings et al. (2010), relationally focused leadership styles (e.g., socio-emotional, consideration, inspirational,
resonant, and transformational leadership) and task focused leadership styles (such as instrumental, management by exception, and laissez-faire leadership) have significant effects on particular outcomes. Specifically, relationally focused leaders promote positive outcomes, such as greater job satisfaction, organizational commitment, empowerment, intent to remain, and retention; increased research utilization; and lower stress, role ambiguity, and role conflict. On the other hand, task focused leaders influence negative outcomes such as greater intent to leave and emotional exhaustion; poorer emotional health; and reduced productivity and effectiveness.

**Nurse faculty.** In Rouse’s (2006) study of nurse faculty, the leader was found to affect intent to remain employed. When asked to comment on their decision to stay or leave academia, having a positive relationship with the department head emerged as a retention factor. Lambert (1991) also reported on the importance of leaders in nurse faculty retention behaviour. Thirteen percent of the retention group (n = 136) identified administration as a determinant of retention. Wolfertz (1999) conducted a mixed-methods study to examine the relationship between institutional climate and recruitment and retention of part-time nurse faculty. When asked the question, *what are the factors in an institution’s climate which promote a part-time nursing member’s decision to remain in a part-time faculty appointment?*, part-time participants (n = 15) indicated that a sense of connectedness with their program promoted their decisions to remain employed. Sense of connectedness is enhanced by communication with various people, including the program administrator. While few part-time nurse faculty participants identified the program administrator as a direct support, discussion of various activities, such as faculty/staff development, communication, effective program management, and part-time faculty integration, which require significant leader involvement, suggests a positive relationship between leader support and part-time nurse faculty intent to remain employed in the academic organization.

Garbee and Killacky (2008) used statistical methods to examine the relationship between leader support and intent to remain. In their mixed-methods study of 316 full-time nurse faculty, Garbee and Killacky (2008) concluded that the leader behaviour, consideration, predicted intent to remain employed one year and five years \[R^2 = .07, F (1, 312) = 22.70, p < .001, \text{ and } R^2 = .07 F (1, 312) = 28.88, p < .001, \text{ respectively}\]. Consideration is the degree to which the leader considers the comfort, well-being status, and
contribution of the follower (Boyle et al., 1999). Thus, nurse faculty leaders who consider the needs of each individual follower contribute to nurse faculty’s increased intent to remain within the near and far future.

In the focus group phase of their study, Tourangeau et al. (2012) found that leadership impacted intent to remain. Specifically, quality leadership was described as a Dean/Director who is supportive by being respectful, approachable, accommodating, and providing consistent direction and feedback. As one participant described, “The Dean called me in and said “I hear you’re having some problems; what can we do to make it better?” She worked with me to alter my teaching assignment. That really impressed me that she cared enough about me and how I was coping” (p. 257).

**Other nursing groups.** The study of leader support and leader behaviour of different nursing groups and contexts support findings of nurse faculty studies. In Boyle et al.’s (1999) study of 255 full-time and part-time ICU nurses, regression analysis showed that manager characteristics had a significant effect at each stage of their conceptual model. Manager characteristics of power, influence, and leadership styles of structuring expectations and consideration accounted for 12% of the variance in intent to remain ($R^2 = .12, p < .01$). Tourangeau et al. (2010) drew similar conclusions from their descriptive study of acute care nurses. The researchers found that acute care nurses perceived leadership behaviour, abilities, and relationship with managers as important influencing factors of their intentions to remain employed in the hospital. They hypothesized that managers had direct impact on the work environment, work processes, and rewards, which in turn influenced nurse intentions to remain employed. Tourangeau and Cranley (2006) tested a direct relationship between manager ability and support and ITR of acute care nurses. A significant relationship was not found but the researchers hypothesized post-hoc, that job satisfaction mediated the relationship between manager ability and support and ITR.

Based on findings from nurse faculty studies and supported by study findings of other nursing groups, it is proposed that leadership characteristics predict part-time nurse faculty intent to remain employed in the academic organization. The following relationship is hypothesized (Figure 4):

**H9.** Leader support is positively related to part-time nurse faculty intent to remain employed in the academic organization.
Figure 4. Leadership characteristics and intent to remain employed.

**Work group characteristics.** Work group characteristics includes: co-worker support.

Gurney and colleagues (1997) defined co-worker support as the degree to which a person has friends in their immediate work group. Healthy and supportive work relationships have been shown to be related to higher levels of nurse intent to remain employed (Tourangeau et al., 2010).

**Nurse faculty.** In Barrett, Goldenberg, and Faux’s (1992) exploratory study of 44 full-time nurse faculty from Canadian universities and colleges, university faculty identified *more peer support* as a determinant of retention. Similarly, Rouse’s (2006) sample of nurse faculty reported that a positive relationship with peers was a determinant of retention. In Lambert’s (1991) descriptive study of determinants of retention and turnover behaviour, *interpersonal relations* was identified as a determinant of both retention and attrition. Specifically, 40% of faculty in the retention group named interpersonal relations as a reason why they remained in academia, while six percent of the attrition group identified interpersonal relations as a factor that contributed to their attrition behaviour. Wolfertz (1999) found that enhanced communication and support given by colleagues contributed to part-time nurse faculty’s decisions to remain employed.

Lane, Esser, Holte, and McCusker (2010) reported qualitative findings from their larger mixed-method study involving nurse faculty in one US state. The purpose of the qualitative portion of their study was to explore the perceptions that associate-degree nurse faculty held concerning intent to remain and job satisfaction. In response to questions about interpersonal relationships developed during their faculty position, some responses indicated a positive association between positive co-worker relationships and intent to remain employed. Two comments were made: “I've developed a close friend and many other
friendships that I would hate to lose” and “My coworkers are supportive, and one of the reasons I haven't left yet” (p. 20). In another qualitative study, Williamson et al. (2010) found that relationships with co-workers influence nurse faculty intent to remain employed. Phenomenological analysis revealed several major themes, one of which the authors called, relationships. The sample of nurse faculty nearing retirement age, discussed the importance of social stimulation – retirement would jeopardize the connectedness they feel while working. One participant who briefly tried retirement said: “While retired, I volunteered lots but got extremely bored at home, tired of looking at the fireplace, started sleeping until 9 AM. I couldn’t stand it. I missed…colleagues.” (p. 154).

Similar to the previously described study findings, Tourangeau et al. (2012) found during focus groups with nurse faculty that collegial relationships had a positive effect on nurse faculty intent to remain. One participant described: “My relationships with colleagues are what keeps me here. When I think about leaving this institution to go somewhere else, I think about leaving them behind and that is a really hard decision to make” (p. 257).

Other nursing groups. In Tourangeau et al.’s (2010) study of hospital nurses, relationships with co-workers was reported as the most consistent work environment characteristic that influenced retention. Participants described having a sense of belonging when supported by co-workers. Moreover, participants wanted to remain employed when they felt their work group was stable and dependable. Sourdif (2004) studied 108 full-time and part-time acute care nurses in Quebec, Canada to determine the predictors of intent to remain employed in the hospital setting. Sourdif (2004) found that work group cohesion was a positive predictor of intent to remain employed (β = .26, p = .006). They reported that seven percent of variance in intent to remain was accounted for by work group cohesion. In another Canadian study, Tourangeau and Cranley (2006) found that teamwork and satisfaction with work group cohesion were positive predictors of acute care nurse intent to remain employed in the hospital setting (β = .03, p = .015 and β = .04, p = .003, respectively).

Other employee groups. Schaefer and Moos (1996) examined relationships among work environment and content characteristics and intent to remain in a sample of 405 full-time and part-time long-term care staff of nurses, physicians, social workers, and physical and occupational therapists from 14 facilities in one US state. Schaefer and Moos (1996)
found that co-worker cohesion was a significant predictor of intent to remain at initial measurement ($\beta = .11, p < .05$) and eight months later ($\beta = .16, p < .01$). The significant regression coefficients found over time indicates that co-worker cohesion is a stable and a particularly important predictor of intent to remain employed.

Based on findings from nurse faculty studies and supported by study findings of other nursing and non-nursing employee groups, it is proposed that work group characteristics predict part-time nurse faculty intent to remain employed in the academic organization. The following relationship is hypothesized (Figure 5):

H10. Co-worker support is positively related to part-time nurse faculty intent to remain employed in the academic organization.

**Figure 5.** Work group characteristics and intent to remain employed.

**Organizational characteristics.** Organizational characteristics include: professional growth opportunities, recognition, distributive justice, procedural justice, and work rewards.

a. Professional growth opportunities

Professional growth opportunities refer to chances provided by the employer to develop skills and knowledge (Kim et al., 1996).

**Nurse faculty.** In nurse faculty literature, professional growth opportunities are found to influence retention to the academic organization. In Barrett et al.’s (1992) study of university and college nurse faculty, the only determinant of retention reported by college faculty was the opportunity for professional growth opportunities and development. Similar to Barrett et al.’s (1992) findings, Wolfertz (1999) concluded that professional growth opportunities encouraged retention behaviour among part-time nurse faculty. Specifically, one of the climate factors that influenced part-time nurse faculty retention was the availability of faculty development opportunities. Focus group participants in Tourangeau et al.’s (2012) study described that support for professional growth opportunities such as continuing education, motivates intentions to remain.
**Other nursing groups.** Tourangeau et al. (2010) found that professional growth opportunities influenced intentions to remain among 78 registered nurses. During focus groups, discussions of professional growth opportunities emerged, which Tourangeau et al. (2010) categorized as a topic of organizational support and practices. One participant explained: “The positive things that keep you here and employed within this institution…that there’s always some educational offering that could offer personal growth and development and opportunity (p. 27).

b. Recognition

Recognition is the formal or informal acknowledgement of work-related performances or accomplishments. Study findings of different occupational groups of nurses show that when nurses are recognized by their leaders, their level of intent to remain employed increases.

**Nursing faculty.** In Tourangeau et al.’s (2012) focus group study, nurse faculty participants working in Ontario, Canada college and university nursing programs, identified recognition specific to newly acquired credentials, as an important factor that encourages their intent to remain employed in their academic role.

**Other nursing groups.** In a study of 206 Jordanian staff nurses, 95.1% of which were full-time, AbuAlRub and Al-Zaru (2008) reported that recognition for outstanding performance and recognition for achievements were positively correlated with intent to remain ($r = .21, p < .01$ and $r = .23, p < .01$, respectively). Similarly, Tourangeau and Cranley (2006) found that acute care registered nurses and registered practical nurses ($n = 8,456$) who were satisfied with the praise and recognition they received at work, had higher levels of intent to remain employed ($\beta = .04, p < .004$).

c. Distributive justice

Distributive justice refers to the perceived fairness of the amounts of work outcomes, such as compensation and work rewards employees receive (McFarlin & Sweeney, 1992).

**Other faculty and nursing groups.** Empirical findings from several studies suggest that distributive justice does not directly predict intent to remain. Rather, a relationship between distributive justice and intent to remain may exist due to the intervening variable, organizational commitment. Daly and Dee (2006) tested their theory of intent to remain among 768 full-time instructional faculty. Using correlation analysis, the researchers found
that distributive justice was positively related to intent to remain ($r = .33, p < .01$). However, path analysis revealed that distributive justice did not have a significant direct effect on intent to remain. Rather, findings showed an indirect effect through organizational commitment ($\beta = .08, p < .01$). Magner, Johnson, and Elfrink (1994) did not find a significant relationship between distributive justice and intent to remain employed. Magner et al. (1994) conducted a study among 225 non-administrative accounting faculty at colleges and universities in the US. Using regression analysis, Magner et al. (1994) found that distributive justice did not statistically predict intent to remain employed. Price and Mueller’s (1981) longitudinal study of 1,091 full-time and part-time staff nurses did not yield significant regression coefficients between distributive justice and intent to remain. Similar to Magner et al. (1994) and Price and Mueller (1981), Boyle et al. (1999) did not find a significant predictive association between distributive justice and intent to remain. Finding discrepancies among faculty studies and studies of other employees may be due to the differences in employee groups.

d. Procedural justice

Adopted from Greenberg (1990), procedural justice is the perceived fairness of the policies and procedures used to make decisions. Procedures that faculty may be subjected to include decisions surrounding pay and performance evaluation.

Other faculty and nursing groups. Procedural justice has not been examined in the nurse faculty population. However, studies of other populations indicate that procedural justice is related to intent to remain. In Magner et al.’s (1994) study of 225 accounting faculty, regression analysis findings indicate that procedural justice predicted intent to remain ($\beta = .23, p < .05$). Findings suggest that accounting faculty who perceive a fair performance appraisal process are more likely to remain employed.

e. Work rewards

Work rewards are tangibles that employees receive as recompense for performing the job. Salary is often identified as a determinant of nurse faculty shortages (Brady, 2007; Curl et al., 2004; DeYoung et al., 2002; Dunham-Taylor et al., 2008; Falk, 2007; Gazza & Shellenbarger, 2005; Merwin et al., 2008; Starnes-Ott & Kremer, 2007) and recommended as an effective recruitment and retention strategy (Falk, 2007; Hessler & Ritchie, 2006; Horton, 2003; Merwin et al., 2008; Shipman & Hooten, 2008).
Nurse faculty. In nurse faculty studies, work rewards, salary and benefits have been linked to intent to remain employed. Wolfertz (1999) found that the compensation package offered positively influenced full-time and part-time nurse faculty and administrators’ intent to remain, while failure to include benefits was a negative determinant. A number of studies have found that salary and/or benefits affect retention behaviour of nurse faculty. For instance, in Lambert’s (1991) descriptive comparative study, eight percent of participants from the retention group (n = 136) identified salary as a reason why they remained employed. In Barrett et al.’s (1992) study of university and college nurse faculty, the university faculty identified increased salaries as a retention factor. Similarly, Brendtro and Hegge (2000) found that compensation was an incentive to recruit and retain nurse faculty (n = 79). In their sample of 56 nurses which included nurse faculty, Brewer et al. (2006) found that improved compensation was an incentive to attract and retain nurse faculty. In Rouse’s (2006) study, adequate retirement benefits encouraged retention behaviour among full-time and part-time nurse faculty. In Tourangeau et al.’s (2012) nurse faculty study, during focus groups, nurse faculty participants discussed the importance of being adequately paid for work. According to participants, work rewards are comprised not only of pay, but job benefits such as vacation, sabbatical and research leaves, and parental leaves.

While empirical findings strongly suggest that work rewards, such as salary, are important determinants of intent to remain employed, they may not be as important as several other workplace characteristics. Plawecki and Plawecki (1976) found that of a list of retention factors, 92 graduate-prepared nurse faculty considered salary to be the least important and the work itself to be the most important.

Other nursing groups. Tourangeau et al. (2010) conducted a descriptive study to identify determinants of intent to remain employed of 78 acute cares nurses. From thematic analysis of data emerged several themes, one of which was labelled, work rewards. In each of the 13 focus groups, participants identified several work rewards that influenced intent to remain employed in the hospital. One participant simply stated: “What will retain me here? Money” (p. 27). Benefits, such as pension, parental leave, reasonably priced and safe parking, and access to fitness facilities were also discussed as determinants of intent to remain employed.
Based on findings from nursing and non-nursing employee groups, it is proposed that organizational characteristics predict part-time nurse faculty’s intent to remain employed in the academic organization. The following relationships are hypothesized (Figure 6):

H11. Professional growth opportunities are positively related to part-time nurse faculty intent to remain employed in the academic organization.

H12. Recognition of performance and accomplishments is positively related to part-time nurse faculty intent to remain employed in the academic organization.

H13. Distributive justice is positively related to part-time nurse faculty intent to remain employed in the academic organization.

H14. Procedural justice is positively related to part-time nurse faculty intent to remain employed in the academic organization.

H15. Work rewards are positively related to part-time nurse faculty intent to remain employed on the academic organization.

**Figure 6.** Organizational characteristics and intent to remain employed.

**Nurse Faculty Responses to the Workplace and Intent to Remain**

Nurse faculty responses to workplace and external characteristics include: burnout, organizational commitment, and job satisfaction.
a. Burnout

Burnout is a work-related phenomenon characterized by both exhaustion and psychological withdrawal (Schaufeli & Greenglass, 2001). Maslach and colleagues are considered leading experts in the study of burnout of health services employees. According to Maslach, Jackson, and Leiter (1996), burnout has three components: (a) emotional exhaustion (feelings of being overextended and depleted of emotional and physical resources); (b) depersonalization or cynicism (negative or excessively detached responses to various aspects of the job); and (c) diminished personal accomplishment (feelings of incompetence and a lack of achievement at work). Therefore, burnout is a syndrome of high emotional exhaustion, high depersonalization, and reduced personal accomplishment (Sarmiento, Laschinger, & Iwasiw, 2004). Since nursing is considered to be inherently stressful, nurses are highly susceptible to burnout (Wu, Zhu, Wang, Wang, & Lan, 2007).

Other nursing groups. In their longitudinal study of 401 staff nurses in Belgium, van Bogaert, Meulemans, Clarke, Vermeyen, and van de Heyning (2009) investigated relationships between nurse practice environment, burnout, and job outcomes. Job outcomes was operationalized as satisfaction with the current job, intent to remain in the current hospital one year, and intent to remain in nursing. The researchers hypothesized that nurse-physician relationship and hospital management, and organizational support both predict nurse management at the unit level. In turn, nurse management predicts the three dimensions of burnout. The burnout dimension, personal accomplishment, then influences both nurse-assessed quality of care and job outcomes. Using structural equation modeling, van Bogaert et al. (2009) determined that the original model did not fit the data well, however, the adjusted model fit the data adequately (χ² = 548.1, df = 313, p < .001, CFI = .91, IFI = .90; RMSEA = .43), resulting in a model with more relationships and interactions among variables. Relationships of prime interest for this study are the direct relationships found between burnout and job outcomes. Specifically, high depersonalization predicted decreased job satisfaction and intent to remain in the hospital and in nursing (β = -.31). Conversely, high personal accomplishment predicted high satisfaction, intent to remain in the current hospital and intent to remain in nursing (β = .27). In contrast, Tourangeau and Cranley (2006) did not find a direct effect between burnout and intent to remain employed in the
hospital. They hypothesized, post hoc, that burnout directly affects job satisfaction, which in turn, affects intent to remain employed.

b. Organizational commitment

Mowday, Porter, and Steers (1982) defined organizational commitment as the psychological attachment to and identification with an organization that makes separation from the organization difficult for the employee. Organizational commitment is characterized by three features: (a) a strong belief in and acceptance of the organization’s goals and values, (b) a willingness to exert considerable effort on behalf of the organization, and (c) a strong desire to maintain membership in the organization (Mowday et al., 1982). Advantages of fostering organizational commitment among employees include employee acceptance of organizational goals, limited tardiness, better job performance, enhanced organizational citizenship behaviour, decreased personal stress and work-family conflict, and reduced turnover and absenteeism (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Randall, 1990; Somers & Birnbaum, 2000). What this means for organizational leaders is that positive organizational outcomes are more likely to occur among employees who are highly committed to the organization. Committed employees are, therefore, valuable commodities for employers and organizations as they are loyal, demonstrating their commitment by working towards the achievement of organizational goals, intending to remain on behalf of the organization, and aligning with their own commitment intentions by demonstrating retention behaviour. Therefore, it is no surprise that the study of employee commitment to the organization has been the focus of many studies (Allen & Meyer, 1990; Gregory, Way, LeFortm Barrett, & Parfrey, 2007; Griffeth et al., 2000; Sourdif, 2004; Tallman & Bruning, 2005; Tourangeau & Cranley, 2006; Way et al., 2007; Zeytinoglu et al., 2007).

Nurse faculty. Within the nurse faculty literature, one study was located that examined the relationship between nurse faculty organizational commitment and intent to remain. In Garbee and Killacky’s (2008) study of 316 full-time nurse faculty members, organizational commitment, job satisfaction, mentoring, and leadership behaviours were examined as significant predictors of nurse faculty intent to remain one year and five years. Analysis of variance revealed that organizational commitment was a significant predictor of intent to remain for both one year and five years ($p < .001$ and $p < .001$, respectively). Using
stepwise regression analysis, Garbee and Killacky (2008) found that organizational commitment explained 19.7% of variance in scores for intent to remain one year and 22.2% of the variance in scores for intent to remain five years \((p < .001)\). The authors concluded that organizational commitment was the most parsimonious predictor of nurse faculty intent to remain employed in the academic organization. The increase in variance between intent to remain one year and intent to remain five years is suggestive of organizational commitment’s time sensitivity. While organizational commitment changes over time, it remains a significant predictor of intent to remain.

**Other nursing groups.** Empirical findings from other nursing groups support the argument that organizational commitment is associated with intent to remain employed. Sourdif (2004) conducted a cross-sectional study of 108 full-time hospital nurses to determine predictors of intent to remain. Linear regression analysis revealed that organizational commitment was a significant predictor of nurses’ intent to remain \((\beta = .37, p < .001)\) and explained 14% of variance in intent to remain. Way et al. (2007) found moderate to strong positive correlations between nurse managers’ organizational commitment and intent to remain employed in 2000 and 2002 \((r = .57, p = .001 \text{ and } r = .62, p = .001\), respectively). Gregory et al. (2007) also observed a positive and moderate correlation between organizational commitment and intent to remain among 343 acute care registered nurses \((r = .44, p < .001)\). In Tallman and Bruning’s (2005) study of nurses \((n = 122)\) from 13 northern hospitals in Canada, affective and continuance commitment were significant predictors of intent to remain employed \((\beta = .28, p < .01 \text{ and } \beta = .22, p < .01, \text{ respectively})\). In their study of 8,456 hospital nurses, Tourangeau and Cranley (2006) found that organizational commitment, measured as length of employment in the current hospital, was a significant predictor of intent to remain \((\beta = .18, p < .001)\). Empirical findings from Armstrong-Stassen and Schlosser’s (2010) longitudinal study of 526 registered nurses indicated a strong direct effect between organizational commitment and intent to remain employed in the hospital \((\beta = .76)\).

**Other faculty and employee groups.** Findings from Daly and Dee’s (2006) study of faculty \((n = 768)\) suggest not only a positive relationship between organizational commitment and intent to remain employed \((r = .66, p < .05)\), but a direct relationship between the variables. Using path analysis, the researchers found that the total effect
between organizational commitment and intent to remain was an entirely direct effect ($\beta = .51, p < .01$).

c. Job satisfaction

Spector (1997) defined job satisfaction as how people feel about their job and the different aspects of their job. Job satisfaction has been the focus of intense study within the nursing discipline, frequently discussed as one of the most, if not the most significant predictor of nurse retention among various nursing contexts and nurse sub-groups (Beecroft et al., 2008; Boyle et al., 1999; Coomber & Barriball, 2007; Gregory et al., 2007; Hayes et al., 2006; Hinshaw et al., 1987; Irvine & Evans, 1995; Larrabee et al., 2003; Lum et al., 1998; Lu, While, & Barriball, 2005; Price & Mueller, 1981; Shader, Broome, Broome, West, & Nash, 2001; Sourdif, 2004; Tett & Meyer, 1993; Tai et al., 1998; Tourangeau & Cranley, 2006; Tourangeau et al., 2010; Tzeng, 2002; Yin & Yang, 2002; Zeytinoglu et al., 2007).

Similarly, job satisfaction is the most frequently studied determinant of nurse faculty retention (Barrett et al., 1992; Chen & Baron, 2006; Chen, Beck, & Amos, 2005; Christian, 1986; Disch, Edwardson, & Adwan, 2004; Donohue, 1986; Fain, 1987; Gormley, 2003; Grandjean, Aiken, & Bonjean, 1976; Kennerly, 1989; Marriner & Craigie, 1977; Moody, 1996; Sarmiento et al., 2004; Shieh, Mills, & Waltz, 2001; Snarr & Krochalk, 1996).

Scholars conclude that the more satisfied the nurse, the higher the levels of nurses’ intent to remain employed.

*Nurse faculty.* Based on nurse faculty ($n = 882$) perceptions of the importance and satisfaction with 50 job characteristics, Marriner and Craigie (1997) concluded that the more satisfied nurse faculty were, the higher the level of intent to remain employed. Sullivan (2001) found a strong and positive association between intent to remain and job satisfaction among a sample of 51 faculty ($\beta = .74, p < .001$). Job satisfaction accounted for 53% of the variability in intent to remain. Ruel (2009) also found a positive correlation ($r = .38, p < .05$) between job satisfaction and intent to remain employed among a sample of 240 nurse faculty in the US. Reynolds (1997) found a positive relationship between job satisfaction and retention among a sample of 176 nurse faculty employed in colleges and universities in one US state ($r = .29, p < .001$).

Research also indicates that job satisfaction is a significant predictor of intent to remain over a period of time. In Garbee and Killacky’s (2008) study of 316 full-time nurse
faculty, correlation analysis showed that job satisfaction was positively associated with nurse faculty intent to remain one year \((r = .40, p < .001)\) and for the next five years \((r = .36, p < .001)\).

**Facets of job satisfaction and intent to remain.** Some scholars examine job satisfaction in reference to particular components of the work environment. For instance, nurse faculty in Garbee and Killacky’s (2008) study identified several satisfiers and dissatisfiers, all of which were workplace characteristics. The top five satisfiers were: (1) being part of student success, (2) flexibility, (3) faculty colleagues, (4) collegial environment, and (5) supportive chair/administrator/dean. The top five dissatisfiers were: (1) time demands, (2) extremes in leadership behaviour, (3) low pay, (4) faculty attitudes and lack of accountability, and (5) work environment. Study findings also demonstrate relationships between nurse faculty satisfaction and the following workplace characteristics: pay (Christian, 1986; Snarr & Krochalk, 1996), promotional opportunities (Gurney et al., 1997; Marriner & Craigie, 1977; Sarmiento et al., 2004; Snarr & Krochalk, 1996); and supervision (Chen & Baron, 2006; Chen et al., 2005; Donohue, 1986; Shieh et al., 2001).

Research suggests that when nurse faculty are satisfied with various aspects of their workplace, they are more likely to remain employed. For example, Sullivan (2001) concluded that nurse faculty satisfaction with various aspects of the workplace contributed to intent to remain employed in the academic organization. Among a sample of 51 nurse faculty, using correlation analysis, the following five facets of job satisfaction were found to be positively related to intent to remain: the work itself \((r = .55, p < .001)\), supervision \((r = .46, p = .001)\), pay \((r = .30, p = .03)\), promotional opportunities \((r = .42, p = .002)\), and coworkers \((r = .23, p = .03)\). In Tourangeau et al.’s (2013) study of nurse faculty, stepwise regression analysis showed that satisfaction with salary and benefits, satisfaction with job status, and satisfaction with access to required material resources predicted ITR (\(\beta = .09, p < .013, \beta = .11, p = .001\), and \(\beta = .09, p < .017\), respectively).

**Other nursing groups.** In other nursing contexts, job satisfaction has been found consistently to be a significant determinant of intent to remain employed. Gregory et al. (2007) studied acute care registered nurses \((n = 343)\). The purpose of the non-experimental predictive study was to examine registered nurses’ perceptions of organizational culture (satisfaction with the emotional climate of the workplace, practice issues, and collaborative
relations), trust, job satisfaction, organizational commitment, and intent to remain. A moderate and positive correlation was found between job satisfaction and intent to remain ($r = .54, p < .001$).

In the nursing homecare setting, job satisfaction is a significant determinant of intent to remain employed. In Ellenbecker et al.’s (2008) study of 1,912 home healthcare nurses, findings from regression analysis showed a positive relationship between job satisfaction and intent to remain ($\beta = .69, p < .05$). Similar to nurse faculty and hospital nurses, the more satisfied home healthcare nurses are with their job, the more likely they are to remain with their current employer. In response to the nurse shortages in Jordan, AbuAlRub, Omari, and Al-Zaru (2009) studied nurses employed in Jordanian public and private hospitals ($n = 288$ and $n = 195$, respectively) to investigate relationships between social support, job satisfaction, and intent to remain. AbuAlRub et al. (2009) found that job satisfaction and intent to remain were positively related ($r = .33, p < .01$).

Contrary to findings of studies discussed above, Tourangeau et al. (2010) did not find that job satisfaction predicted acute care nurses’ intentions to remain employed in the hospital setting. Surprisingly, participants did not mention job satisfaction as influencing their intent to remain employed. Tourangeau et al. (2010) hypothesized that nurses assess their job satisfaction with the eight categories of their work environment and job content, which in turn, influences their intent to remain employed.

**Other faculty and employee groups.** Similar to studies of nurse faculty, job satisfaction positively influences intent to remain employed among other employee groups. Using path analysis, Daly and Dee (2006) found a total and direct effect of job satisfaction on intent to remain ($\beta = .29, p < .01$) among 768 full-time faculty. Ramsey (2003) conducted a study of full-time, tenure-track business faculty from public institutions ($n = 93$) in the US. Using secondary analysis of questionnaire data collected by the National Center for Education Statistics, Ramsey (2003) found that job satisfaction was positively related to intent to remain employed in the academic organization ($r = .31, p = .003$).

Based on findings from nurse faculty studies and supported by study findings of other nursing and non-nursing employee groups, it is proposed that nurse responses predict intent to remain employed in the academic organization. The following relationships are hypothesized (Figure 7):
H16. Burnout is negatively related to part-time nurse faculty intent to remain employed in the academic organization.

H17. Organizational commitment is positively related to part-time nurse faculty intent to remain employed in the academic organization.

H18. Job satisfaction is positively related to part-time nurse faculty intent to remain employed in the academic organization.

Figure 7. Nurse responses and intent to remain employed.

**Relationship between Workplace Characteristics and Nurse Faculty Responses**

The impact of workplace characteristics on job satisfaction, organizational commitment, and burnout is widespread and complex. While the workplace characteristics do not influence all of the nurse faculty responses or to the same degree, empirical evidence suggests that conditions of the work environment and the job influence the degree of satisfaction, organizational commitment, and burnout, such that workplace characteristics perceived to be poor, diminish job satisfaction and organizational commitment, while augmenting burnout, all of which decrease the level of intent to remain employed.

**Determinants of burnout.** Numerous studies show that poor work environments and poor conditions of the job lead to burnout in employees. Workplace characteristics
linked empirically to burnout of nurses and faculty populations include: leader support (Demerouti, Bakker, Nachreiner, & Schaufeli, 2000; Duquette, Kerouac, Sandhu, & Beaudet, 1994; Kiekkas, Spyratos, Lampa, Aretha, & Sakellaropoulos, 2010; Pedrini et al., 2009; Robinson et al., 1991; Turnipseed et al., 1994; van Bogaert et al., 2009), co-worker support (Duquette et al., 1994; Garrosa, Rainho, Moreno-Jiménez, & Monteiro, 2010; Turnipseed et al., 1994; van Bogaert et al., 2009), autonomy (Demerouti et al., 2000; Garrosa et al., 2010; Turnipseed et al., 1994), workload (Demerouti et al., 2000; Duquette et al., 1994; Lackritz, 2004; Robinson et al., 1991; Turnipseed et al., 1994), role ambiguity (Duquette et al., 1994; Turnipseed et al., 1994), role conflict (Lee & Ashforth, 1991), and recognition (Demerouti et al., 2000). Duquette et al. (1994) conducted a literature review of the empirical determinants of burnout in nurses. From their search, 36 pertinent studies were retained. Of these studies, 15 variables were selected, classified, and critically analysed. Organizational characteristics relevant to this study found to be related to nurse burnout include: role ambiguity, workload, and social support (i.e., leader and co-worker). Specifically, increased role ambiguity, a heavy workload, and minimal support from leaders and co-workers, increase nurses’ burnout.

Based on findings from studies that examined the determinants of burnout, the following relationships are hypothesized (Figure 8):

H19. Workload is positively related to part-time nurse faculty burnout.
H20. Role ambiguity is positively related to part-time nurse faculty burnout.
H21. Role conflict is positively related to part-time nurse faculty burnout.
H22. Autonomy is negatively related to part-time nurse faculty burnout.
H23. Leader support is negatively related to part-time nurse faculty burnout.
H24. Co-worker support is negatively related to part-time nurse faculty burnout.
H25. Recognition is negatively related to part-time nurse faculty burnout.
Determinants of organizational commitment. Several workplace characteristics have been found to be empirically related to organizational commitment, including: leader support (Gurney et al., 1997; Kovner, Brewer, Greene, & Fairchild, 2009; Joiner & Bakalis, 2006; Vanaki & Vagharseyyedin, 2009), co-worker support (Kovner et al., 2009, Joiner & Bakalis, 2006; Vanaki & Vagharseyyedin, 2009), autonomy (Daly & Dee, 2006; Kovner et al., 2009), distributive justice (Daly & Dee, 2006; Gurney et al., 1997; Kovner et al., 2009), procedural justice (Kovner et al., 2009), professional growth opportunities (Kovner et al., 2009), work rewards (Kovner et al., 2009), resource adequacy (Gurney et al., 1997; Joiner & Bakalis, 2006), role ambiguity (Joiner & Bakalis, 2006), role conflict (Daly & Dee, 2006), and workload (Daly & Dee, 2006).

In a study of nurse doctorates ($n = 842$), using path analysis, Gurney et al. (1997) found the following workplace characteristics as direct predictors of organizational commitment: job satisfaction ($\beta = .41$), supervisory support ($\beta = .07$), resource adequacy ($\beta = .14$), and distributive justice ($\beta = .16$). In their study of 768 full-time faculty, Daly and Dee (2006) found several determinants of organizational commitment using path analysis: autonomy ($\beta = .05, p < .01$), distributive justice ($\beta = .08, p < .01$), role conflict ($\beta = -.07, p < .01$), and workload ($\beta = .04, p < .05$). In Kovner et al.’s (2009) cross-sectional study of
determinants of new registered nurses’ \( n = 1,933 \) intent to remain employed in their hospital job, several workplace characteristics were found to be related to organizational commitment: autonomy (\( \beta = .14, p = .001 \)), supervisory support (\( \beta = .11, p = .003 \)), work group cohesion (\( \beta = .14, p = .001 \)), distributive justice (\( \beta = .14, p = .001 \)), procedural justice (\( \beta = .26, p < .001 \)), and pay/benefits (\( \beta = .10, p = .003 \)).

Significant relationships between workplace factors and organizational commitment have also been found globally. In Vanaki and Vagharseyyedin’s (2009) cross-sectional study of 250 nurses employed in hospitals in Iran, the following significant relationships with organizational commitment were found: managerial support (\( r = .19, p = .05 \)) and general satisfaction (\( r = .41, p = .01 \)). Joiner and Bakalis (2006) conducted a study of 72 casual academics working in Australian universities. Significant correlations between organizational commitment and several workplace characteristics were found: supervisor support (\( r = .40, p = .01 \)), co-worker support (\( r = .39, p = .01 \)), access to resources (\( r = .39, p = .01 \)), and role clarity (i.e., converse of role ambiguity; \( r = .38, p = .01 \)).

Based on findings from studies that examined the determinants of organizational commitment, the following relationships are hypothesized (Figure 9):

H26. Workload is negatively related to part-time nurse faculty organizational commitment.

H27. Resource adequacy is positively related to part-time nurse faculty organizational commitment.

H28. Role ambiguity is negatively related to part-time nurse faculty organizational commitment.

H29. Role conflict is negatively related to part-time nurse faculty organizational commitment.

H30. Autonomy is positively related to part-time nurse faculty organizational commitment.

H31. Leader support is positively related to part-time nurse faculty organizational commitment.

H32. Co-worker support is positively related to part-time nurse faculty organizational commitment.
H33. Professional growth opportunities are positively related to part-time nurse faculty organizational commitment.

H34. Distributive justice is positively related to part-time nurse faculty organizational commitment.

H35. Procedural justice is positively related to part-time nurse faculty organizational commitment.

H36. Work rewards are positively related to part-time nurse faculty organizational commitment.

Figure 9. Determinants of organizational commitment.

**Determinants of job satisfaction.** Several nurse studies make similar conclusions in which the following workplace characteristics influence job satisfaction: leader support/behaviours (Blegen, 1993; Chen & Baron, 2006; Chen et al., 2005; Cummings et al.,
2008; Donohue, 1986; Garbee & Killacky, 2008; Gormley, 2003; Gui, Barriball, & While, 2009; Kovner et al., 2009; Lane et al., 2010; Rodwell, Noblet, Demir, & Steane, 2009; Shieh et al., 2001); relationship with co-workers (Blegen, 1993; Garbee & Killacky, 2008; Kovner et al., 2009), and promotional opportunities (Lane et al., 2010; Marriner & Craigie, 1977; Sarmiento et al., 2004; Snarr & Krochalk, 1996); role ambiguity (Cavenar, 1987; Gormley, 2003; Gui et al., 2009; Ruel, 2009), role conflict (Cavenar, 1987; Gormley, 2003; Ruel, 2009), pay (Christian, 1986; Garbee & Killacky, 2008; Kovner et al., 2009; Snarr & Krochalk, 1996), workload (Blegen & Mueller, 1987; Kovner et al., 2009), resource adequacy (Lane et al., 2010), praise and recognition (Blegen, 1993; Tourangeau & Cranley, 2006), distributive justice (Blegen, 1993; Blegen & Mueller, 1987; Fernandes & Awamleh, 2006), procedural justice (Al-Zu’bi, 2010; Fernandes & Awamleh, 2006; Kovner et al., 2009), autonomy (Blegen, 1993; Garbee & Killacky, 2008; Kovner et al., 2009; Lane et al., 2010; Zangaro & Soeken, 2007), and burnout (Gui et al., 2009; Sarmiento et al., 2004). For instance, Ruel (2009) conducted a quantitative study of 243 nurse faculty, and found that both role ambiguity and role conflict predicted job satisfaction ($\beta = -.34, p < .001$ and $\beta = -.38, p < .001$, respectively). In Sarmiento et al.’s (2004) cross-sectional study of 89 nurse faculty in Ontario, Canada colleges and universities, all three dimensions of burnout were related to job satisfaction (emotional exhaustion: $r = -.65, p = .01$; depersonalization: $r = -.52, p = .01$; personal accomplishment: $r = .42, p = .01$). Blegen (1993) conducted a meta-analysis of the factors that are related to nurses’ job satisfaction. Data from 48 studies ($n = 15,048$) showed that communication with the supervisor, communication with peers, autonomy, recognition, and distributive justice were related to job satisfaction. In a meta-analysis of factors influencing nursing faculty job satisfaction, Gormley (2003) found that several workplace factors affect job satisfaction, which included: autonomy, leadership behaviour, role ambiguity, and role conflict.

In Lane et al.’s (2010) qualitative study of nurse faculty working in community colleges in one US state, several factors were found to either influence job satisfaction or job dissatisfaction. Lane et al. (2010) adopted Herzberg’s Motivator-Hygiene theory of job satisfaction, which postulates that job satisfaction and job dissatisfaction are two distinct phenomena with different contributing factors. ‘Motivator’ factors or intrinsic factors contribute to job satisfaction. They are related to the job and experience of doing work and
contribute to professional growth, such as autonomy, advancement, recognition, and responsibility (Herzberg, 1966 as cited in Barrett et al., 1992; Tovey & Adams, 1999). Conversely, ‘hygiene’ factors or extrinsic factors, are not associated with the job itself but with the conditions surrounding the job, such as work conditions, work hours, salary, benefits, organizational policies, administration, and interpersonal relations (Lane et al., 2010). These factors contribute to job dissatisfaction. A major premise of Herzberg’s two-factor theory is that people become dissatisfied by a bad environment, however, they are seldom made satisfied by a good environment. Lane et al. (2010) found the following hygiene factors among nurse faculty: leadership relationship/behaviours, colleague relationships, and physical surroundings, such as office space and adequacy of supplies. The following motivator factors were discussed among nurse faculty participants: autonomy and professional/promotional opportunities.

Literature reviews and meta-analyses of studies that examined job satisfaction among nurse faculty have been conducted. For instance, Gui et al. (2009) conducted a literature review of 15 studies that examined job satisfaction of nurse faculty. Empirical findings from the studies concurred on associations between several workplace characteristics, nurse faculty responses and job satisfaction. For instance, role ambiguity, burnout, and leader expectations and styles were associated with nurse faculty job satisfaction. In Gormley’s (2003) meta-analysis of studies that examined factors affecting nurse faculty job satisfaction, the following factors yielded significant effect sizes: leader expectations, styles, and behaviours; role conflict, and; role ambiguity.

Among faculty outside of the nursing profession, workplace characteristics affect job satisfaction in similar ways. For example, using path analysis, Daly and Dee (2006) determined that several work environment characteristics influenced faculty intent to remain employed in university through job satisfaction: autonomy ($\beta = .06, p < .01$), role conflict ($\beta = -.30, p < .05$), and workload ($\beta = .02, p < .05$). Therefore, as autonomy and workload increases, job satisfaction increases, which in turn, increases intent to remain employed. In the opposite direction, as role conflict increases, job satisfaction decreases, thereby decreasing intent to remain employed.

Based on findings from studies that examined the determinants of job satisfaction, the following relationships are hypothesized (Figure 10):
H37. Workload is negatively related to part-time nurse faculty job satisfaction.
H38. Resource adequacy is positively related to part-time nurse faculty job satisfaction.
H39. Role ambiguity is negatively related to part-time nurse faculty job satisfaction.
H40. Role conflict is negatively related to part-time nurse faculty job satisfaction.
H41. Autonomy is positively related to part-time nurse faculty job satisfaction.
H42. Leader support is positively related to part-time nurse faculty job satisfaction.
H43. Co-worker support is positively related to part-time nurse faculty job satisfaction.
H44. Professional growth opportunities are positively related to part-time nurse faculty job satisfaction.
H45. Recognition is positively related to part-time nurse faculty job satisfaction.
H46. Distributive justice is positively related to part-time nurse faculty job satisfaction.
H47. Procedural justice is positively related to part-time nurse faculty job satisfaction.
H48. Work rewards are positively related to part-time nurse faculty job satisfaction.
H49. Burnout is negatively related to part-time nurse faculty job satisfaction.
Figure 10. Determinants of job satisfaction.

Relationship between Job Satisfaction and Organizational Commitment

Several literature reviews and meta-analyses suggest that both job satisfaction and organizational commitment are essential components of employee retention/turnover (Cotton & Tuttle, 1986; Griffeth et al., 2000; Mueller & Price, 1990; Tett & Meyer, 1993). Nursing research also establishes a significant relationship between job satisfaction and organizational commitment (Kirsch, 1990; Kuokkanen, Leino-Kilpi, & Katajisto, 2003; Lynn & Redman, 2005; Tallman & Bruning, 2005; Wang, 2007; Way et al., 2007). For example, Way et al. (2007) found strong correlations between organizational commitment and job satisfaction ($r = .73$ and $.68$ in 2000 and 2002, respectively).

In nurse faculty literature, Gurney et al. (1997) postulated that organizational commitment functions as a mediator between job satisfaction and intent to leave through
which all exogenous variables function. From their study of 842 nurse doctorates, Gurney et al. (1997) found that job satisfaction had an indirect effect on intent to leave ($\beta = -.13, p < .001$). Of all the paths analyzed, job satisfaction was reported to be most strongly associated with organizational commitment ($\beta = .41, p < .001$).

Holopainen, Tossavainen, & Kaernae-Lin (2008) conducted a qualitative study to examine nurse teacherhood from the perspectives of nurse faculty and to develop a theory of nurse teacherhood, its development, changes, and manifestation. According to the authors, nurse teacherhood is a multidimensional dynamic process influenced by change in the organization, workplace context and culture, relationships with students, the professional standards, and future of the profession. The sample consisted of 34 nurse faculty from five nursing programs in Finland. In the semi-structured interviews, it was found that the way nurse faculty experienced the dynamic process of nurse teacherhood was influenced by the level of satisfaction with their own nurse teacherhood and their commitment to it. Moreover, satisfaction with context, content, the future of the profession, and the migration between commitment types explained the level of nurse educators’ commitment to teacherhood at each point in time. Despite the difference in focus of one’s commitment, the relevance of Holopainen et al.’s (2008) study is the explanation of a theoretical relationship between satisfaction and commitment. Findings of this study suggest that not only is nurse faculty satisfaction associated with commitment, but that satisfaction precedes commitment.

While findings from two studies (Gurney et al., 1997; Holopainen et al., 2008) that examined the relationship between job satisfaction and organizational commitment among nurse faculty suggest a job satisfaction – organizational commitment causal order, a hypothesis of this order will not be made in this study, despite a wide range of supporters (Boyle et al., 1999; Gurney et al., 1997; Holopainen et al., 2008; Price & Mueller, 1981; Way et al., 2007). Other scholars contest this hypothesis. For instance, in Curriivan’s (1999) prospective panel study of 482 Chicago public teachers who completed both questionnaires and 356 Chicago public teachers who completed the questionnaire once, concluded that the relationship between job satisfaction and organizational commitment ($r = .72, p < .05$ at time 1; $r = .69, p < .05$ at time 2) was spurious as a result of common causes (i.e., workplace and demographic characteristics). This conclusion was based on structural equation modeling results which showed that model fit of the four tested models were essentially the same. For
instance, chi-square fit statistics were considerably large and did not change appreciably when the following causal orders were tested: job satisfaction – organizational commitment ($\chi^2 = 5,577.98$); organizational commitment – job satisfaction ($\chi^2 = 5,578.86$); reciprocal relationship between job satisfaction and organizational commitment ($\chi^2 = 5,577.97$); and no relationship between the constructs ($\chi^2 = 5,579.13$). In another longitudinal study, Curry, Wakefield, Price, and Mueller (1986) studied 508 women working in five nursing departments (included registered nurses, managers, clerical and service staff). Using structural equation modeling, Curry et al. (1986) discovered that job satisfaction and organizational commitment were not related to each other over time. In effect, inconsistent findings limit a hypothesis of a causal order between job satisfaction and organizational commitment, therefore a causal relationship is not hypothesized.

**External Characteristics and Intent to Remain Employed**

External characteristics includes: external career opportunities. The degree of external career opportunities may influence part-time nurse faculty intent to remain employed with their present employer. Such a situation may be particularly important if other organizations present career opportunities that are more closely aligned with the employees’ career goals and workplace expectations.

**Nursing faculty.** In Tourangeau et al.’s (2012) descriptive exploratory study of full-time and part-time nurse faculty, participants identified the ability to look for employment elsewhere influenced whether they would stay or leave their academic job. Participants perceived there to be more available positions in alternate educational institutions in urban areas as compared to non-urban areas. Some participants also perceived that positions in urban areas offered higher wages. Those participants who lived and worked in academic organizations outside of urban areas remained in their position simply because opportunities did not exist. One participant said: “If we want another faculty position, we have to leave the community. There is no other university. Even within the hospital institution, there are no positions like clinician scientists and similar positions” (p. 259).

**Other nursing groups.** In Tourangeau et al.’s (2010) study, nurse participants identified several factors external to their present work that could influence their decisions to remain employed, such as favourable work opportunities elsewhere. The impact of other work opportunities was stronger when other organizations attempted to recruit individual
nurses by offering several incentives. One nurse listed several incentives offered by another organization that would influence her intent to remain employed: “Incentives, pay incentives, any type of incentive to come and work in this hospital, sign-on bonuses” (p. 28).

**Other faculty and employee groups.** Correlation findings from Daly and Dee’s (2006) study of full-time instructional faculty showed that the more job opportunities as perceived by the faculty member, the lower the levels of intent to remain employed with their current academic organization ($r = -.14, p < .05$).

Based on findings from nurse faculty, other nursing and non-nursing employee groups, it is proposed that external characteristics predict part-time nurse faculty’s intent to remain employed in the academic organization. The following relationship is hypothesized (Figure 11):

H50. External career opportunities is negatively related to part-time nurse faculty intent to remain employed in the academic organization.

*Figure 11.* External characteristics and intent to remain employed.

**Summary of the Review of the Related Literature**

Review of the nurse faculty retention literature indicates that there is a paucity of empirical studies of determinants of intent to remain employed among part-time nurse faculty. Therefore, selected studies of other nursing and non-nursing groups were included in the literature review. The number of significant relationships found between nurse faculty intent to remain and various workplace and external characteristics indicates the complexity of the retention phenomenon. Based on a review of the relevant literature, a model of part-time nurse faculty intent to remain employed in the academic organization has been developed (see Figure 12).

**Purpose and Research Question**

The primary purpose of this study is to test and refine a hypothesized model of the determinants of part-time nurse faculty intent to remain in the academic organization. This
study will address the following research question: **What are the determinants of part-time nurse faculty intent to remain employed in the academic organization?**
Figure 12. Hypothesized model of part-time nurse faculty intent to remain employed in the academic organization.
Note: ITR = intent to remain; JOBSAT = job satisfaction; ORGCOM = organizational commitment; BO = burnout; RC = role conflict; RA = role ambiguity; AUTO = autonomy; WL = workload; LEADER = leader support; COWORK = co-worker support; RESAD = resource adequacy; EXCAR = external career opportunities; ED = graduate-level education; TENURE = organizational tenure; AGE = age in years; PJ = procedural justice; DJ = distributive justice; REWARDS = work rewards; REC = recognition; GROW = professional growth opportunities.

Figure 13. Full structural model of part-time nurse faculty intent to remain employed in the academic organization.
CHAPTER THREE: METHODS AND PROCEDURES

In this chapter, methods and procedures that will be used to conduct the proposed study are described. Included in this chapter is a description of the research design, sample and sampling approach, measurement tools, collection, and analysis of data. Ethical considerations and methodological limitations are addressed. For a brief overview of the study’s theoretical concepts and corresponding instruments, see Appendix B.

Study Design

This study uses a cross-sectional survey design. A self-report pen-and-paper survey will be used to collect data at one point in time from nurse faculty to test the hypothesized theory by examining proposed relationships. The survey will be mailed to the home address of eligible participants. The use of a cross-sectional design facilitates the identification of relationships between the outcome variable, intent to remain employed (ITR), endogenous nurse response variables, and exogenous workplace, demographic, and external variables. This study warrants the use of a cross-sectional survey design as it facilitates the identification of many inter-relationships in a given situation based on analysis of data collection on one occasion (Burns & Grove, 2009; LoBiondo-Wood & Haber, 2009). Additional advantages include: increased flexibility when investigating complex relationships, enables collection of large amounts of data, and allows for examination of relationships as they occur naturally (LoBiondo-Wood & Haber, 2009).

Sample and Sampling Approach

The population of interest is part-time, nurse faculty employed in college and university nursing programs. The unit of analysis is the individual nurse faculty member. In this study, a nurse faculty member is included if he or she satisfies the following criteria: (a) is a registered nurse (RN); (b) is employed by a college or university nursing program in Ontario, Canada; (c) is currently employed on a part-time basis, and; (d) has taught or will teach RN students or registered practical nursing (RPN) students within the past year or over the next year. Part-time faculty are those that are contractually obligated to work less than full-time hours as stipulated by the employing institution. Since titles vary from institution to institution, participants can hold any title. Faculty are excluded from this study if (a) they are not a RN; (b) they are contractually employed on a full-time basis, and; (c) function primarily as an administrator (e.g., dean or director of school).
Sample size. The sample of potential participants will be drawn from the College of Nurses of Ontario’s (CNO) most current registration year. As a self-regulating body of approximately 145,000 RNs, RPNs, and nurse practitioners (NPs), the CNO maintains accurate and detailed practice and employment information about each registrant. Participants will be drawn from a potential population of 493 RNs in 2010 registered with the CNO who indicated that they work part-time as an educator/faculty.

Structural equation modeling (SEM) will be the statistical technique used to test and refine the theoretical model. There is no consensus regarding the sample size determination in SEM (Schumacker & Lomax, 2004). A rule-of-thumb for sample size is a minimum of 200 cases (Kenny, 2012; Kline, 2011, Lei & Wu, 2007; Weston & Gore, 2006). In order to attain a minimum sample of 200, this study will employ the Tailored Design Method (Dillman, Smyth, & Christian, 2009). Dillman et al. (2009) found that response rates ranged from 50 to 70% when self-administered, mailed questionnaires were appropriately designed and implemented to encourage participation. This study will plan for a 50% response rate. Therefore, the entire pool of RNs that meet the inclusion and exclusion criteria will be invited to participate.

Measurement

Intent to Remain Employed

Conceptual. Adopted from Tett and Meyer (1993), intent to remain employed is the conscious and deliberate willfulness to remain employed in the organization.

Operational. Intent to remain employed in the academic organization will be measured with one item developed for the study. On a one to seven ordinal scale where 1 = strongly disagree and 7 = strongly agree, participants will be asked to indicate the extent of their agreement or disagreement with the three parts of the following statement: I intend to remain employed with my academic organization where I am currently employed part-time for the (a) 2 years, (b) 5 years, (c) 10 years.

Job Characteristics

The job characteristics includes: workload and resource adequacy.

a. Workload

Conceptual. Workload is defined as the amount of work nurse faculty are required to do in order to fulfill their work role requirements.
Operational. Workload will be measured with the 3-item Workload Index (Kim et al., 1996). Participants indicate the extent of their agreement or disagreement along a one to five ordinal scale where 1 = *strongly disagree* and 5 = *strongly agree*. The degree of workload is calculated by finding the mean, such that the higher the score, the heavier the workload as perceived by the participant. The instrument has adequate psychometrics. In Kim et al.’s (1996) study of the determinants of career intent among US physicians (*n* = 244), the instrument had a Cronbach’s alpha of .73. The instrument also demonstrated discriminant and convergent validity, however, the authors did not provide the statistics.

b. Resource adequacy

Conceptual. Resource adequacy is defined as the degree to which resources, in the form of human, physical surroundings, and equipment, are provided that are necessary to perform the role. Resources pertinent to the nurse faculty role may include access to sufficient library and copying services, and provision of a personal office.

Operational. Resource adequacy will be measured with a modified version of the resource adequacy subscale of the School-Level Environment Questionnaire (SLEQ). The SLEQ, developed to measure perceptions of school climate among elementary and secondary school teachers, has been used in several studies in Australia and the US (Johnson, Stevens, & Zvoch, 2007). The original scale included seven items. In this study, the revised SLEQ Resource Adequacy subscale is employed, with slight modification to wording, for example, changing ‘school’ to ‘university/college’. The three items omitted in this study include those that refer to access to tape recorders and cassettes, and class book sets, which are more applicable to elementary and secondary school settings. One item is added to assess the extent of human resources that are provided. Participants will be asked to rate the extent of agreement with the following statement: *The supply of human resources, such as teaching assistants, research assistants, administrative and support staff, and information technologists, is adequate.* In effect, the resource adequacy scale is composed of five items. Participants will rate their level of agreement or disagreement along an ordinal scale where 1 = *strongly disagree* and 5 = *strongly agree*. Two of the five items are reverse-coded. A mean score will be calculated. A high score reflects more sufficient access to resources.

In Johnson and Stevens’ (2006) study of relationships between elementary school teachers’ perceptions of school climate and their students’ achievements, they found that the
resource adequacy subscale had an acceptable Cronbach’s alpha of .86. Validity of the scale was demonstrated in Johnson et al.’s (2007) study of teachers (n = 4,920) in a US urban school district. Using confirmatory factor analysis, Johnson et al. (2007) found that the four resource adequacy items of the shortened version loaded together on one factor, with factor loadings ranging from .52 to .80.

**Role Characteristics**

Role characteristics include: role ambiguity, role conflict, and autonomy.

a. Role ambiguity

*Conceptual.* Adopted from House and Rizzo (1972), role ambiguity is defined as the lack of necessary information to perform job duties.

*Operational.* See description below.

b. Role conflict

*Conceptual.* Adopted from House and Rizzo (1972), role conflict is defined as inconsistent role obligations.

*Operational.* Role ambiguity and role conflict will be measured with Rizzo, House, and Lirtzman’s (1970) 14-item Role Conflict and Role Ambiguity scales. The role ambiguity scale consists of six items and role the conflict scale consists of eight items. Both scales are scored on an ordinal scale from one to seven where 1 = *very false* and 7 = *very true*. All items on the ambiguity scale are reverse-coded. To determine the degree of role ambiguity and conflict, mean scores for each scale are calculated, such that the greater the mean, the greater the role ambiguity or role conflict. Although role ambiguity and role conflict correlate with each other (Acorn, 1991), they have been shown to be factorially distinct constructs (Rizzo et al., 1970). In Rizzo et al.’s (1970) factor analysis of data from two samples of managerial and technical employees (n = 199 and n = 91, respectively), two factors, role ambiguity and role conflict, were extracted from the 30-item set, accounting for 56% of the common factor variance. The eight retained items developed to capture role conflict loaded on one factor, while the six retained items developed to measure role ambiguity loaded on a second factor. All factor loadings were greater than .30, which satisfies Polit’s (1996) recommendation of factor loadings of .30 or greater. None of the scale items cross-loaded, indicating distinct factors. Reliability of both measures have been demonstrated in the literature although role ambiguity reliability coefficients are consistently
lower, hovering close to .79 and .80. In Ruel’s (2009) study of nurse faculty, Cronbach’s alpha’s for role ambiguity and role conflict were .89 and .86, respectively. In two studies of nurses, Cronbach’s alpha’s for the role ambiguity and role conflict scales ranged from .79 to .80, and .82, respectively (Acorn, 1991; Lu, While, & Barriball, 2007).

c. Autonomy

**Conceptual.** Autonomy is the ability of nurse faculty to decide work patterns, to actively participate in major academic decision-making, to have their work evaluated by professional peers, and to be relatively free of bureaucratic regulations and restrictions (Baldridge et al., 1973).

**Operational.** Autonomy will be measured with Spreitzer’s (1995) self-determination subscale of the Psychological Empowerment measure. Self-determination is the belief that an employee has control over how he or she does his or her own work. The subscale is composed of three items to which participants will indicate the extent of their agreement with each statement along a one to seven ordinal scale, where 1 = *strongly disagree* and 7 = *strongly agree*. Degree of autonomy is calculated by finding the mean, such that the higher the score, the greater the degree of autonomy. The self-determination scale has acceptable psychometric properties. In a longitudinal study of industrial and insurance employees, Spreitzer (1995) found a Cronbach’s alpha of .80 at time one and .79 at time two. Confirmatory factor analysis was used to determine that there are four distinct dimensions of psychological empowerment. Results of the second-order confirmatory factor analysis of both industrial and insurance samples showed that the three self-determination items loaded on one factor, ranging from .60 to .69 and .68 to .86, respectively.

**Leadership Characteristics**

Leadership characteristics includes: leader support.

**Conceptual.** When leaders are supportive, they demonstrate concern for employees’ feelings and needs; encourage them to voice their concerns, questions, ideas; provide positive feedback and necessary information; and encourage continual skill development (Fields, 2002). Therefore, in this study, leader support is defined as an open, helpful, and positive relationship between leader and subordinate regarding work-related affairs.

**Operational.** Description of leader support is discussed with co-worker support in the following section.
Work Group Characteristics

Work group characteristics includes: co-worker support.

**Conceptual.** Co-workers are viewed as supportive when they are easy to talk to, can be relied upon when the job becomes difficult, and when they are willing to listen to an employee’s personal problems. Therefore, co-worker support is defined as a positive or helping relationship between co-workers.

**Operational.** Leader and co-worker support will be measured with Caplan, Cobb, French, Van Harrison, and Pinneau’s (1980) Social Support scale. The social support scale assesses support in three different social circles – leaders, co-workers, and family and friends. Similar to Lim (1996), this study will employ the leader and co-worker subscales and omit the family/friends subscale. Each subscale is composed of three items, to which participants will respond along an ordinal scale with anchors ranging from 1 = *not at all* to 4 = *very much.* Leader and co-worker support will be derived by finding the mean scores, such that the higher the score, the greater the support received. The types of support reflected in Caplan et al.’s (1980) scale can be characterized as emotional (easy to talk to and willing to listen to personal problems) and instrumental (make things easier and can be relied on; Fields, 2002). The leader subscale has been modified slightly to reflect accurate titles of leaders in academia from *Your supervisor* to *Your dean/director.* Similarly, the co-worker subscale has been modified slightly to enhance clarity. The wording, *other people at work,* has been changed to, *your co-workers.* Using confirmatory factor analysis, Scheck, Kinicki, and Davy (1997) found empirical support for construct validity of Caplan et al.’s (1980) scale when the items intended to assess emotional and instrumental social support loaded onto one factor (factor loadings ranged from .49 to .59). Reliability of both scales has been established. In Lim’s (1996) study of 306 MBA graduates, a Cronbach’s alpha of .80 was found for both scales combined.

Organizational Characteristics

Organizational characteristics include: professional growth opportunities, recognition, distributive justice, procedural justice, and work rewards.

a. Professional growth opportunities

**Conceptual.** Adopted from Kim et al. (1996), professional growth opportunities is defined as chances provided by the employer to develop skills and knowledge.
**Operational.** Professional growth opportunities will be measured with Wayne, Shore, and Liden (1997) 4-item Developmental Experiences scale. The items assess the formal and informal developmental experiences provided to the employee by their employer. It focuses on the extent to which the organization makes discretionary investments in developing employee skills and abilities (Fields, 2002). Responses to the first two items of the scale are obtained along a one to seven ordinal scale where 1 = *strongly disagree* and 7 = *strongly agree*. Responses to items three and four are obtained along an ordinal scale where 1 = *not at all* and 7 = *a very large extent*. The higher the score, the more formal and/or informal development experiences have been provided to the employee.

Adequate psychometric properties of the measure have been demonstrated in literature. In Wayne et al.’s (1997) study of a model of perceived organizational support and leader-member exchange among 570 employees and 289 managers throughout the US, principal component analysis was conducted on 35 items, which comprised the scales, developmental experiences, perceived organizational support, leader-member exchange, employee favour doing, affective commitment, and intentions to quit. Wayne et al. (1997) found that the four items developed to measure development experiences loaded on one factor, with loadings ranging from .73 to .92, and no cross-loadings. Internal consistency of the scale was also demonstrated with a Cronbach’s alpha of .87.

b. Recognition

**Conceptual.** Recognition is defined as the formal or informal acknowledgement of work-related performances or accomplishments. Co-workers, supervisors, management, and human resources can acknowledge accomplishments (Fletcher & Nusbaum, 2009).

**Operational.** Recognition will be measured with Koys and DeCotiis’ (1991) Recognition scale. The original scale was composed of five items. In this study, four items will be administered as item, *My boss uses me as an example of what to do*, did not load onto the recognition factor in Koys and Decotiis’ (1991) study. Participants will indicate the degree of agreement or disagreement with each statement along a one to five-point ordinal scale where 1 = *strongly disagree* and 5 = *strongly agree*. One item is reverse-coded. A score is calculated by finding the mean. The higher the score, the more recognition nurse faculty perceive to receive. Reliability of the scale was demonstrated in Koys and DeCotiis’ (1991) study with Cronbach’s alphas ranging from .83 to .84 among the original and
validation samples. The scale was also validated through confirmatory factor analysis with the remaining items developed to measure recognition with loadings on the intended factor ranging from .32 to .56.

c. Distributive justice

**Conceptual.** Adopted from McFarlin and Sweeney (1992), distributive justice is defined as the perceived fairness of the amount of work outcomes, such as compensation and work rewards, employees receive.

**Operational.** Distributive justice will be measured with Price and Mueller’s (1986) Distributive Justice Index. It is composed of six questions to which participants rate the degree of fairness along a one to five ordinal scale, where 1 = *rewards are not distributed at all fairly* to 5 = *rewards are very fairly distributed*. A score is calculated by finding the mean. The higher the score, the greater the perceived fairness of reward distribution. Validity of the measure has been established. In Liljegren and Ekberg’s (2009) study of 428 employment officers, results from confirmatory factor analysis indicated that the Distributive Justice scale was valid, in which items loaded on the expected factor, with factor loadings ranging from .76 to .87. DeConinck, Stilwel, and Brock (1996) also found that items loaded on the distributive justice factor, with loadings ranging from .87 to .92. Similarly, Sweeney and McFarlin (1993) found that the distributive justice items loaded onto its intended factor, with loadings ranging from .79 to .92. Moorman (1993) also found empirical evidence of the scale’s validity. Using confirmatory factor analysis, the distributive justice items loaded onto one factor, with loadings ranging from .82 to .93. The scale has also been found to be internally consistent. McFarlin and Sweeney (1992), Sweeney and McFarlin (1993), and Moorman (1991) have reported Cronbach’s alphas of .92, .88, and .94, respectively.

d. Procedural justice

**Conceptual.** Adopted from Greenberg (1990), procedural justice is defined as the perceived fairness of the policies and procedures used to make decisions.

**Operational.** Procedural justice will be measured with McFarlin and Sweeney’s (1992) Procedural Justice scale which is composed of four items to which participants will indicate their perceived level of fairness in their workplace. Responses range from 1 = *very unfair* to 5 = *very fair*. A score is found by calculating the mean, such that the higher the score, the fairer workplace procedures are perceived to be. Using confirmatory factor
analysis to test the validity of their scale, Sweeney and McFarlin (1993) found that the scale is a valid instrument, demonstrated by all four items loading onto one factor, with factor loadings ranging from .52 to .84. The Procedural Justice scale has also demonstrated its reliability. McFarlin and Sweeney (1992) and Sweeney and McFarlin (1993) have reported Cronbach’s alphas of .82 and .85, respectively.

e. Work rewards

**Conceptual.** Work rewards is defined as tangibles nurse faculty receive as recompense for performing the job. Work rewards include but are not limited to salary; benefits (e.g., medical, dental, retirement); safe, convenient, affordable parking, and; health, fitness, and child-care facilities.

**Operational.** Work rewards will be measured with one item to which participants will indicate their level of agreement or disagreement on a one to seven ordinal scale, where 1 = *strongly disagree* and 7 = *strongly agree*: *The rewards that I receive from my employer for doing my nurse faculty job are adequate*. The mean will be calculated. The higher the score, the more adequate work rewards received are perceived to be.

**Nurse Faculty Responses**

Nurse faculty responses to the workplace include: burnout, organizational commitment, and job satisfaction.

a. Burnout

**Conceptual.** Adopted from Schaufeli and Greenglass (2001), burnout is defined as a condition of emotional, mental, and physical exhaustion caused by long-term involvement in work situations that are emotionally demanding.

**Operational.** The Maslach Burnout Inventory (MBI) is widely considered the gold standard to measure occupational burnout (Schaufeli & Taris, 2005). Since the initial publication of the Maslach Burnout Inventory in 1981 developed for use with human services employees, two additional versions have been developed: the Maslach Burnout Inventory – Educators Survey (MBI-ES) and the Maslach Burnout Inventory – General Survey (MBI-GS) (Maslach et al., 1996). Similar to the original scale, the newer versions are designed to assess three aspects of burnout. In this study, only the emotional exhaustion items of the Maslach Burnout Inventory – Educators Survey (MBI-ES) will be used to assess burnout. Therefore, participants will be asked to respond to eight items, in which they will
identify the frequency of the experience of burnout along a zero to six ordinal scale, where 0 = *never* and 6 = *everyday*. Burnout is determined by adding up the scores of subscale items. The score can be coded as low, average, or high using normalized numerical cut-offs provided in the scoring key. A high degree of burnout is reflected in a high score. A moderate degree of burnout is reflected in an average score, and a low degree is reflected in a low score (Maslach et al., 1996).

Psychometric properties of the Maslach Burnout Inventory have been established (Maslach et al., 1996; Worley, Vassar, Wheeler, & Barnes, 2008). Convergent validity was demonstrated in Vanheule, Rosseel, and Vlerick’s (2007) study. The researchers found that the three dimensions of burnout (i.e., emotional exhaustion, depersonalization, and personal accomplishment) were moderately to strongly correlated with each other and in expected directions for both samples, ranging from -.35 to .74. In Worley et al.’s (2008) meta-analytic study, Maslach and Jackson (1981) suggested omitting the emotional exhaustion item, *Working with people directly puts too much stress on me*, as is consistently fails to load on the expected factor (Worley et al., 2008). Worley et al. (2008) conducted a meta-analysis of 45 studies from 1981 through 2006; 32 articles used exploratory factor analysis; 21 articles used confirmatory factor analysis; eight studies used both analyses. Worley et al. (2008) conducted principal component analysis to find that items loaded on the appropriate factor, with factor loadings ranging from .69 to .98 for the emotional exhaustion factor. Reliability of the Educators Survey was also demonstrated in Lackritz’ (2004) study of 265 full-time faculty from one university in the US, with a Cronbach’s alpha of .90 for the emotional exhaustion dimension.

b. Organizational commitment

**Conceptual.** Adopted from Mowday et al. (1982), organizational commitment is defined as the psychological attachment to and identification with an organization that makes separation from the organization difficult for the employee.

**Operational.** The most widely used measure of organizational commitment, the Organizational Commitment Questionnaire (OCQ), was developed by Porter, Steers, Mowday, and Boulian (1974). This study will use the 9-item short form. Participants will indicate the extent of their agreement or disagreement with each statement along a one to seven ordinal scale, where 1 = *strongly disagree* and 7 = *strongly agree*. A total score is
computed by calculating the mean. The higher the score, the greater the commitment to the organization. Reliability and validity of the shortened version have been established. Tetrick and Farkas (1988) found a Cronbach’s alpha of .86. Mowday and Steers (1979, as cited by Price, 1997) found that the OCQ converged with the organizational attachment measure, a 12-item measure that captures ‘affective’ commitment ($r = .70$). With respect to discriminant validity, the OCQ did not correlate highly with other attitudinal measures. Price (1997), reported the following correlations: over four samples, correlations with job involvement ranged from .30 to .56; over two samples, correlations ranged from .39 and .40 with career satisfaction; with five samples, correlations ranged from .01 to .68 between the OCQ and the Job Descriptive Index.

c. Job satisfaction

**Conceptual.** Job satisfaction is defined as the positive, contented feelings nurse faculty have toward their job.

**Operational.** Global job satisfaction will be measured by the Job Satisfaction subscale of the Michigan Organizational Assessment Questionnaire (MOAQ-JSS) developed by Cammann, Fichman, Jenkins, and Klesh (1983, as cited by Bowling & Hammond, 2008). The MOAQ-JSS is composed of three items. Responses are obtained along a seven-point ordinal scale where $1 = \text{strongly disagree}$ and $7 = \text{strongly agree}$. Scores are computed by finding the average, with the second item being reversed-scored. The higher the score, the more satisfied the participant is overall. In a meta-analysis of 80 samples ($n = 30,703$) that used the MOAQ-JSS, Bowling and Hammond (2008) established the scale’s reliability. The mean sample-weighted internal consistency reliability was .84.

**External Characteristics**

External characteristics includes: external career opportunities.

**Conceptual.** External career opportunities is defined as the degree of available career opportunities outside of the present employing organization.

**Operational.** Perceived amount of external career opportunities will be measured with one item. Participants will be asked to indicate the extent of their agreement with the following statement: *There are nurse faculty career opportunities outside of my present academic organization.* Response options range from one to seven where $1 = \text{strongly}$
disagree and 7 = strongly agree. The higher the score, the more the available job opportunities outside of the employing organization as perceived by nurse faculty.

Nurse Demographics Characteristics

In this study, demographic data will be collected with single item questions. Data will be collected about age, education level, and organizational tenure.

Data Collection

According to the CNO 2010 online nurse query tool, there is a potential pool of 493 registered nurses (RNs) and nurse practitioners (NPs) working part-time as faculty/educator. A pre-notice letter (Appendix E) will be sent to home addresses of all potential participants, introducing the study and informing the potential participant that a formal letter of explanation (Appendix F) will be sent shortly afterwards. The letter of explanation will include the following: (a) the purpose of the study; (b) the approximate time it will take to complete the questionnaire; (c) assurance of anonymity and confidentiality; (d) consent to participate in the study is implied if the questionnaire is completed, and; (e) the researcher’s contact information in case of questions and/or concerns. To encourage participation, reminder letters will be sent over a 10-week period.

Survey Plan

Once approval from the University of Toronto Health Sciences Research Ethics Board is obtained, invitations to participate will be mailed to potential participants. Survey administration will follow methods proposed by Dillman et al. (2009). Questionnaire implementation will consist of a system of five contacts over a 10-week period consisting of the following:

1. Week one: a brief pre-notice letter (Appendix E) is mailed to potential participants a few days prior to the questionnaire. The pre-notice letter explains that an important survey will arrive in their home mailbox in a few days and that the person’s response would be greatly appreciated.

2. Week two: the letter of explanation and questionnaire (Appendices F and I) mailing. The letter of explanation provides details of the study and why the study is important.

3. Week four: a thank you/remider postcard (Appendix G) is mailed after the questionnaire. The postcard expresses appreciation for responding and indicates that
if the questionnaire has not yet been completed, it is hoped that it will be completed and returned shortly.

4. Week seven: a replacement letter and questionnaire (Appendices H and I) is mailed to non-respondents 2 to 4 weeks after the previous questionnaire mailing. It indicates that the person’s completed questionnaire has not yet been received and urges the recipient to complete the survey and mail it back.

5. Week nine: final contact is made. A thank you postcard is mailed, expressing appreciation for participating and encouraging non-responders to complete and mail back the questionnaire.

Data Analysis

Construct Validity and Reliability

To assess validity of each scale, confirmatory factor analysis will be conducted using the structural equation modeling software, AMOS version 18. Another important issue in testing the measurement model is to determine the reliability of a set of items purported to define a construct (Schumacker & Lomax, 2004). Measurement reliability will be assessed with Cronbach’s alpha. A reliability coefficient of .70 or higher is considered acceptable (Nunnally & Bernstein, 1994).

Structural Equation Modeling

Structural equation modeling (SEM) will be the statistical method used to test and refine the theoretical model. SEM is a theory-testing statistical technique that can estimate both direct and indirect effects and the hypothesized causal sequences of effects among model constructs. SEM is particularly appropriate for this study given the complexity of the theoretical model. Weston and Gore (2006) make note of two differences between SEM and common quantitative methods. First, as an advantage, SEM has the capacity to estimate and test relationships among constructs. It allows for use of multiple measures to represent constructs and accounts for measurement error. This allows testing of construct validity. Second, in order to determine model fit, interpretation of the significance of SEM results requires evaluation involving multiple test statistics and several fit indices. There are two major steps in SEM. The first step is to validate the measurement model; the second step is to assess the fit of the model (Schumacker & Lomax, 2004). The following steps will guide proper SEM model testing: (a) model identification, (b) estimation, (c) evaluation, and (d)
modification (Schumacker & Lomax, 2004; Weston & Gore, 2006; Weston, Gore, Chan, & Catalano, 2008).

**Validating the measurement model.** Before fitting the full structural model to the data, the measurement model will assessed for construct validity using confirmatory factor analysis (CFA). Most of the model modification to obtain model fit will occur during measurement model formulation (Schumacker & Lomax, 2004). Conducting CFA focuses on the extent to which the observed variables are linked to their underlying latent variable (Byrne, 2010). Before statistical testing of the measurement model, it must be identified first.

**Model identification.** In model identification, the goal is to determine whether a value for every free parameter can be obtained from the observed data, which depends on the choice of model and specification of fixed, constrained, and free parameters (Schumacker & Lomax, 2004). Because the latent variable is unobservable, it does not have a measurement scale. In order to estimate the factor loadings, one of the paths from latent variable to indicator is constrained to one. The factor loading with the largest standardized regression coefficient will be fixed to 1.0. For models with three indicators, two loadings will be fixed to 1.0 in order to attain degrees of freedom greater than zero.

**Model estimation.** The goal of model estimation is to produce an observed covariance matrix that converges with the theoretical covariance matrix so that the residual matrix is minimized. To estimate factor loadings, Maximum Likelihood Estimation (MLE) will be used. MLE chooses estimates that have the greatest chance of reproducing the observed data (Schumacker & Lomax, 2004). One key assumption of MLE is normally distributed data.

**Model evaluation.** Once the model has been estimated, it will be assessed whether the hypothesized model fits the data. Model fit will be examined by assessing (1) magnitude and direction of parameter estimates, statistical significance, and appropriateness of standard errors and residuals, and; (2) the model as a whole as indicated by the chi-square test, its p-value, and goodness-of-fit indices (Weston & Gore, 2006).

Chi-square ($\chi^2$) is an index of absolute fit, which directly assesses how well a model fits the observed data. A chi-square with a p-value that is greater than .05 indicates that the hypothesized model is not significantly different than the hypothesized model. Because the
chi-square statistic is sensitive to sample size and may not provide an accurate picture of model fit, additional goodness-of-fit indices will be examined (Schumacker & Lomax, 2004; Weston & Gore, 2006). Goodness-of-fit (GFI) is an index of absolute fit. The GFI, analogous to $R^2$ in regression analysis, is a measure of the relative amount of variance in the data that is jointly explained by the hypothesized model. Values closer to 1.0 indicate good fit (Byrne, 2010). By convention, GFI should be equal to or greater than .95 (Weston & Gore, 2006). The Comparative Fit Index (CFI) is an incremental fit index in which the improvement of a model is compared to a restricted, null model, which specifies no relationships among variables. With a range of zero to 1.0, values closer to 1.0 indicate better fit; greater than .95 is considered a good fit (Weston & Gore, 2006). The Standardized Root Mean Square Residual (SRMR) index is a summary of how much difference exists between the model and observed data. It ranges from zero to 1.0. In a well-fitting model, the SRMR is less than .05. The Tucker-Lewis Index (TLI) has values ranging from zero to 1.0. A value close to .95 indicates a good fit. This index addresses issues of parsimony and sample size (Byrne, 2010). The Root Mean Square Error of Approximation (RMSEA) corrects for a model’s complexity (Weston & Gore, 2006). When multiple models explain the data equally well, the RMSEA value will favour the simpler, more parsimonious model (Weston & Gore, 2006). Values less than .05 indicate good fit. Values between .06 and .08 indicate an adequate fit. Its corresponding 90% confidence interval and non-significant $p$ of close fit indicates a good fit.

**Model modification.** If the model does not meet the minimum acceptable criteria for acceptable model fit, the model will be modified with subsequent re-testing. Model modification may include freeing or setting parameters (Weston & Gore, 2006). To determine which changes may result in a better fitting model, several modification indices can be employed. It should be noted that model modifications may adversely affect the generalizability of study findings. Therefore, modifications will only be made within the limitations of previous empirical findings or changes that are theoretically appropriate.

**Validating the full structural model.** Once each measurement model has been tested and modified (if necessary), the next step is to validate the full structural model, which includes the measurement models, but also specifies how the latent variables are related
(Schumacker & Lomax, 2004). The steps to test the full structural model are similar to those to test the measurement model, described above.

**Measurement error.** Measurement error refers to error associated with the indicator variable. In the factor-analytic context, measurement error represents unique variance, which describes the variance not explained by the factors (Kline, 2011). Therefore, measurement error, represented by the small ellipses in Figure 13, represent the combined effect of all other unspecified sources of influence on the indicator’s score (Kline, 2011). An advantage of SEM is its capacity to accommodate varying errors in measurements (Weston et al., 2008). Measurement error is explicitly modeled, and as a result, estimated parameters are unbiased by error terms. During the measurement model validation step, all items of scales will serve as indicators of underlying variables. Therefore, error terms are free to be estimated. During validation of the full structural model, one indicator will be used to define each latent variable. The issue with using one indicator to define a latent variable is that measurement error cannot be modeled, therefore, measurement error variance must be fixed. An error term for each indicator, reflecting the percentage of the variance due to error is expressed as percentage of the variable’s variance (Cummings et al., 2008). Measurement error percentages typically range from 1% to 20% (Cummings et al., 2008; Hayduk, 1987) and should be determined based on judgement of how accurately each indicator reflects its respective underlying concept (see Appendix C). According to Hayduk (1987), fixing the error variance as a nonzero value implies that factors other than the underlying concept can influence the indicator, acknowledging unreliability in the measurement.

**Missing Data**

If missing data are determined to be systematic, there is no reliable way to remedy the systematic data loss, therefore, preventative measures should be taken to prevent this occurrence (Squires & Tourangeau, 2009). In this study, the questionnaire will be subjected to a feasibility test and modified in accordance with recommendations made by feasibility test participants. If data are missing, the Expectation Maximization (EM) method will be used. EM is an iterative procedure that produces estimated values for missing data by using expectation (E-step) and maximization (M-step) algorithms (Musil, Warner, Yobas, & Jones, 2002). This iterative process concludes when expected values from iteration to iteration become negligible.
**Feasibility Test**

Because this is a newly developed questionnaire, a small feasibility test will be conducted before the main study. While the majority of the questionnaire is composed of valid and reliable scales, the questionnaire contains numerous items, causing concern for response burden, negatively influencing response rate. Due to the concern that greater questionnaire length significantly decreases response rate, experiments focused on examining the relationship between questionnaire length and responses were discussed by Dillman et al. (2009). Dillman et al. (2009) concluded that overall, greater length decreases response rates. However, shortening an already brief questionnaire does not necessarily improve response. Dillman et al. (2009) did suggest that the relationship between questionnaire length and response rate is likely to decrease when response-inducing techniques (such as layout, font size, question order, etc.) are used. It should be noted that a feasibility test does not necessarily improve response rates.

In this study, the questionnaire will be tested with up to five nurse faculty from the faculty where the PhD student is affiliated. Participants will be asked to complete the entire questionnaire in one sitting and asked to record the time it took to complete. Once the participant has completed the questionnaire, he or she will be asked to comment on the following: questionnaire length, ease of understanding, and visual layout. Revisions of the questionnaire will reflect feasibility test participants’ comments. Once revisions have been made, the questionnaire will be mailed to all potential participants.

**Ethical Considerations**

**Harm and/or Potential Risks to Participants**

Participants may be concerned about potential injury to reputation or privacy if others become aware of their perceptions, negative or positive, of their employing organization, and/or their intentions about their future employment at their current organization. To maintain anonymity and confidentiality of participants and their responses, there will be no personal identifiers included in analysis. Only grouped responses will be presented.

In order to keep track of who participated, each potential participant will be assigned a code number. The list of names and respective code numbers can only be accessed by the researcher and will be kept separate from survey data, double locked in the researcher’s office at the Lawrence S. Bloomberg Faculty of Nursing. This information will only be used
to identify those who have or have not returned surveys so that subsequent mail-outs are sent to the appropriate people. The list will also be used to remove surveys and/or survey data of those who wish to withdraw from the study.

**Informed Consent, Anonymity, and Confidentiality**

A completed and submitted survey indicates respondent consent to participate in the study. Participants will be informed of their right to withdraw from the study at any time without penalty of any kind and that they may choose not to answer any question asked as part of the research. Results of the study will be presented in such a way that individual participants cannot be identified. Access to completed surveys is permitted only to the PhD student and supervisory committee members. There will be no sources of individual identification on surveys. Only grouped responses will be presented.

**Storage of Data**

Hard copies of surveys will be securely double locked in the research office of the student’s PhD supervisor’s office at the University of Toronto for a period of two years, after which the surveys will be securely destroyed. Electronic survey data will be retained in the most current Statistical Package for the Social Sciences (SPSS) and Analysis of Moment Structures (AMOS) files for analyses. These electronic files will be password protected and will not contain any personal identifiers. Nurse faculty survey electronic data will be securely stored on a University of Toronto server and data stored on memory sticks that will be double locked in the research office of the investigator at the University of Toronto.

**Remuneration**

Remuneration will be provided to two not-for-profit charitable organizations on behalf of each participant for his/her completed survey. Participants will be asked to choose the organization he/she would like the researcher to donate $1.00 to on their behalf. Participants can choose either Higher Ground Neighbourhood Outreach or the Heart and Stroke Foundation of Ontario.

**Study Limitations**

Although the purpose of this study is to develop, test, and refine a theory of part-time nurse faculty intent to remain employed in the academic organization, a limitation of this cross-sectional study design is its inability to prove hypothesized causal relationships. With cross-sectional studies, data are captured at one point in time and theories that focus on
sequences of events cannot be confirmed. Despite this limitation, the cross-sectional research design is appropriate at this juncture as little is known about part-time nurse faculty intent to remain. Thus, findings from this study will provide foundational understanding of the intent to remain phenomenon among part-time nurse faculty and will serve to develop future longitudinal designs that can provide stronger evidence of causality. To examine the hypothesized relationships, structural equation modeling (SEM) will be used. SEM is a comprehensive method for quantifying and testing theories. It is used to test the plausibility of propositions about interrelationships among constructs and the relationships to indicators assessing them (Raykov & Marcoulides, 2006). Thus, if the data fits the implied model well, there is evidence to support the theoretical model of part-time nurse faculty intent to remain employed in the academic organization.

**Threats to Study Validity**

Internal validity is the degree to which the independent variable(s), rather than extraneous variables, is responsible for observed effects (Polit & Beck, 2010). A common threat to a study’s internal validity is selection, the way in which participants are chosen (Polit & Beck, 2010). Selection encompasses biases that result from pre-existing differences among subjects (Polit & Beck, 2010). If there are differences among subjects, differences in outcomes may be a result of subject differences. To control effects of selection biases, a random sample can be selected. Randomization is a technique that limits the effects of selection biases on internal validity by giving each potential participant an equal chance of being selected (Polit & Beck, 2010), and is used when the entire population cannot be studied. In this study, it is feasible to invite the entire population of Ontario part-time nurse faculty to participate.

External validity refers to the generalizability of findings to other samples and settings (Polit & Beck, 2010). Due to the volunteer nature of data collection, non-response bias is a possible limitation of this study. Non-response bias is a source of error in which characteristics of the respondents differ significantly from characteristics of the non-responders. As the rate of non-responders increases, the probability that the sample represents the population of interest decreases. In such situations, the sample is no longer representative of the population and findings cannot be credibly generalized to the population of interest. To limit the effects of non-response bias in this study, efforts will be made to
maximize participation by following Dillman et al.’s (2009) recommendations. Specifically, potential participants will be contacted up to five times over a ten-week span to encourage and remind them to participate.

**Common method variance.** Another threat to this study’s internal and external validity is common method variance. Common method variance becomes an issue when the variance caused by common methods biases the results between the observed and true relationships between constructs (Doty & Glick, 1989). The use of common methods to measure constructs has the potential to either inflate or deflate correlations, thereby leading to inaccurate findings. As this study will use a survey to examine all constructs of interest, common method variance with consequent biases is a possibility.

There is sufficient discussion in the literature that questions the gravity of common method variance (Crampton & Wagner, 1994; Doty & Glick, 1998; Spector, 1987; Spector, 2006). For instance, Spector (1987) examined method variance of ten studies that administered the Job Satisfaction Survey and the Job Descriptive Index. In all but one analysis, common method variance was non-significant. Crampton and Wagner (1994) compared mono-method and multi-method correlations among 143 pairs of variables in 581 articles. The scholars found that in 11% of mono-method cases, correlations were lower. In 62% of cases, there were no significant differences between the two measurement approaches. Crampton and Wagner (1994) therefore concluded that while common method variance may be a prevalent issue, it may be of concern only with certain combinations of variables. Spector (2006) has a strong aversion of the idea of common methods variance, stating that the first step in dealing with the potential problem of common method variance is to change the way in which we think about it. He contends that common method variance is simply urban legend, suggesting that the idea and term be retired and replaced with a more complex notion of the connection between constructs and their assessment. Rather than accepting the existence of systematic variance produced by common methods, he encourages researchers to contemplate each measured variable, the possible sources of variance, and how they might be controlled. Rather than systematically implementing methods to decrease the likelihood of biased results, researchers should involve a careful analysis of the study purpose and the nature of the desired inferences in relation to the measurement methods being used (Spector, 2006).
ADDENDUM OF CHAPTERS TWO AND THREE

This addendum describes changes made to the dissertation after the successful defence of the study proposal. Revisions were made to the theoretical model presented in chapter two and the statistical approach to test the hypotheses presented in chapter three.

Revisions to the theoretical model and analytical approach were necessary as it was determined that the achieved collected sample size \((n = 119)\) was too small given the complexity of the model to produce valid results (Kline, 2011; Lei & Wu, 2007). Structural equation modeling (SEM) is a large sample analytical approach (Lei & Wu, 2007). Although there is little consensus about sample size, it is commonly recommended that a sample size should be a minimum of 200 cases (Kenny, 2012; Kline, 2011, Lei & Wu, 2007; Weston & Gore, 2006). A caveat of sample size in SEM is that adequacy of sample size also depends on model size (Lei, 2009). The more complex a model, the more parameters to estimate, therefore, the greater the sample size needed for results to be reasonably stable. The hypothesized relationships between model variables were based on empirical evidence and previous theory, illustrated in Figure 12. However, a sample size of 119 limits statistical examination of the model in its entirety using SEM. As Kline (2011) described, sample sizes of less than 150 cases may result in nonconvergence or improper solutions. To address the problems associated with validity, a portion of the theoretical model will be tested. Figure 14 illustrates that fundamental changes were not made to the model. Rather, the section of the theoretical model that suggests direct relationships between the 19 demographic, workplace, nurse faculty responses, and external characteristics and intent to remain employed (H1 to H19 in chapter two) will be tested. Post-hoc analyses will be conducted if findings from hypothesis testing suggest the presence of mediation. If mediation is suspected, analyses will be limited to examining burnout, organizational commitment, and/or job satisfaction as mediating variables between the workplace characteristics and intent to remain as theorized in the original model.

In SEM, two steps must be satisfied before a hypothesized model can be empirically estimated: model specification and model identification. In the model specification step, a graphical model of a phenomenon is developed. Figure 12 illustrates the hypothesized relationships depicted by the arrows. Knowledge of theory and empirical evidence guides this step. In the model identification step, it is determined if the hypothesized model can be
empirically estimated. If the number of known values (from the variance-covariance matrix) is greater than the number of unknown values, which are the parameters to be estimated, the model is identified and can be tested statistically (see Figure 13). In this study, the original model is properly identified shown by its positive degrees of freedom \( df = p - q = 22 \); where \( p \) is number of known values and \( q \) is the number of unknown values. Although the model is identified, the sample size precludes examination of the original model as an improper solution is likely (Kline, 2011).

One potential solution to this issue that was explored was to increase the sample of part-time nurse faculty population. However, the request made to the College of Nurses of Ontario (CNO) in 2010 for all names and corresponding mailing address of RNs meeting the inclusion criteria yielded a total of 282 potential participants. This is a marked decline from the projected sample pool of 493 in 2010 provided by the CNO online nursing query tool. Reasons for the discrepancy are unknown, but may include voluntary or involuntary turnover, retirement, and a decline to participate in research. Therefore, it was not possible to increase the sample size of part-time nurse faculty employed in Ontario. The entire available population was invited to participate. Time and resources limited the sampling of part-time nurse faculty employed in other provinces.

To examine the direct effects, multiple linear regression is employed. Multiple regression is used to assess the relationship between one dependent variable and several independent variables (Tabachnick & Fidell, 2013). Because regression techniques can be used when independent variables are correlated, multiple regression is appropriate in this study. In this study, it is assumed that some independent variables are related to each other. Independent variables are entered simultaneously to identify how much unique variance in intent to remain each of the independent variables explains. In standard multiple regression, the portion of correlated variables that contributes to the variance in ITR is not assigned to any one independent variable, therefore independent variables that are highly correlated with ITR and other independent variables may appear unimportant. For this reason, both the full correlation and the unique contribution of each independent variable will be considered in interpretation. According to Cohen, Cohen, West, and Aiken (2002), partialling is a mechanism that makes multiple regression and correlation a powerful system that allows for an increase in generality and mirrors the complexity of the hypothesized causal relationships.
To evaluate the hypotheses, the level of significance for a two-tailed test was set to an alpha of 0.10. The revised model is illustrated in Figure 14.
Figure 14. Revised model of Part-time Nursing Faculty Intent to Remain Employed in the Academic Organization.
CHAPTER FOUR: RESULTS

In this chapter, study findings will be presented in several sections. First, findings from feasibility testing are described. Second, demographic characteristics of the sample and setting are described including sample characteristics based on setting. Third, descriptive characteristics of the independent variables, including validity and reliability analyses are presented. Last, findings from correlation and multiple regression analyses used to test the hypotheses and a refined model are presented (Figure 32).

To determine factors influencing intent to remain employed (ITR) for part-time nurse faculty, a cross-sectional survey design was used. The model included 19 constructs hypothesized to directly predict intent to remain. The centred squared-term of age was added to model testing because age and intent to remain also function curvilinearly. The constructs are as follows: (a) demographic characteristics – age, organizational tenure, graduate-level education; (b) job characteristics – workload, resource adequacy; (c) role characteristics – role ambiguity, role conflict, autonomy; (d) leadership characteristics – leader support; (e) work group characteristics – co-worker support; (f) organizational characteristics – professional growth opportunities, recognition, distributive justice, procedural justice, work rewards; (g) external characteristics – external career opportunities; (h) faculty responses to work – burnout, organizational commitment, and job satisfaction. The initial mailing of the pre-notice letter was sent to 282 part-time nurse faculty in Ontario who fit the inclusion criteria. One pre-notice letter was returned indicating an incorrect mailing address, therefore, 281 initial surveys were sent with follow-up mailings as recommended by Dillman et al. (2009). Two additional questionnaires were undeliverable. Twenty-nine responders were ineligible as they did not satisfy the inclusion criteria (i.e. did not work as a part-time faculty member in a university or college in Ontario or did not teach one RN or RPN course within the last year or would not teach within the upcoming year). A total of 125 part-time nurse faculty who met the inclusion criteria responded for a response rate of 50%. Data of six additional responders were deleted from further analysis because of a high percentage of missing data. The true response rate was 47.6%.

Questionnaire Feasibility Testing Results

The survey consisted of 14 valid and reliable scales, and specific individual questions about intent to remain, demographics, work rewards, and external career opportunities.
Three full-time nurse faculty members at the academic organization where the researcher is affiliated agreed to participate in the feasibility portion of this study. Participants were instructed to complete the questionnaire in one sitting noting the times he/she started and completed the questionnaire. Once completed, the researcher interviewed the participant and asked him/her to comment on the format (e.g., font size), ease of understanding and clarity of instructions and questions, and questionnaire length. Results of the feasibility testing are presented in Table 1. Any suggestions to modify pre-existing scales were not made to retain their original form. Suggestions to improve clarity of instructions and format of questionnaire were made.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Time to complete</th>
<th>Comments/Suggestions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>18 minutes</td>
<td>• Ambiguous wording of one Developmental Experiences scale item</td>
</tr>
<tr>
<td>2</td>
<td>14 minutes</td>
<td>• Improve clarity of instructions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Specify that FTE* is in response to primary part-time position</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Improve clarity of one Role Clarity item</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Include an additional response option for Emotional Exhaustion scale</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Add page numbers</td>
</tr>
<tr>
<td>3</td>
<td>10 minutes</td>
<td>• Include, Not applicable as a response option to Procedural Justice scale</td>
</tr>
</tbody>
</table>

Note: * full-time equivalent.

Data Preparation and Screening

Once questionnaires were returned, the data were coded and entered into the SPSS 20 computer software. Before proceeding with statistical analysis, data were double checked and corrected for data entry errors. Missing data were identified and managed. Normality, linearity, multicollinearity, and homoscedasticity assumptions were examined using both graphical and statistical methods.

Missing Data Assessment and Management

Six responders were removed from the data set. Four responders did not fill in any of the demographic data, therefore they could not be categorized in any meaningful way. Two responders did not fill in at least half of the questionnaire. For the remaining questionnaires
that were missing data, the extent and pattern were examined. In the following sections, the lack of a response values will be referred to as “missing data”.

**Extent of missingness.** Up to 10% of cases with missing data is not extensive and should be treated and retained (Fox-Wasylyshyn & El-Masri, 2005). Overall, 38 (31.9%) responders had at least one missing datum on an item. The item which addressed the proportion of FTE worked had extensive missingness of 10.1% ($n = 12$). This item was not included in inferential analysis, therefore missing data were not imputed.

Other than the FTE item, items with missing scores were not excessive and ranged from 0.8% ($n = 1$) to 5.0% ($n = 6$). The Recognition scale had the most missing data ($n = 6$). The only scale that did not have any missing data was the Development Experiences scale measuring the professional growth opportunities construct. The remaining scales had at least one missing datum. Of the 57 items from pre-established instruments, 41 had at least, one missing datum.

**Pattern of missingness.** More than the extent of missingness, of greater concern is the pattern of missingness because it has a larger impact on the validity of results (Kline, 2011; Tabachnick & Fidell, 2013). The missing completely at random (MCAR) assumption was examined using Little’s (1988) MCAR test. The null hypothesis of this test states that missing data are missing completely at random. Findings show that the null hypothesis is not rejected. Therefore, it was concluded that missing data were missing completely at random ($\chi^2 = 1,786, df = 1,906, p = .98$).

**Imputing missing data.** Missing values in demographic variables were imputed using pattern matching (Kline, 2011). Missing age data ($n = 5$) were imputed by first identifying a participant most similar to the participant with missing data on the following characteristics: type of organization, level of education, rank, organizational tenure, and faculty role tenure, followed by extrapolating age of the similar participant to the participant with the missing data. Similarly, missing RN education scores ($n = 3$) were imputed with a value extrapolated from a similar participant with respect to age, education in another discipline, type of organization, and rank. Items used to measure intent to remain with missing data were imputed using the expectation maximization (EM) method (Musil et al., 2002). A total of 57 missing data were imputed using the EM method.
Normality

The normality assumption of each variable was examined by analyzing Q-Q plots and comparing skewness and kurtosis statistics to a threshold. A Q-Q plot illustrates normal distribution if there is minimal deviation of the observed data points from the reference distribution line. Skewness and kurtosis statistics not greater than +/- 3.3 indicate normality (Tabachnick & Fidell, 2013). Visual inspection of the Q-Q plot suggested the presence of non-normality in the following variables: organizational tenure, autonomy, burnout, and job satisfaction. However, skewness and kurtosis statistics of the suspected non-normal variables were within normal limits. Therefore, it was concluded that study variables were normally distributed.

Outliers. A score is considered an outlier when the z-score is +/- 3.3 (Tabachnick & Fidell, 2013). Three univariate outliers were identified. Two organizational tenure cases had z-scores of 3.76 and 3.63, and original scores of 40 and 39, respectively. Both scores were changed to 35, the next most extreme score. The burnout variable had one outlier with a z-score of 3.30 and the original score of 5.88. The score was changed to the next most extreme score of 5.75. The presence of multivariate outliers was assessed by examining the p-values of the Mahalanobis distance statistic for each case. All p-values were greater than .001, indicating that the data did not contain any multivariate outliers (Tabachnick & Fidell, 2013).

Linearity

Linearity was assessed by examining scatter plots between independent variables and the dependent variable and a trend line. Relationships appeared linear with the exception of age which showed a curvilinear relationship. A quadratic trend line was added to the scatter plot, which appeared to better fit the dispersion of data points. In addition, the $R^2$ of the linear and quadratic trend lines suggested that the quadratic line better fit the data ($R^2 = .03$ and .06, respectively). When intent to remain was regressed on age and the centred squared term of age, both beta coefficients were statistically significant. Therefore, age-squared was included in regression analyses as a predictor.

Multicollinearity. Assessment of multicollinearity began with examining the correlations between all independent variables. Correlations ranged from < .001 to .74. The correlation of .74 between distributive justice and work rewards suggested collinearity. However, all variance inflation factor statistics of the independent variables were less than
10.0, ranging from 1.16 to 2.99 (Kline, 2011). Therefore, there was no evidence that the assumption of multicollinearity was violated.

**Homoscedasticity**

Homoscedasticity means that the variance of intent to remain’s residuals are equal across all independent variables. Scatter plots of the residuals and level of significance of the Breusch-Pagan test for heteroscedasticity were examined. Heteroscedasticity was suspected based on visual analysis of the residual plots of the following variables: age, role conflict, autonomy, recognition, organizational commitment, and job satisfaction. The non-significant $p$-value of the Breusch-Pagan test ($\chi^2 = 15.39, p = .70$) indicated that the null hypothesis of homoscedasticity is not rejected. Therefore, there was no evidence that assumption of homoscedasticity was violated.

**Sample and Setting Demographic Characteristics**

In this section, nurse faculty demographic characteristics and work setting characteristics are described. The demographic variables included are age, sex, education, academic organization, academic rank, years worked in the organization, years worked as a faculty member, proportion of full-time equivalent (FTE), and preference for part-time or full-time employment. Table 2 summarizes the descriptive statistics of the predictor variables.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Descriptive Statistics of Predictor Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>Range</td>
</tr>
<tr>
<td>Intent to remain 2 years</td>
<td>1 – 100</td>
</tr>
<tr>
<td>Age (in years)</td>
<td>30 – 76</td>
</tr>
<tr>
<td>Organizational Tenure (in years)</td>
<td>1.5 – 40</td>
</tr>
<tr>
<td>Graduate-level Education</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Workload</td>
<td>1 – 100</td>
</tr>
<tr>
<td>Resource Adequacy</td>
<td>1 – 100</td>
</tr>
<tr>
<td>Autonomy</td>
<td>1 – 100</td>
</tr>
<tr>
<td>Role Ambiguity</td>
<td>1 – 100</td>
</tr>
<tr>
<td>Role Conflict</td>
<td>1 – 100</td>
</tr>
<tr>
<td>Leader Support</td>
<td>1 – 100</td>
</tr>
<tr>
<td>Co-worker Support</td>
<td>1 – 100</td>
</tr>
<tr>
<td>Professional Growth Opportunities</td>
<td>1 – 100</td>
</tr>
<tr>
<td>Recognition</td>
<td>1 – 100</td>
</tr>
</tbody>
</table>
Variable & Range & Mean* or Proportion (%) & SD & Cronbach’s alpha \\
--- & --- & --- & --- & --- \\
Distributive Justice & 1 – 100 & 43.72 & 24.86 & .96 \\
Procedural Justice & 1 – 100 & 48.92 & 20.23 & .87 \\
Work Rewards & 1 – 100 & 43.77 & 31.03 & – \\
External Career Opportunities & 1 – 100 & 59.89 & 30.24 & – \\
Burnout & ≤ 13 = low EE** & 12.82 & 1.36 & .93 \\
 & 14 – 23 = avg. EE & & & \\
 & ≥ 24 = high EE & & & \\
Organizational Commitment & 1 – 100 & 65.87 & 22.97 & .93 \\
Job Satisfaction & 1 – 100 & 75.49 & 25.73 & .88 \\

* all variables standardized out of 100 except age, organizational tenure, graduate-level education, and burnout. ** emotional exhaustion.

Sample Characteristics

Sex and age. One hundred percent of the sample (n = 119) indicated their sex as female. Of the total sample, 114 (95.8%) participants disclosed their year of birth. Age was calculated by subtracting year of birth from 2010, the year that data were collected. The average age of part-time nurse faculty in Ontario was 53.4 years (SD = 11.49), which is older than the average age of 46.5 years for the Ontario nurse in 2010 (CNO, 2010).

Education. Of the total sample, 116 participants disclosed their highest nursing education credentials. The majority of the sample (n = 54, 45.4%) had a nursing baccalaureate degree as their highest level of registered nurse (RN) education. Twenty-three (19.8%) participants had a diploma in nursing as their highest nursing credential. The remaining 39 participants had a nursing graduate degree as their highest nursing credential. Specifically, 37 participants (31.9%) had a master’s degree and two participants (< 1%) had a PhD in nursing.

Participants identified whether or not they had completed education credentials other than nursing. Approximately half of participants, 53.8% (n = 64) did not report having another education credential, 20.2% (n = 24) had a master’s degree, 10.1% (n = 12) had a baccalaureate degree, 9.2% (n = 11) had a certificate, 3.4% (n = 4) had a diploma, and 3.4% (n = 4) had a PhD in another discipline.

Academic rank. Participants identified their academic position rank. The majority of the sample, 37.8% (n = 45) were clinical instructors; 22.7% (n = 27) were sessional instructors, and 12.6% (n = 15) identified themselves as an instructor. Ten participants (14.2%) self-identified as lecturers – nine individuals held the lecturer title and one
individual was a senior lecturer. The professor rank was subdivided into four groups: professor \( (n = 16, 13.4\%) \), assistant professor \( (n = 2, 1.7\%) \), associate professor \( (n = 2, 1.7\%) \), and adjunct professor \( (n = 1, 0.8\%) \). One participant selected the “Other” option and self-identified as a replacement professor. No additional description was provided.

**Organizational tenure.** One hundred percent of the sample indicated the number of years that they have worked in the academic organization where they held a part-time position. Organizational tenure ranged from 1.5 to 40 years, with a mean of 9.56 years and a standard deviation of 8.01.

**Faculty role tenure.** All participants indicated the number of years that they have worked as nurse faculty in any organization. Participants reported having worked an average of 12.1 years in a faculty role \( (SD = 9.22; range = 1 \text{ to } 40) \).

**Full-time equivalent of position (FTE).** Of the total sample, 113 participants indicated the FTE of their position. Of these, six participants did not know the proportion of FTE they worked. Participants reported working a wide range of FTEs (.1 to 1.0), with an average of .49 \( (SD = .26) \). The majority of the sample worked .50 FTEs and less. Twenty-six point nine percent \( (n = 32) \) worked .30 FTEs or less, and 27.7% \( (n = 33) \) worked between .31 and .50 FTEs. Almost 17% \( (n = 20) \) worked between .51 and .75 FTEs, and the remaining 18.5% participants \( (n = 22) \) worked .76 or more FTEs, 10 of which said they worked 1.0 FTE. The participants that reported working 1.0 FTE may have been referring to the number of hours that they put into their job, rather than the number of hours that they were hired to work.

**Employment status.** One hundred percent of the sample answered the question that asked participants if they would prefer a full-time nurse faculty position if available. The majority of participants, 56.3% \( (n = 67) \), reported that they would not prefer a full-time position. Approximately 36% \( (n = 43) \) reported that they would choose a full-time position if available, and the remaining 7.7% \( (n = 9) \) were unsure.

**Setting Characteristics**

**Organization.** All participants identified the type of organization where they held their part-time faculty position. In this sample, there was an almost even split between university \( (n = 54, 45.4\%) \) and college \( (n = 57, 47.9\%) \). Eight individuals worked in both college and university. These individuals were referring to their employment in a
collaborative nursing program, in which accredited nursing education is jointly delivered by college and university partners, with the university partner maintaining authority to issue baccalaureate nursing degrees (Council of Ontario Universities, 2012).

**Summary of Sample and Setting Characteristics**

In summary, part-time nurse faculty who participated in this study were all female, with an average age of 53.4 years. More than half the participants had some form of undergraduate certification as their highest level of education, while approximately one third attended graduate school and held a master’s degree in nursing. There was significant diversity in the number of years nurse faculty held a faculty position and worked in the same organization. The average participant held a faculty role position for approximately 12 years (range of 1 to 40 years) and worked in the same organization for approximately 10 years. Just as diverse was the proportion of FTE part-time faculty worked, ranging from .1 to 1.0 FTE. The majority of the sample held an instructor or lecturer position. Participants worked in universities and colleges almost equally ($n = 54$ and 57, respectively). Universities, colleges, and collaborative nursing education programs had more part-time faculty in the clinical instructor role than any other rank position. Colleges employed more part-time faculty with the rank of instructor, professor, and associate professor; universities employed more part-time faculty as sessional instructors and lecturers. Over one third of participants would choose a full-time position if available but more than half the sample preferred their part-time position to full-time work.

**Descriptive Findings**

The results of the descriptive analysis of each workplace, external environment, and nurse faculty response variables are presented in this section. The analyses were performed to gain a better understanding of the state of the workplace and external environment as perceived by part-time nurse faculty, as well as their responses to their workplace. A summary of the descriptive statistics of predictor variables are found in Table 2.

**Construct Validity and Reliability**

Adequate validity and reliability psychometric properties of established instruments do not guarantee that they will be satisfactory in another sample or with a different population (Burns & Grove, 2009). Therefore, each construct examined with a pre-existing instrument was assessed for validity and reliability. Each figure in this section is an
illustration of the final confirmatory factor analysis model with standardized regression coefficients of the items loading on the construct and correlation between error terms, where applicable.

**Dependent Variable**

**Intent to remain employed.** Participants were asked about their intent to remain employed with their academic organization using three items: intent to remain two years, intent to remain five years, and intent to remain 10 years. The response option for each item was one (strongly disagree) to seven (strongly agree). Intent to remain two years was the dependent variable in correlation and multiple regression analyses because more variables were correlated with intent to remain two years (six correlations) versus intent to remain five years and intent to remain 10 years (four correlations and five correlations, respectively).

In the intent to remain two years item, there were three missing data (2.5%). With missing data, the mean raw score was 5.55 (SD = 1.90). With imputed data, the mean score was 5.57 (SD = 1.88) and the standardized mean score out of 100 was 76.17 (SD = 31.33). In the intent to remain five years item, there were four missing data (3.4%). With missing data, the mean raw score was 4.12 (SD = 2.24). With imputed data, the mean score increased to 4.13 (SD = 2.34). Imputed scores standardized out of 100 yielded a mean of 52.10 (SD = 37.24). In the ITR 10 years item, there were four missing data (3.4%). With missing and imputed intent to remain, the mean remained the same at 3.19 (SD = 2.25 with missing data and 2.23 with imputed values). The standardized mean score out of 100 was 36.53 (SD = 37.08).

**Predictor Variables**

**Workload.** Workload was measured with the 3-item Workload Index with response options from one (strongly disagree) to five (strongly agree). One item had two missing data (1.7%); the other two items had one missing datum (0.8%) each. The mean raw score with missing data was 3.47 (SD = .08). With imputed variables, the mean score and standard deviation were unchanged. Summated scores with imputed values ranged from 5 to 15 with a standardized mean out of 100 of 53.97 (SD = 24.95).

Confirmatory factor analysis results of the Workload Index are presented in Table 3. Factor loadings ranged from .57 to .79. The non-significant chi-square p-value and goodness-of-fit indices greater than the thresholds indicated that the hypothesized model fit
the data well, therefore, modifications were not required. Figure 15 illustrates the final model with factor loadings. The internal consistency coefficient was .69.

Table 3
Fit Statistics and Modification Indices for the Workload Index

<table>
<thead>
<tr>
<th>Model</th>
<th>Modification</th>
<th>$\chi^2$ (df)</th>
<th>SRMR</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA (90% CI)</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized model / Final</td>
<td>-</td>
<td>.002(1) (.97)</td>
<td>.001</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>.12 (.00-.00)</td>
<td>Adequate fit</td>
</tr>
<tr>
<td>model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Figure 15. Final model of the Workload Index.

**Resource adequacy.** The adapted resource adequacy subscale of the School-Level Environment Questionnaire contained five items with response options ranging from one (strongly disagree) to five (strongly agree). Three items had one missing datum each; two items had two missing data each. The mean raw score with missing data was 3.24 ($SD = .70$). With imputed data, the mean and standard deviation remained were unchanged. Summated scores with imputed data ranged from 8 to 25 and the standardized mean score out of 100 was 48.25 ($SD = 20.60$).

In confirmatory factor analysis, item 17, *Adequate copying facilities and services are available to faculty*, had a low loading of .26. When this item was removed from the scale, the Cronbach’s alpha increased from .64 to .66. As Table 4 summarizes, the model without the low loading item fit the data well [$\chi^2 (df) = 4.25(2), p = .12$, SRMR = .005, GFI = .98, CFI = .97, TLI = .90, RMSEA = .09 (.00 – .23), $pCLO\SE = .20$]. Figure 16 illustrates the final model with standardized factor loadings.
Figure 16. Final model of the Resource Adequacy subscale.

Role ambiguity. Role ambiguity was measured with Rizzo et al.’s (1970) 6-item instrument with response options ranging from one (very false) to seven (very true); all items were reversed scored. Four items had one missing datum each; one item had two missing data; one item had three missing data. With missing data, the mean score was 2.52 (SD = .98). With imputed data, the mean score was unchanged (SD = .97). Imputed data ranged from 6 to 31 with a standardized mean out of 100 of 36.36 (SD = 23.27).

Factor loadings ranged from .44 to .82. As Table 5 shows, confirmatory factor analysis indicated a good fit between the data and hypothesized model [$\chi^2 (df) = 14.81(9), p = .10$, SRMR = .04, GFI = .96, CFI = .98, TLI = .97, RMSEA = .07 (.00 – .14), pCLOSE =
.25). Figure 17 illustrates the final model with standardized factor loadings. The internal consistency coefficient was .86.

Table 5

<table>
<thead>
<tr>
<th>Model</th>
<th>Modification</th>
<th>$\chi^2$ (df)</th>
<th>SRMR</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA (90% CI)</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized model</td>
<td>-</td>
<td>14.81(9)</td>
<td>.04</td>
<td>.96</td>
<td>.98</td>
<td>.97</td>
<td>.07 (.00-.14)</td>
<td>Good fit</td>
</tr>
<tr>
<td>Final model</td>
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</tbody>
</table>

Figure 17. Final model of the Role Ambiguity Scale.

Role conflict. Role conflict was measured with Rizzo et al.’s (1970) 8-item instrument with response options ranging from one (very false) to seven (very true). All eight items had one missing datum each. The mean raw score with missing data was 3.37 ($SD = 1.20$); with imputed data, the mean score remained unchanged ($SD = 1.20$). When standardized out of 100, the mean with imputed data was 46.16 ($SD = 23.27$); scores ranged from 8 to 49.
In CFA, factor loadings ranged from .48 to .79. As shown in Table 6, the hypothesized measurement model yielded a poor fit. Review of the modification indices suggested a covariance between the error terms for items 32 and 33 (I receive assignments without the manpower to complete them and I receive assignments without adequate resources and materials to execute them, respectively). Once the covariance was specified in the model, the model improved slightly. Modification indices indicated that specifying covariances between error terms of items 26 and 27 (I have to do things that should be done differently and I have to defy a rule of a policy in order to carry out an assignment, respectively). Once specified, model fit improved significantly \[\chi^2(df) = 28.96(18), p = .05, \text{SRMR} = .05, \text{GFI} = .95, \text{CFI} = .97, \text{TLI} = .96, \text{RMSEA} = .07 (.01-.12), p\text{CLOSE} = .21\]. Figure 18 illustrated that final model with standardized factor loadings and correlated error terms. The internal reliability coefficient of the instrument was .86.

Table 6
Fit Statistics and Modification Indices for the Role Conflict Scale

<table>
<thead>
<tr>
<th>Model</th>
<th>Modification</th>
<th>(\chi^2 (df)) ((p))</th>
<th>SRMR</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA ((90% CI)) ((p\text{CLOSE}))</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized</td>
<td>-</td>
<td>76.28(20) ((&lt;.001))</td>
<td>.08</td>
<td>.85</td>
<td>.85</td>
<td>.79</td>
<td>.15 ((.12-.19)) ((&lt;.001))</td>
<td>Poor fit</td>
</tr>
<tr>
<td>model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revised</td>
<td>e32 ↔ e33</td>
<td>44.35(19) ((.001))</td>
<td>.06</td>
<td>.92</td>
<td>.93</td>
<td>.90</td>
<td>.10 ((.07-.15)) ((.02))</td>
<td>Adequate fit</td>
</tr>
<tr>
<td>model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final model</td>
<td>e26 ↔ e27</td>
<td>28.96(18) ((.05))</td>
<td>.05</td>
<td>.95</td>
<td>.97</td>
<td>.96</td>
<td>.07 ((.01-.12)) ((.21))</td>
<td>Good fit</td>
</tr>
</tbody>
</table>


Autonomy. Autonomy was measured with the self-determination subscale of the Psychological Empowerment instrument (Spreitzer, 1995). Participants answered three items with response options ranging from one to seven (strongly disagree to strongly agree). All three items were missing one datum. The mean raw score with missing data was 5.46 (SD = 1.34). With imputed data, the mean score and standard deviation were to 5.47 and 1.30, respectively. Summated scores ranged from 4 to 21 with a mean of 72.98 (SD = 22.99) when standardized out of 100.

Results from confirmatory factor analysis yielded factor loadings ranging from .88 to .97. As Table 7 summarizes, the hypothesized measurement model fit the data well. Figure 19 illustrates the final model with standardized factor loadings. The instrument also demonstrated internal consistency with a Cronbach’s alpha of .95.
Table 7
Fit Statistics and Modification Indices for the Self-Determination subscale

<table>
<thead>
<tr>
<th>Model</th>
<th>Modification</th>
<th>$\chi^2$ (df)</th>
<th>SRMR</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA (90% CI)</th>
<th>Evaluation (pCLOSE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized model / Final model</td>
<td>-</td>
<td>.02(1)</td>
<td>.001</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>.11 (0.00-.11)</td>
<td>Adequate fit (0.91)</td>
</tr>
</tbody>
</table>

![Diagram](image)

Figure 19. Final model of the Self-Determination subscale

**Leader support.** Leader support was measured with the 3-item supervisor support subscale of Caplan et al.’s (1980) Social Support scale. The response option ranged from one (not at all) to four (very much). One item was missing one datum (0.8%). The mean raw score with the missing datum was 3.08 ($SD = .82$). When the missing datum was imputed, the mean and standard deviation were unchanged. Summated raw scores ranged from 3 to 12 with a standardized mean out of 100 of 69.46 ($SD = 27.17$).

**Co-worker support.** Participants indicated the degree of support received by their co-workers by answering Caplan et al.’s (1980) 3-item co-worker support subscale of the Social Support scale. Response options ranged from one (not at all) to four (very much). All three items had two missing two (1.7%) each. The mean raw score and standard deviation with missing data was 3.11 and .74, respectively. When missing data were imputed, the mean was the same ($SD = .73$). Summated raw scores with imputed values ranged from 3 to 12 with a mean standardized out of 100 of 70.28 ($SD = 24.33$).

The leader support and co-worker support subscales are from the same Social Support scale. Wording of the subscales were the same except for the subject (i.e., dean/director...
versus co-worker). Therefore, the subscales were factor analyzed together and were hypothesized to correlate. As Table 8 indicates, factor loadings of the leader support and co-worker support constructs ranged from .73 to .87 and .79 to .80, respectively. The hypothesized model fit the data well. Figure 20 illustrates the final model with standardized factor loadings and the correlation between the factors. The internal consistency coefficient for the Leader Support and Co-worker Support subscales were .85 and .86, respectively.

Table 8
Fit Statistics and Modification Indices for the Leader Support and Co-worker Support subscales

<table>
<thead>
<tr>
<th>Model</th>
<th>Modification</th>
<th>$\chi^2$ (df)</th>
<th>SRMR</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA (90% CI)</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized model / Final model</td>
<td>-</td>
<td>14.52 (8)</td>
<td>.03</td>
<td>.96</td>
<td>.98</td>
<td>.97</td>
<td>.08 (.00-.15)</td>
<td>Good fit</td>
</tr>
</tbody>
</table>

Figure 20. Final model of the Leader Support and Co-worker Support subscales.
Professional growth opportunities. Professional growth opportunities was measured with four items from the Developmental Experiences scale (Wayne et al., 1997). The first two items had a response option of one (strongly disagree) to seven (strongly agree); the last two items had a response option of one (not at all) to seven (a very large extent). None of the items were missing data. The mean raw score was 4.19 (SD = 1.35). Scores ranged from 4 to 27 with a standardized mean out of 100 of 55.50 (SD = 23.55).

Confirmatory factor analysis indicated a poor fitting model (Table 9). Modification indices suggested existence of a covariance between the error terms of items 44 and 45 (In my part-time nurse faculty position, I have often been given additional challenging assignments and In my part-time nurse faculty position, I have often been assigned jobs that have enabled me to develop and strengthen new skills, respectively). Once specified, this new model indicated a good fit between the model and the data \( \chi^2 (df) = 2.81(1), p = .09, \) SRMR = .03, GFI = .99, CFI = .99, TLI = .92, RMSEA = .12 (.00 – .31), pCLOSE = .14. Figure 21 illustrates the final model with standardized factor loadings and the correlation between error terms. The reliability coefficient of the instrument was .77.

<table>
<thead>
<tr>
<th>Model</th>
<th>Modification</th>
<th>( \chi^2 (df) (p) )</th>
<th>SRMR</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA (90% CI) (pCLOSE)</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized model</td>
<td>-</td>
<td>19.68(2) (&lt; .001)</td>
<td>.08</td>
<td>.93</td>
<td>.87</td>
<td>.60</td>
<td>.27 (.17-.39) (&lt; .001)</td>
<td>Poor fit</td>
</tr>
<tr>
<td>Final model</td>
<td>e44 ↔ e45</td>
<td>2.81(1) (.09)</td>
<td>.03</td>
<td>.99</td>
<td>.99</td>
<td>.92</td>
<td>.12 (.00-.31) (.14)</td>
<td>Adequate fit</td>
</tr>
</tbody>
</table>
Recognition. Recognition was measured with the 4-item Recognition scale (Koys & DeCotiis, 1991). Response options ranged from one (strongly disagree) to five (strongly agree). Two items were missing four data (3.4%), one item had five missing data (4.2%), and one item had six missing data (5.0%). With missing data, the mean raw score was 3.25 (SD = 1.05). The mean score remained unchanged with imputed data (SD = 1.03). Scores ranged from 4 to 20 with a standardized mean out of 100 of 56.26 (SD = 25.63).

Confirmatory factor analysis of the initial model produced factor loadings ranging from .45 to .94 and indicated a poor fit to the data (Table 10). Modification indices suggested existence of a covariance between the error terms of items 48 and 49 (I can count on a pat on the back when I perform well and The only time I hear about my performance is when I screw up, respectively). When these error terms were set to covary, the model fit improved, yielding a non-significant chi-square and goodness-of-fit indices greater than the thresholds of good fit [$\chi^2(df) = 1.17(1)$, $p = .28$, SRMR = .01, GFI = .99, CFI = 1.00, TLI = .99, RMSEA = .04 (.00 – .25), $p$CLOSE = .35]. Figure 22 illustrates the final model with standardized factor loadings and the correlation between error terms. The internal consistency coefficient of the scale was .91.

![Figure 21. Final model of the Development Experiences scale.](image-url)
Table 10

Fit Statistics and Modification Indices for the Recognition Scale

<table>
<thead>
<tr>
<th>Model</th>
<th>Modification</th>
<th>$\chi^2$ (df)</th>
<th>SRMR</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA (90% CI)</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized model</td>
<td>-</td>
<td>14.23(2)</td>
<td>.03</td>
<td>.90</td>
<td>.97</td>
<td>.89</td>
<td>.23 (.13-.35)</td>
<td>Poor fit</td>
</tr>
<tr>
<td>Final model</td>
<td>e48 ↔ e49</td>
<td>1.17(1)</td>
<td>.01</td>
<td>.99</td>
<td>1.00</td>
<td>.99</td>
<td>.04 (.00-.25)</td>
<td>Good fit</td>
</tr>
</tbody>
</table>

Figure 22. Final model of the Recognition scale.

**Distributive justice.** Distributive justice was measured with the Distributive Justice Index. The instrument has six items with response options ranging from one (rewards are not distributed at all fairly) to five (rewards are very fairly distributed). Four items had a total of four missing data (3.4%) and two items had five missing data (4.2%). With missing data, the mean raw score was 2.75 ($SD = 1.01$). When data were imputed, the mean raw score was 2.75 ($SD = .99$). Summated imputed scores ranged from 6 to 35. The mean standardized score out of 100 was 43.72 ($SD = 24.86$).

Confirmatory factor analysis indicated a poor fitting model (Table 11) with loadings ranging from .83 to .96. Modification indices suggested a covariance between the error terms of items 54 and 55 (To what extent are you fairly rewarded taking into account the...
amount of education and training that you have had? and To what extent are you fairly rewarded in view of the amount of experience that you have?, respectively). When a covariance was specified, the model improved slightly but was of mediocre fit. A review of the modification indices suggested a covariance between error terms of items 53 and 54 (To what extent are you fairly rewarded considering the responsibilities that you have? and To what extent are you fairly rewarded taking into account the amount of education and training that you have had?, respectively). When set to covary, the model indicated a good fit $[\chi^2(df) = 13.59(7), p = .06$, SRMR = .02, GFI = .97, CFI = .99, TLI = .98, RMSEA = .08 (.00 – .16), pCLOSE = .16]. Figure 23 illustrates the final model with standardized factor loadings and correlations between error terms. The scale demonstrated internal consistency with a Cronbach’s alpha of .96.

<table>
<thead>
<tr>
<th>Model</th>
<th>Modification</th>
<th>$\chi^2 (df)$</th>
<th>SRMR</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA (90% CI)</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized model</td>
<td>-</td>
<td>48.60(9)</td>
<td>.03</td>
<td>.88</td>
<td>.95</td>
<td>.92</td>
<td>.19 (.14–.25)</td>
<td>Poor fit</td>
</tr>
<tr>
<td>Revised model</td>
<td>e54 ↔ e55</td>
<td>33.09(8)</td>
<td>.03</td>
<td>.92</td>
<td>.97</td>
<td>.94</td>
<td>.16 (.11–.22)</td>
<td>Adequate fit</td>
</tr>
<tr>
<td>Final model</td>
<td>e53 ↔ e54</td>
<td>13.59(7)</td>
<td>.02</td>
<td>.97</td>
<td>.99</td>
<td>.98</td>
<td>.08 (.00–.16)</td>
<td>Good fit</td>
</tr>
</tbody>
</table>
Figure 23. Final model of the Distributive Justice Index.

Procedural justice. Procedural justice was measured with the 4-item Procedural Justice scale with response options ranging from one (very unfair) to five (very fair). Three items had five missing data each (4.2%); one item was missing six data (5.0%). With missing data, the scale had a mean score of 2.96 ($SD = .83$). With imputed data, the mean score remained unchanged ($SD = .81$). The standardized mean score out of 100 with imputed data was 48.92 ($SD = 20.23$) and scores ranged from 4 to 20.

Confirmatory factor analysis of the hypothesized model indicated the data fit the model poorly (Table 12). Modification indices suggested a covariance between error terms of items 59 and 61 (How fair or unfair are the procedures used to communicate performance feedback? and How fair or unfair are the procedures used to evaluate performance?, respectively). Correlating the error terms produced a well-fitting model [$\chi^2(df) = .29(1)$, $p = .59$, SRMR = .005, GFI = .99, CFI = 1.00, TLI = 1.02, RMSEA = .00 (.00 –.19), $pCLOSE = .64$]. Factor loadings ranged from .61 to .94. Figure 24 illustrates the final model with standardized factor loadings and the correlation between error terms. The Procedural Justice scale demonstrated internal consistency with a Cronbach’s alpha of .87.
Table 12
*Fit Statistics and Modification Indices for the Procedural Justice Scale*

<table>
<thead>
<tr>
<th>Model</th>
<th>Modification</th>
<th>( \chi^2 (df) ) ((p))</th>
<th>SRMR</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA (90% CI) ((p\text{CLOSE}))</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized model</td>
<td>-</td>
<td>26.27(2) (&lt; .001)</td>
<td>.07</td>
<td>.90</td>
<td>.91</td>
<td>.74</td>
<td>.32 (.22-.44) (&lt; .001)</td>
<td>Poor fit</td>
</tr>
<tr>
<td>Final model e59 ↔ e61</td>
<td></td>
<td>.29(1) (.59)</td>
<td>.005</td>
<td>.99</td>
<td>1.00</td>
<td>1.00</td>
<td>.00 (.00-.19) (.64)</td>
<td>Good fit</td>
</tr>
</tbody>
</table>

![Diagram](image_url)

*Figure 24.* Final model of the Procedural Justice Scale.

**Work rewards.** The degree of adequacy of work rewards was measured with one item developed for this study. Participants responded to the item along a 7-point scale with response options ranging from one (*strongly disagree*) to seven (*strongly agree*). The item had four missing data (3.4%) With missing data, the mean raw score was 3.63 \((SD = 1.89)\); with imputed data, the mean remained 3.63 \((SD = 1.86)\). The standardized mean score out of 100 with imputed data was 43.77 \((SD = 31.03)\).

**External career opportunities.** Participants were asked to indicate their level of agreement with the statement, *There are nurse faculty career opportunities outside of my present academic organization.* Response options ranged from one (*strongly disagree*) to seven (*strongly agree*). With one missing datum (0.8%), the mean raw score was 4.59 \((SD = 1.93)\).
The imputed missing value yielded the same mean score ($SD = 1.81$). The standardized mean score out of 100 with the imputed missing data was 59.89 ($SD = 30.24$).

**Burnout.** Burnout was measured with the emotional exhaustion subscale of the Maslach Burnout Inventory – Educators Survey (Maslach et al., 1996). This subscale is a composite of eight items, with response options ranging from zero (*never*) to six (*every day*). One item had one missing datum (0.8%), one item had three (2.5%) missing data, and the remaining items were not missing data. Normative data for postsecondary educators established by Maslach et al. (1996) were used to interpret findings: $\leq 13$ indicates low emotional exhaustion, 14 to 23 is average emotional exhaustion, and $\geq 24$ indicates high emotional exhaustion. Scores with imputed data ranged from zero to 47 with a mean of 12.82 ($SD = 1.36$).

Factor loadings ranged from .62 to .93. Summarized in Table 13, confirmatory factor analysis showed that the model fit the data poorly [$\chi^2(df) = 118.83(20)$, $p < .001$, SRMR = .07, GFI = .78, CFI = .86, TLI = .81, RMSEA = .21 (.17 – .24), $p\text{CLOSE} < .001$]. Modification indices recommended covarying several error terms. To arrive at an adequately fitting model, the model was revised five times. The final model had five pairs of covariances and fit the data well [$\chi^2(df) = 24.41(15)$, $p = .06$, SRMR = .03, GFI = .95, CFI = .99, TLI = .98, RMSEA = .07 (.00 – .12), $p\text{CLOSE} = .22$]. Figure 25 illustrates the final model with factor loadings and correlations between error terms. The instrument demonstrated internal consistency with a Cronbach’s alpha of .93.

<table>
<thead>
<tr>
<th>Table 13</th>
<th>Fit Statistics and Modification Indices for the Emotional Exhaustion subscale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Modification</td>
</tr>
<tr>
<td>Hypothesized model</td>
<td>-</td>
</tr>
<tr>
<td>Revised model</td>
<td>e63 ↔ e64</td>
</tr>
<tr>
<td>Revised model</td>
<td>e64 ↔ e65</td>
</tr>
<tr>
<td>Model</td>
<td>Modification</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Revised model</td>
<td>e63 ↔ e69</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Revised model</td>
<td>e64 ↔ e69</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Final model</td>
<td>e68 ↔ e69</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 25. Final model of the Emotional Exhaustion subscale.

**Organizational commitment.** Organizational commitment was measured with the 9-item short version of the Organizational Commitment Questionnaire. Participants indicated their level of agreement or disagreement with each item along a 7-point scale with
response options ranging from one (strongly disagree) to seven (strongly agree). Six items had one missing datum; the remaining three items were not missing data. The mean raw score with missing and imputed data was 5.17 ($SD = 1.24$) and 5.18 ($SD = 1.23$), respectively. Summated imputed scores ranged from 15 to 63 with a standardized mean out of 100 of 65.87 ($SD = 22.97$).

Factor loadings ranged from .39 to .90. Table 14 indicates that the hypothesized model produced an ill-fitting model. Examination of the modification indices first suggested a covariance between the error terms of items 72 and 73 (I talk up this academic organization to my friends as a great place to work for and I would accept almost any type of job assignment in order to keep working for this academic organization, respectively), which improved model fit slightly. Additional modification indices suggested a covariance between error terms for items 71 and 72 (I am willing to put in a great deal of effort beyond what’s normally expected in order to help this academic organization be successful and I talk up this academic organization to my friends as a great place to work for, respectively), which resulted in a fairly good fitting model except for a significant chi-square. Modification indices then suggested to covary error terms for item 71 and 75, and 73 and 74, resulting in a good fit with the data [$\chi^2 (df) = 31.92(23), p = .10$, SRMR = .03, GFI = .95, CFI = .99, TLI = .98, RMSEA = .06 (.00 – .11), pCLOSE = .40]. The Cronbach’s alpha for this scale was .93. Figure 26 illustrates the final model and factor loadings and correlations between error terms.

<table>
<thead>
<tr>
<th>Table 14</th>
<th>Fit Statistics and Modification Indices for the Organizational Commitment Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Modification</td>
</tr>
<tr>
<td>Hypothesized model</td>
<td>-</td>
</tr>
<tr>
<td>Revised model</td>
<td>e72 ↔ e73</td>
</tr>
<tr>
<td>Revised model</td>
<td>e71 ↔ e72</td>
</tr>
</tbody>
</table>
**Model | Modification | $\chi^2$ (df) (p) | SRMR | GFI | CFI | TLI | RMSEA (90% CI) (pCLOSE) | Evaluation**
--- | --- | --- | --- | --- | --- | --- | --- | ---
Revised model | e71 ↔ e75 | 36.78(24) (.046) | .04 | .94 | .94 | .98 | .07 (.01-.11) (.24) | Adequate fit |
Final model | e73 ↔ e74 | 31.92(23) (.10) | .03 | .95 | .99 | .98 | .06 (.00-.10) (.40) | Good fit |

**Figure 26.** Final model of the Organizational Commitment Questionnaire.

**Job satisfaction.** Job satisfaction was examined with the 3-item job satisfaction subscale of the Michigan Organizational Assessment Questionnaire. Response options
ranged from one (strongly disagree) to seven (strongly agree). One item had two missing data (1.7%); two items had three missing data (2.5%). The mean raw score with missing and imputed data was 5.84 (SD = 1.25) and 5.86 (SD = 1.20), respectively. Scores with imputed data ranged from 7 to 21 with a standardized score of 75.49 (SD = 25.73).

Confirmatory factor analysis results are summarized in Table 15. The chi-square statistic, its corresponding p-value, and goodness-of-fit indices indicate that the model fit the data well. Factor loadings ranged from .71 to .96. Figure 27 illustrates the final model. The instrument also demonstrates internal consistency with a Cronbach’s alpha of .88.

Table 15
Fit Statistics and Modification Indices for the Job Satisfaction subscale

<table>
<thead>
<tr>
<th>Model</th>
<th>Modification</th>
<th>$\chi^2$ (df)</th>
<th>SRMR</th>
<th>GFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA (90% CI)</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized model / Final model</td>
<td>-</td>
<td>.84(1) (.36)</td>
<td>.014</td>
<td>.99</td>
<td>1.00</td>
<td>1.00</td>
<td>.00 (.00 - .24)</td>
<td>Good fit</td>
</tr>
</tbody>
</table>

Figure 27. Final model of the Job Satisfaction subscale.

Summary of Confirmatory Factor Analysis and Reliability Findings

In summary, the instruments used to measure study constructs generally had sound psychometric properties, with some exceptions. The Workload Index and the Resource Adequacy subscale did not meet the recommended internal consistency threshold of .70 with
Cronbach’s alphas of .69 and .66, respectively. When examining construct validity, the initial models purported to measure the following constructs did not fit the data well: role conflict, professional growth opportunities, recognition, distributive justice, procedural justice, burnout, and organizational commitment. Once revised, they adequately reflected the corresponding construct.

**Findings Related to Hypothesis Testing**

In this section, correlation analysis, standard and block regression were employed to test the relationships between hypothesized predictors and part-time nurse faculty intent to remain employed.

**Correlation Analysis**

Correlation analysis was conducted to examine relationships between intent to remain (ITR) two years and the hypothesized determinants, as well as correlations among independent variables. Results are summarized in Table 16. Results showed that six of the 20 independent variables were statistically significantly correlated with ITR at the .10 alpha level. The negative correlation between age and ITR indicated that the older the part-time nurse faculty, the lower the level of intent to remain employed ($r = -.16, p = .08$). Positive correlations between ITR and leader support ($r = .21, p = .02$), recognition ($r = .23, p = .01$), procedural justice ($r = .17, p = .07$), external career opportunities ($r = .21, p = .02$), and job satisfaction ($r = .29, p = .001$) indicated that leader behaviours perceived to be supportive, formal and informal recognition practices, fairness in procedural activities, the availability of faculty positions outside of the employing organization, and overall satisfaction were associated with higher levels of intent to remain employed. Correlations between independent variables ranged from less than .001 to .74.

**Multiple Regression Analyses**

**Standard regression analysis.** The standard regression method was first employed for the multiple regression analysis. The 20 predictor variables produced a statistically significant regression model: $R^2 = .30, F (20, 98) = 2.08, p = .01$, adjusted $R^2 = .16$. When adjusted for the number of variables, the statistically significant model predicted 16% of the variance in intent to remain employed for the next two years. Table 17 summarizes the standardized and unstandardized regression coefficients, standard errors, $t$ and $p$ statistics, and squared semi-partial correlations. Five variables were found to be statistically
significant predictors at the .10 alpha level: age ($\beta = -.28$), age-squared ($\beta = -.23$), organizational tenure ($\beta = .25$), external career opportunities ($\beta = .16$), and job satisfaction ($\beta = .41$). This indicated that the older the part-time nurse faculty, the lower the level of intent to remain; the longer the part-time nurse faculty worked in the organization, the more perceived work opportunities outside of the employing organization, and the more satisfied with the job, the higher the level of part-time nurse faculty intent to remain. These five variables uniquely predicted 22% of the variance in intent to remain 2 years. Unlike findings from correlation analysis, leader support, recognition, and procedural justice were not statistically associated with intent to remain. These variables were subjected to additional analyses discussed in the following section.

Examination of beta coefficients and $R^2$ of several regression models suggested the presence of suppressor variables. A suppressor variable “increases the predictive validity of another variable (or set of variables) by its inclusion in a regression equation. This variable is a suppressor only for those variables who regression weights are increased” (Conger, 1974, p. 36-37). Age and organizational tenure were reciprocal suppressors in explaining intent to remain. Although these variables correlated positively with each other ($r = .41, p < .001$), they correlated with ITR in the opposite direction. When age and organizational tenure were included in the regression one at a time as predictors of intent to remain, the effect of age on intent to remain was weak ($\beta = -.18, p = .08$) but increased in magnitude and became more statistically significant when organizational tenure was added to the equation ($\beta = -.28, p = .008$). For this regression model, variance explained increased from 11% to 16% [$R^2 = .25$, adjusted $R^2 = .11$, $F (19, 99) = 1.77$, $p = .04$ and $R^2 = .30$, adjusted $R^2 = .16$, $F (20, 98) = 2.07$, $p = .01$, respectively]. Similarly, when age was not included in the equation predicting ITR, the regression coefficient with organizational tenure was relatively weak and non-significant ($\beta = .14, p = .14$). When age was included in the regression equation, the regression coefficient increased in magnitude and became statistically significant ($\beta = .25, p = .02$). The explained variance of this model increased from 10% to 16% [$R^2 = .25$, adjusted $R^2 = .10$, $F (19, 99) = 1.70$, $p = .05$ and $R^2 = .30$, adjusted $R^2 = .16$, $F (20, 98) = 2.07$, $p = .01$, respectively]. These analyses confirm that age and organizational tenure had a mutual reciprocal suppression effect. Therefore, including both variables in the regression equation enhances the specification of the part-time nurse faculty model.
The correlation between the variables distributive justice and work rewards ($r = .74$) suggest potential multicollinearity, which may have caused some predictors (e.g., external career opportunities) to affect intent to remain in the opposite direction than hypothesized (Martz, 2013). To examine this further, two additional regression models were calculated – one model without distributive justice and the second model without work rewards. In both models, the direction of the relationships between predictors and intent to remain did not change. This suggests that the relationships between predictors and the outcome opposite to what were hypothesized are not a result of multicollinearity.
Table 16
Correlation Matrix of Hypothesized Determinants and Intent to Remain 2 Years (n = 119)

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Note: *p < .1. **p < .05. ***p < .01. Correlations between scale means. ITR = intent to remain employed 2 years; Age² = square of age-centred; OT = organizational tenure; ED = graduate-level education; WL = workload; RAD = resource adequacy; RA = role ambiguity; RC = role conflict; AUTO = autonomy; LS = leader support; CS = co-worker support; OPP = professional growth opportunities; REC = recognition; DJ = distributive justice; PJ = procedural justice; WR = work rewards; EXC = external career opportunities; BO = burnout; OC = organizational commitment; JS = job satisfaction.
Table 17

Summary of Standard Multiple Regression for Intent to Remain Employed

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Note: n = 119. b = unstandardized regression coefficient. SE = standard error. β = standardized regression coefficient. sr² = squared semi-partial correlation.

Block regression analysis. Block regression analysis was conducted to quantify and explain the unique contribution of variables in each block in the explanation of ITR. Four models were examined. The first block of variables consisted of demographics, the second block included the workplace variables, the third block included the external variable, and the fourth block consisted of the nurse faculty responses to work variables. Results are presented in Table 18. The demographic predictors explained 5% of variance in ITR. This model was significant at the .10 alpha level \( F(4, 114) = 2.53, p = .04 \). With the addition of workplace variables, the adjusted \( R^2 \) increased from 5% to 6%; this change was not statistically significant. In the third model, external career opportunities was added while controlling for the other variables, increasing the explained variance from 6% to 10% \( F(17, 101) = 1.80, p = .04 \). The change in \( R^2 \) was statistically significant. With the addition of the faculty response variables in the final model, explained variance increased from 10% to 16% and was statistically significant \( F(20, 98) = 2.08, p = .01 \).
### Table 18

**Summary of Block Regression Analysis for Variables Predicting Intent to Remain**

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<td>Role Ambiguity</td>
<td>-.14</td>
<td>-.07</td>
<td>-.10</td>
<td>-.05</td>
</tr>
<tr>
<td>Role Conflict</td>
<td>.14</td>
<td>.09</td>
<td>.18</td>
<td>.11</td>
</tr>
<tr>
<td>Autonomy</td>
<td>.06</td>
<td>.04</td>
<td>.07</td>
<td>.05</td>
</tr>
<tr>
<td>Leader Support</td>
<td>.10</td>
<td>.05</td>
<td>.11</td>
<td>.05</td>
</tr>
<tr>
<td>Co-worker Support</td>
<td>-.31</td>
<td>-.12</td>
<td>-.24</td>
<td>-.09</td>
</tr>
<tr>
<td>Professional Growth Opportunities</td>
<td>-.17</td>
<td>-.12</td>
<td>-.18</td>
<td>-.13</td>
</tr>
<tr>
<td>Recognition</td>
<td>.46*</td>
<td>.25</td>
<td>.41*</td>
<td>.23</td>
</tr>
<tr>
<td>Distributive Justice</td>
<td>-.06</td>
<td>-.03</td>
<td>-.05</td>
<td>-.02</td>
</tr>
<tr>
<td>Procedural Justice</td>
<td>.49*</td>
<td>.21</td>
<td>.55*</td>
<td>.24</td>
</tr>
<tr>
<td>Work Rewards</td>
<td>.01</td>
<td>.01</td>
<td>.05</td>
<td>.05</td>
</tr>
<tr>
<td>External Career Opportunities</td>
<td></td>
<td>.23**</td>
<td>.22</td>
<td>.17*</td>
</tr>
<tr>
<td>Burnout</td>
<td>.26</td>
<td>.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>-.10</td>
<td>-.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td></td>
<td></td>
<td>.64***</td>
<td>.41</td>
</tr>
</tbody>
</table>

\( R^2 \) = .08  
\( \text{Adjusted } R^2 \) = .05  
\( p \text{ for } F \text{ change} \) = .04  
\( p \text{ for the model} \) = .04

**Note:** *\( p < .10 \)  **\( p < .05 \)  ***\( p < .01 \). Age\(^2\) = square of age-centred. \( b \) = unstandardized regression coefficient. \( \beta \) = standardized regression coefficient.

### Additional Analyses

Additional analyses were conducted to gain a better understanding of the associations between hypothesized predictors and intent to remain. Previous theory and empirical findings (Boyle et al., 1999; Kim et al., 1996; Mueller & Price, 1990; Price, 2001) suggest that job satisfaction is a mediator between workplace characteristics and intent to remain. Therefore, analyses included the exploration of job satisfaction as a mediating variable between workplace constructs and intent to remain.

Significant correlations and non-significant regression coefficients suggest that job satisfaction mediated the association between leader support, recognition, and procedural
justice and intent to remain. Mediation was examined using Baron and Kenny’s (1986) three steps. Mediation holds if (1) the independent variable affects the mediator, (2) the independent variable affects the dependent variable, and (3) the mediator affects the dependent variable when both mediator and independent variable are in the equation.

As Figure 28 illustrates, the statistically significant standardized regression coefficient between leader support and intent to remain ($\beta = .21, p = .02$) decreased and became non-significant when controlling for job satisfaction ($\beta = .10, p = .34$). The other conditions of mediation were also met: leader support was a significant predictor of job satisfaction ($\beta = .45, p < .001$), and job satisfaction was a significant predictor of intent to remain while controlling for leader support ($\beta = .25, p = .01$).

Three regression analyses were conducted to examine the relationship between recognition, job satisfaction, and intent to remain. As Figure 29 illustrates, the standardized regression coefficient between recognition and ITR was positive and statistically significant ($\beta = .23, p = .01$). When controlling for job satisfaction, the coefficient between recognition and intent to remain decreased and became non-significant ($\beta = .12, p = .23$). The other conditions of mediation were also met: recognition was a significant predictor of job satisfaction ($\beta = .47, p < .001$), and job satisfaction was a significant predictor of intent to remain while controlling for recognition ($\beta = .24, p = .02$).

Three regression models were examined to explore the relationship between procedural justice, job satisfaction, and intent to remain. As Figure 30 depicts, recognition was statistically associated with intent to remain ($\beta = .17, p = .08$). When job satisfaction was included in the regression equation, the relationship between procedural justice decreased in magnitude and became statistically non-significant ($\beta = .07, p = .48$). In addition, procedural justice predicted job satisfaction ($\beta = .37, p < .001$) and job satisfaction predicted intent to remain when controlling for procedural justice ($\beta = .27, p = .005$).

Based on this series of regression analyses, there is evidence to suggest that job satisfaction mediates the relationships between leader support, recognition, procedural justice and part-time nurse faculty intent to remain employed.
**Figure 28.** The relationship between leader support and ITR, mediated by job satisfaction.

- Job Satisfaction
  - Leader Support: $\beta = .21, p = .02$ (\(\beta = .10, p = .34\))
  - Intent to Remain Employed: $\beta = .25, p = .01$

**Figure 29.** The relationship between recognition and ITR, mediated by job satisfaction.

- Job Satisfaction
  - Recognition: $\beta = .23, p = .01$ (\(\beta = .12, p = .12\))
  - Intent to Remain Employed: $\beta = .47, p < .001$
Figure 30. The relationship between procedural justice and ITR, mediated by job satisfaction.

Based on findings from correlation and regression analyses, five hypotheses were fully supported and two hypotheses were partially supported (see Table 19). There was no evidence found to support the other research hypotheses.

Table 19
Summary of Hypothesis Findings

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Findings</th>
<th></th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age is positively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>-</td>
<td>Yes</td>
<td>Partial</td>
</tr>
<tr>
<td>2. Organizational tenure is positively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Graduate-level education is negatively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>4. Workload is negatively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>-</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>5. Resource adequacy is positively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>6. Role ambiguity is negatively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>-</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Hypothesis</td>
<td>Findings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>----------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Direction</td>
<td>Statistically significant at $p &lt; .10$</td>
<td>Support</td>
</tr>
<tr>
<td>academic organization.</td>
<td>-</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>7. Role conflict is negatively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>8. Autonomy is positively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>9. Leader support is positively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>10. Co-worker support is positively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>11. Professional growth opportunities are positively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>12. Recognition of performance and accomplishments is positively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>13. Distributive justice is positively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>14. Procedural justice is positively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>15. Work rewards are positively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>16. External career opportunities is negatively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>Yes</td>
<td>Partial</td>
</tr>
<tr>
<td>17. Burnout is negatively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>-</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>18. Organizational commitment is positively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>19. Job satisfaction is positively related to part-time nurse faculty intent to remain employed in the academic organization.</td>
<td>+</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note: - = negative relationship; + = positive relationship.
Summary

This chapter presented the findings of several statistical analyses conducted to address the research question and hypotheses. First, demographics of the sample and setting were described. In general, the sample was all female and older than the average RN in Ontario, Canada.

Descriptive findings of the dependent and independent variables and psychometric analyses for measurement models were followed by hypothesis testing. Results of standard multiple regression analysis conducted to answer the hypotheses was presented. Seven were fully or partially supported and correlation and regression results are summarized in Tables 16 and 17. Additional analyses to examine mediation suggest that job satisfaction mediated the relationship between three workplace characteristics, leader support, recognition, and procedural justice, and part-time nurse faculty intent to remain employed. Block regression analysis shows that all blocks of variables predicted small amounts of the variance in ITR, for a total of 16% of explained variance in intent to remain when all variables are included. Specifically, demographics predicted 5%; with the addition of workplace variables, 6% of the variance was explained. When external career opportunities was added, 10% was explained, and when nurse faculty responses to the workplace variables were included, 16% of the variance in part-time nurse faculty was explained.

In summary, the older the part-time nurse faculty, the lower the level of intent to remain employed. The relationship between organizational tenure and intent to remain was positive. Therefore, the longer part-time nurse faculty worked in an organization, the higher the level of ITR. The nature of the relationship between age and organizational tenure was one of a mutually reciprocal suppression effect. The more job opportunities perceived to exist external to the organization, the higher the level of intent to remain. Satisfaction with the job overall predicted intent to remain. Additionally, more support from the leader, more recognition, and the greater the perceived fairness in procedures, the more satisfied overall, which in turn, predicted intent to remain. Previous theory and empirical findings supported revisions to the model. Figure 31 illustrates the refined model which shows that age, organizational tenure, external career opportunities, and job satisfaction directly predict intent to remain; leader support, recognition, and procedural justice predict intent to remain mediated by job satisfaction.
Figure 31. Revised theoretical model of part-time nurse faculty intent to remain employed in the academic organization.
CHAPTER FIVE: DISCUSSION, IMPLICATIONS, AND CONCLUSIONS

The purpose of this research was to develop, test, and refine a theoretical model of the determinants of part-time nurse faculty intent to remain employed intent to remain in the academic organization. This study focused on intent to remain of part-time nurse faculty as research shows that part-time nurse faculty differ from their full-time counterparts (Creech, 2008; Wareham, 1996). Moreover, nursing programs rely heavily on part-time nurse faculty. For instance, in the 2010 – 2011 academic year, 45.9% of nurse faculty working in nursing schools in Canada were contract part-time faculty (CNA/CASN, 2012a).

As discussed in chapter one, there is a global shortage of nurses (Buchan & Aiken, 2008; Buchan & Calman, 2005; Oulton, 2006), which includes the shortage of nurse faculty. In the 2010 – 2011 academic year, Canadian nursing schools were unable to fill 76 full-time positions; schools also projected a need to hire 215 full-time faculty in 2012 (CNA/CASN, 2012b). The report did not include a discussion of part-time nurse faculty positions, despite almost 50% of nurse faculty in Canada employed part-time (CNA/CASN, 2012a). What makes the shortage of nurse faculty especially disconcerting is their importance to the nursing profession and the health care system. Nurse faculty are the building blocks of the profession, responsible for producing a quality nursing workforce. Without nurse faculty educating and training people to become nurses who work in health care, the health care system cannot offer quality care.

One way to manage the shortage of nurses is to retain nurse faculty in academia. Retaining nurse faculty will help manage the current shortage of nurse faculty. In addition, retaining nurse faculty will help manage the shortage of nurses by enabling academic institutions to sustain the numbers of education trainees, thereby producing qualified nurses.

Overall, there are four key findings. First, age and organizational tenure are significant predictors of intent to remain employed. The older the part-time nurse faculty member, the lower their level of intent to remain employed in the organization. In addition, the more years a part-time nurse faculty member has worked in the same organization, the higher their level of intent to remain. This is the first known study of nurse intent to remain to find a reciprocal suppression effect between age and organizational tenure. Second, study findings do not support the hypothesis that the more job opportunities perceived to exist externally, the lower the level of intent to remain. Rather, the more job opportunities
perceived to exist outside of the organization, the higher the level of intent to remain. Possible reasons for this finding are explored in this chapter. Third, job satisfaction is the strongest predictor of part-time nurse faculty intent to remain employed. Therefore, the more satisfied part-time nurse faculty are with their job overall, the greater their intent to remain. This finding supports a body of knowledge that suggests that job satisfaction is a significant predictor of nurse cognitions about remaining employed (Ellenbecker et al., 2008; Gregory et al., 2007; Marriner & Craigie, 1997; Reynolds, 1997; Ruel, 2009; Sullivan, 2001; Tourangeau et al., 2013). Findings also indicate that job satisfaction is a mediating variable between workplace characteristics and intent to remain. Finally, of the various conditions of the work environment, study findings underscore the importance of leadership in affecting intent to remain. Leader support, recognition, and procedural justice are variables that are, in part, dependent on the behaviours of the leader.

In this chapter, an interpretation of study results and a comparison with previous study findings are discussed. Study limitations, implications of findings, theoretical contributions, and recommendations for future research are also discussed. The chapter concludes with a final summary.

**Discussion and Interpretation of Results**

**The Effect of Age and Organizational Tenure on Intent to Remain Employed**

It was hypothesized that age would positively predict intent to remain employed. Study findings did not support this hypothesis. Age was a statistically significant predictor of intent to remain, however, the relationship was found to be negative. Thus, the older the part-time nurse faculty, the lower the level of intent to remain in the academic organization. Study findings show that the relationship between age and intent to remain was both linear and curvilinear. The negative curvilinear relationship indicates that as part-time nurse faculty age, the level of intent to remain declines more sharply. My study findings are consistent with other nurse faculty studies. Tourangeau et al. (2013) found that age was a negative predictor of full-time and part-time nurse faculty intent to remain employed for the next five years. In other nurse populations, findings were not consistent with my study findings. In their study of acute care nurses, Tourangeau and Cranley (2006) did not find a negative relationship between age and intent to remain. Rather, a positive significant relationship was found. On the other hand, Ellenbecker et al. (2008) did not find a
significant relationship in their study of home care nurses. In their sample of hospitality employees, Cho et al. (2009) found a positive relationship between age and intent to remain. The inconsistent results across studies may indicate that the intent to remain phenomenon differs amongst various populations. One interpretation is that part-time nurse faculty, who are on average, older than other nurse populations, are nearing retirement. Because part-time nurse faculty are nearing retirement age, they may be considering and/or making concrete plans to retire in the near future, which would lead to lower levels of intent to remain.

The hypothesis that organizational tenure would positively predict part-time nurse faculty intent to remain employed was supported by findings in this study. The longer part-time nurse faculty have worked in the same academic organization, the higher the level of intent to remain employed. This finding is consistent with findings from Cho et al. (2009) and Tourangeau and Cranley (2006) who examined hospitality employees and acute care nurses, respectively. One interpretation is that increased years of employment results in higher levels of intent to remain because the longer one remains in an organization, the more investments have been made on the part of both employee and organization. In addition, age and organizational tenure enhance each other’s association with intent to remain. By examining the correlation coefficient of the association between organizational tenure and intent to remain alone, one could prematurely conclude that organizational tenure is not a meaningful factor in predicting nurse faculty intent to remain. However, its inclusion, along with its reciprocal suppressor, age, enhanced the strength of their relationship with intent to remain. It appears that these associations have not been noted in prior research.

Further examination of the nature of relationships that age and organizational tenure have with intent to remain employed and each other shows that age and organizational tenure have opposite effects on intent to remain. The positive relationship between age and organizational tenure means that as part-time nurse faculty get older, the number of years employed in the same organization increases as well. Although these predictors were positively correlated with each other, their effects on intent to remain were in opposite directions. The level of intent to remain increased when organizational tenure increased, yet decreased when age increased. The positive effect of organizational tenure on intent to remain signifies that if all other things are equal, the longer a part-time nurse faculty member has worked in an organization, the higher his or her level of intent to remain.
regardless of age, the longer one has worked, the higher the level of intent to remain. However, considering age and organizational tenure simultaneously when attempting to understand intent to remain, one interpretation is that the older part-time nurse faculty member, who is likely to have worked more years in the same organization than their younger counterparts, is also nearing retirement. As a result, he or she has a lower level of intent to remain employed.

**The Effect of External Career Opportunities on Intent to Remain Employed**

External career opportunities were defined as the extent of available career opportunities outside of the present employing organization. It was hypothesized that the more external job opportunities as perceived by part-time nurse faculty, the lower the level of intent to remain employed. Findings from this study do not support the direction of the hypothesis. Rather, the more opportunities external to the organization as perceived by part-time nurse faculty, the higher the level of their intent to remain with their current organization. This finding is in contrast to previous research on different occupational groups. Tourangeau et al. (2012), Daly and Dee (2006), and Tourangeau et al. (2010) found that nurse faculty, instructional faculty of different disciplines, and acute care nurses, respectively, had lower levels of intent to remain if other job opportunities external to their current organization were available. The difference between this study’s findings and previous studies may be related to the conditions of part-time nurse faculty jobs. One interpretation is that nurse faculty positions at the various Ontario colleges and universities may offer similar job conditions. Although study participants perceived the existence of job opportunities outside of their organization, perhaps these opportunities did not offer conditions that either met their expectations of a job they would accept, or the job opportunities did not offer conditions that were deemed superior to those of their current position enough to warrant leaving. Once a perusal of the available positions results in a conclusion that the offerings are the same or not as desirable as the current position, appreciation of the present job may be strengthened, which in turn, enhances the level of intent to remain. Another interpretation of the finding is that part-time nurse faculty positions are not available. Schools of nursing may be offering more full-time positions. CNA/CASN reports shows that the percentage of part-time nurse faculty decreased between
the 2009 – 2010 and 2010 – 2011 academic years. In 2009 – 2010, 51.7% of faculty in
Canada were part-time; by the 2010 – 2011 academic year, this decreased to 45.9%.

The Effect of Job Satisfaction on Intent to Remain Employed

Job satisfaction was defined as the positive, contented feelings nurse faculty have
toward their job. There is strong empirical support that the more satisfied with one’s job, the
greater the intent to remain (AbuAlRub et al., 2009; Daly & Dee, 2006; Ellenbecker et al.,
2008; Garbee & Killacky, 2008; Gregory et al., 2007; Marriner & Craigie, 1997; Ramsey,
2003; Reynolds, 1997; Ruel, 2009; Sullivan, 2001; Tourangeau et al., 2010). It was
hypothesized that satisfaction with the faculty job would positively predict part-time nurse
faculty intent to remain employed. Study findings support this hypothesis. Moreover, job
satisfaction was the strongest predictor of part-time nurse faculty intent to remain, similar to
study findings from Ruel (2009), Sullivan (2001), and AbuAlRub et al. (2009). Part-time
nurse faculty participants felt quite satisfied with their faculty position, which may mean that
the nature or conditions of the job are meeting the work expectations of part-time nurse
faculty (Lui et al., 2009a).

In addition to its direct relationship with intent to remain, job satisfaction functions as
a mediating variable, supporting previous theory and research studies (Daly & Dee, 2006;
Gregory et al., 2007; Mobley, Horner, & Hollingsworth, 1978; Mueller & Price, 1990; Price,
2001; Price & Mueller, 1981). Additional analysis shows that part-time nurse faculty job
satisfaction mediated the effects of leader support, recognition, and procedural justice on
intent to remain. Therefore, as perceptions of support from the leader, degree of recognition,
and degree of procedural justice increase, the more satisfied part-time nurse faculty are with
the job, which in turn, predicts intent to remain employed in academia.

The Effect of the Leader on Intent to Remain Employed

Leader support was defined as an open, helpful, and positive relationship between
leader and subordinate regarding work-related affairs. Guided by previous research findings
(Boyle et al., 1999; Garbee & Killacky, 2008; Sourdif, 2004; Tourangeau & Cranley, 2006;
Tourangeau et al., 2010), it was hypothesized that a leader perceived to be supportive would
enhance part-time nurse faculty intent to remain employed. This hypothesis was supported.
Leader support indirectly predicted intent to remain, mediated by job satisfaction. Therefore,
leader behaviours perceived by part-time nurse faculty as supportive produce higher levels of
job satisfaction, which in turn, increases the levels of intent to remain employed. This mediating relationship has been found in other studies. For instance, Boyle et al. (1999) found in their study of ICU nurses, that the leadership styles, *structuring expectations* and consideration, directly impacted job satisfaction, which in turn, predicted intent to remain. In their study of Canadian nurse managers, Laschinger, Wong, Grau, Read, and Stam (2011) found that leadership practices predicted turnover cognitions indirectly. Based on empirical evidence published in two systematic reviews, Cowden and Cummings (2012) developed a theoretical model of clinical nurses’ intentions to remain in their current position. The scholars hypothesized that the impact of leadership and supervisor support on intent to remain is mediated by job satisfaction. Several other studies found that supportive leader behaviours enhance job satisfaction (Chen & Baron, 2006; Chen et al., 2005; Cummings et al., 2008; Donohue, 1986; Garbee & Killacky, 2008; Gormley, 2003; Gui et al., 2009; Kovner et al., 2009; Lane et al., 2010; Shieh et al., 2001).

**The Effect of Recognition on Intent to Remain Employed**

Recognition was defined as the formal or informal acknowledgement of work-related performances or accomplishments. It was hypothesized that high levels of recognition would predict high levels of part-time nurse faculty intent to remain employed. The hypothesis was supported. Recognition was positively associated with intent to remain and the relationship was mediated by job satisfaction. Previous research supports this study’s finding that a significant and positive relationship exists between recognition and intent to remain (AbuAlRub & Al-Zaru, 2008; Tourangeau & Cranley, 2006; Tourangeau et al., 2012). However, these studies did not explicitly examine a causal order in which higher levels of perceived recognition produce higher levels of job satisfaction, which in turn, affects higher levels of intent to remain. Similar to this study, AbuAlRub and Al-Zaru (2008) found positive correlations between intent to remain and two kinds of recognition – recognition for outstanding performance and recognition for achievements in their study of Jordanian staff nurses. Tourangeau and Cranley (2006) took a different approach in measuring recognition. Their use of one item that addresses satisfaction with recognition combines the two constructs. As a result, nurses evaluated the state of recognition and their satisfaction with it simultaneously. Tourangeau and Cranley’s (2006) finding may support the theory that job satisfaction is the result of one’s evaluation of the work environment, supporting the causal
order that recognition impacts job satisfaction, which predicts intent to remain. Study findings also support theoretical frameworks of nurse intent to remain. For instance, Cowden and Cummings (2012) hypothesized that praise and recognition affects clinical nurses’ intent to remain, mediated by job satisfaction. 

**The Effect of Procedural Justice on Intent to Remain Employed**

Procedural justice was defined as the perceived fairness of the policies and procedures used to make decisions. It was hypothesized that procedural justice would positively affect part-time nurse faculty intent to remain. This hypothesis was supported. While a significant positive association was found, the nature of the association was not direct. Mediation analysis shows the relationship between procedural justice and intent to remain was mediated by job satisfaction. Therefore, higher levels of procedural justice as perceived by part-time nurse faculty, enhanced their feelings of satisfaction with their job overall, which in turn, predicted intent to remain. Consistent with this study’s findings, Magner et al. (1994) found that procedural justice in a sample of accounting faculty, predicted intent to remain.

**Revised Model of Part-time Nurse Faculty Intent to Remain Employed**

Findings from this study resulted in a revision of the original model, illustrated in Figure 32. As the model illustrates, part-time nurse faculty intent to remain employed is hypothesized to be a causal process. It is hypothesized that age and organizational tenure directly predict intent to remain employed. Because part-time nurse faculty are a relatively older population, it is believed that the level of intent to remain declines as part-time nurse faculty age. As the time to retire nears and concrete plans are being made to phase out of their job, intentions to remain employed decline. Organizational tenure is hypothesized to positively predict intent to remain. The longer nurse faculty have worked in an organization, the more they have invested in the organization and the organization has invested in the employee in return. Part-time nurse faculty who have worked in one institution for an extended period of time are likely to have developed supportive and meaningful relationships with colleagues and supervisors, and to have accrued various work rewards, such as salary increases, promotions, and accolades that meet the needs and expectations in exchange for years of work. In sum, the longer an employee has worked for the same institution, the more
he or she has invested and been invested in. Therefore, the costs of leaving outweigh the benefits of staying, impacting intent to remain employed.

The model suggests that external career opportunities negatively influence part-time nurse faculty intent to remain. In jurisdictions where faculty jobs offer similar compensation packages and work environments, part-time faculty may not be willing to change jobs as the benefits of staying outweigh the costs of leaving. When part-time nurse faculty evaluate their job in comparison with external positions and conclude that their job meets their expectations more than the alternatives, they become more confident that they are in the right job. This in turn, increases the level of intent to remain employed in their academic organization. An alternative explanation is that part-time jobs are simply unavailable. Many part-time faculty work part-time willingly, therefore, the more job opportunities, which may be mainly full-time, the higher the level of intent to remain in their current part-time job.

The model shows that the more satisfied part-time nurse faculty are with their job overall, the higher the level of intent to remain employed. Moreover, job satisfaction intervenes between the workplace variables, leader support, recognition, and procedural justice. A rationale for this particular causal order can be found in the study of attitudes (Eagly & Chaiken, 1993). An attitude is an internal state that is expressed by evaluating a particular entity with some degree of favour or disfavour (Eagly & Chaiken, 1993). Attitudes account for the covariation between the stimuli (i.e., attitude object) and evaluative responses. Job satisfaction is an attitude that develops within (i.e., internally) part-time nurse faculty as a response to their evaluation of the conditions of the work environment. As a result of their job satisfaction attitude, the evaluative response, intent to remain, emerges.

The revised model shows that leader support, recognition, and procedural justice are the stimuli that part-time nurse faculty evaluate, which influences their job satisfaction and, in turn, impacts their level of intent to remain. Leaders can influence the thoughts, attitudes, and behaviours of their employees. In the workplace, leaders articulate the vision and mission of the organization and set the direction for employees. Effective leaders also encourage and inspire. As a result of part-time nurse faculty’s reduced work hours, leadership may be even more salient to part-time staff as they are not as involved in work activities, may not have strong relationships with colleagues, and may not be aware of the daily operations of the faculty/department. This relative disconnect from the organization
may require strong leader support and an open communicative relationship. Supportive leadership may be necessary for part-time nurse faculty to not only feel that they are an integral part of the organization, but to ensure that they have the necessary knowledge and resources to carry out their job duties in a manner that satisfies the leader, the employee him or herself, and students.

Part-time nurse faculty also want to be recognized for their efforts and accomplishments in formal and/or informal ways. Recognition is believed to be a fundamental human need (Brun & Dugas, 2008). Thus, part-time nurse faculty may require praise and acknowledgements for the efforts and accomplishments put forth for a highly variable job. Recognition may be especially important to part-time staff, as they are not as involved in the work activities because of their reduced work hours. Receiving regular, genuine, and timely recognition from leaders will positively impact part-time nurse faculty job satisfaction, which in turn, enhances intent to remain employed.

The revised model also illustrates that procedural justice influences part-time nurse faculty job satisfaction, which, in turn, impacts intent to remain. Scholars contend that employees focus on the idea of fairness conveyed by the organization (Magner et al., 1994). Fair organizational practices convey to employees that they are valued members of the organization, not simply commodities. Thus, if part-time nurse faculty perceive that procedures are implemented in a fair manner, their level of job satisfaction increases. In turn, their intent to remain employed is positively impacted.
Study Limitations

It was hypothesized that 19 variables predict part-time nurse faculty intent to remain. Study findings support the relationship between intent to remain and the following variables: age, organizational tenure, leader support, recognition, procedural justice, external career opportunities, and job satisfaction. However, criteria necessary to infer causality are not all present in this study. Cook and Campbell (1979) identify three conditions that must be met to reasonably infer a cause-effect relation: covariation, temporal precedence, and no plausible alternative explanations. With covariation, changes in the presumed cause must be related to changes in the presumed effect. In this study, findings from correlation and regression analyses suggest that several variables are related to part-time nurse faculty intent to remain. To meet the temporal precedence criteria, the presumed cause must occur before the presumed effect. Temporal precedence is established in experimental or quasi-experimental designs when the hypothesized cause occurs before the existence of the hypothesized effect. In non-experimental design, a longitudinal design can provide some support of a causal relationship. No plausible alternative explanations means that the
presumed cause must be the only reasonable explanation for changes in the outcome measures. Because intent to remain is highly complex, it is possible that other factors that were not measured could be responsible for changes in part-time nurse faculty intent to remain. Although causality cannot be established in this study, there is some consensus among scholars who theorize that intent to remain is causal in nature such that employees evaluate their work environment, which influences attitudes (e.g., job satisfaction), in turn, influencing intent to remain employed (Al-Omari et al., 2008; Boyle et al., 1999; Daly & Dee, 2006; Ellenbecker et al., 2006; Kim et al., 1996; Mobley et al., 1978; Mueller & Price, 1990; Price & Mueller, 1981). Therefore, it is appropriate to hypothesize a causal order of constructs leading to intent to remain but causality cannot be ascertained without all conditions of causality being present. Further research that meets the conditions of causality are needed to strengthen claims of causality of determinants of part-time nurse faculty intent to remain.

**Threats to internal validity.** Internal validity is the degree to which the independent variable(s), rather than extraneous variables, is responsible for observed effects (Polit & Beck, 2010). Non-response may influence the internal validity of a study if the non-responders would have answered the survey items differently than the respondents answered (Oberski, 2008). Such a circumstance could occur if non-responders were apprehensive about revealing their negative perceptions about their work environment and feelings about leaving the organization. To limit apprehension, it was explained in two information letters mailed to potential participants, that they would remain anonymous and their survey would remain confidential. Therefore, it is appropriate to conclude that apprehension did not prevent potential participants from participating. Rather, non-response may be attributable to non-respondents not meeting the inclusion criteria. Of the 155 respondents, 29 (18.7%) were ineligible to participate because they did not meet the inclusion criteria. With nearly 20% of respondents who were ineligible, it is plausible that of a significant percentage of those who did not return a survey, did not return it because they were not eligible to participate. As such, it is appropriate to assume that the unobserved answers are not different than the observed answers.

**Construct validity.** Construct validity examines the fit between the conceptual definitions and the operational definitions of the variables (Burns & Grove, 2009). The
instruments chosen to measure the constructs demonstrated construct validity in previous studies. In this study, confirmatory factor analysis was conducted to evaluate the construct validity of the instruments. With adjustments, the instruments adequately reflected the constructs.

Mono-method bias can affect a study’s construct validity (Burns & Grove, 2009; Trochim, 2006). Mono-method variance, also referred to as common method variance is the variance that is attributed to the measurement rather than the constructs and may systematically bias results, preventing estimates of the true relationships among constructs. Although deemed by some as a serious issue (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), there is discussion in the literature that challenges the conventional view of common method variance (Conway & Lance, 2010; Crampton & Wagner, 1994; Doty & Glick, 1998; Spector, 1987; 2006). For instance, Spector (1987) examined method variance of 10 studies that administered the Job Satisfaction Survey and the Job Descriptive Index. In all but one analysis, common method variance was non-significant. Crampton and Wagner (1994) compared mono-method and multi-method correlations among 143 pairs of variables in 581 articles. These scholars found that in 11% of mono-method cases, correlations were lower; in 62% of cases, there were no significant differences between the two measurement approaches. Crampton and Wagner (1994) therefore conclude that while common method variance may be a prevalent issue, it may be of concern only with certain combinations of variables. Spector (2006) has a strong aversion to the idea of common method variance, stating that the first step in dealing with the potential problem of common method variance is to change the way in which we think about it. He contends that common method variance is simply urban legend, suggesting that the idea and term be retired and replaced with a more complex conception of the connection between constructs and their assessment.

Conway and Lance (2010) make four recommendations to assess the extent to which common method variance biases results. In this study, common method variance was addressed in accordance with their recommendations. First, the use of self-report was appropriate in this study. Arguably, ‘intent’ is a cognition, a mental process that cannot be examined with more accuracy than by the individual him or herself through self-report methods. A similar argument is made for examining nurse faculty’s perceptions of the work environment and their responses to the work environment. Therefore, it is appropriate for the
individual to report his or her personal responses to the work environment. Second, evidence of construct validity was established. According to Conway and Lance (2010), one way to rule out substantial method effects is to demonstrate construct validity of measures. Once revised, the instruments demonstrated construct validity. Third, item overlap for different constructs was avoided. Overlap of items used to measure different constructs can bias relationships. This issue has been investigated with respect to the relationship between organizational commitment and turnover intentions. In their confirmatory factor analysis of items from the Organizational Commitment Questionnaire (OCQ) and turnover-cognition items, Bozeman and Perrewé (2001) found that OCQ items loaded on the turnover-cognition factor and the correlation of OCQ and turnover decreased when the OCQ items were excluded. Although this study did not measure turnover cognition, a direct precursor of its opposite cognition, retention, was measured which may generate similar results with the OCQ. In order to avoid item overlap between the OCQ measure used in this study and the intent to remain item, a 9-item OCQ version was used to measure organizational commitment, which does not make any reference to cognitions about retention. Last, common method bias was proactively considered and managed during survey design. Approaches focused on minimizing social desirability and reducing evaluation apprehension were taken by informing potential participants in two information letters that their anonymity and confidentiality would be protected. Also, the information letters stated explicitly that a respondent’s employer would not have access to survey data, names and identifying information would not be published in any forum, respondents were not obligated to answer any or all questions, and they could withdraw from the study at any time.

External validity. External validity refers to the generalizability of findings to other samples and settings (Polit & Beck, 2010). Non-response can bias results and the bias depends on two factors: the percentage of the sample not responding and the extent to which the non-responders differ systematically from the study population (Barclay, Todd, Finlay, Grande, & Wyatt, 2002). To maximize the response rate and limit non-response bias, several measures recommended by Dillman et al. (2009) were taken: a maximum of five contacts to encourage participation; letters of explanation that emphasized the beneficial nature of the study; clear instructions on how to fill out the survey, and; remuneration. In addition, the survey was tested for its feasibility and adjustments were made before distribution. These
efforts resulted in a 50% response rate. With respect to the percentage of non-responders from the nurse faculty population, this is similar to Garbee and Killacky (2008) and Tourangeau et al.’s (2013) studies using survey methodology, which had response rates of 40.4% and 49.0%, respectively. Because 100% response rate is rarely achieved, most surveys have the potential to experience some non-response bias (Barclay et al., 2002). Although it has been argued that with response rates greater than 70%, most non-response bias disappears (Barclay et al., 2002), Barclay et al. (2002) found that this is not necessarily true. In two of their previous studies with high response rates, they analyzed non-response bias and found different results. In one study with a response rate of 84.4%, there was no significant difference between non-responder and responder general practitioners. However, in their other study, with a response rate of 86.7%, statistical differences were found between non-responder and responder general practitioners.

To examine the degree that this study’s sample was representative of the population, differences between non-responders and responders were also examined by comparing the study’s sample with available data of the population. Demographic data of part-time nurse faculty in the province of Ontario and Canada are not available. Therefore, sample data was compared to available registered nurse data that most closely resemble this study’s sample. The College of Nurses of Ontario (2010) and Canadian Nurses Association/Canadian Association of Schools of Nursing (2012a) have published statistics of registered nurses (RNs) that meet this study’s inclusion criteria by age groups (Table 20). As Table 20 summarizes, the study sample is most similar to the population of RNs working in Ontario schools, colleges, and universities with most similarities in the following age groups: 18 to 24, 30 to 34, 35 to 39, 40 to 44, and 60 to 64. The population of RNs working in Ontario schools, colleges, and universities, includes full-time employees and those who may not work as faculty. Therefore, these differences may obscure the similarities between this study’s sample and the part-time nurse faculty population. In sum, similarities between the study’s sample and the population of RNs who work in Ontario schools, colleges, and universities suggest that findings can be generalized, although this should be done with caution.
Table 20

Comparison of Registered Nurses by Age Group

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Study Sample (%)</th>
<th>Population of RNs working in Ontario schools, colleges, universities in 2010 (%)</th>
<th>Population of permanent* nurse faculty in Canada in 2010 (%)</th>
<th>Population of part-time RNs in Ontario in 2010 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 24</td>
<td>0.0</td>
<td>0.4</td>
<td>7.8</td>
<td>3.0</td>
</tr>
<tr>
<td>25 – 29</td>
<td>0.0</td>
<td>3.0</td>
<td>8.9</td>
<td>9.2</td>
</tr>
<tr>
<td>30 – 34</td>
<td>6.7</td>
<td>4.9</td>
<td>11.1</td>
<td>11.2</td>
</tr>
<tr>
<td>35 – 39</td>
<td>6.7</td>
<td>7.1</td>
<td>14.8</td>
<td>13.2</td>
</tr>
<tr>
<td>40 – 44</td>
<td>9.2</td>
<td>10.4</td>
<td>16.0</td>
<td>14.8</td>
</tr>
<tr>
<td>45 – 49</td>
<td>9.2</td>
<td>14.8</td>
<td>18.8</td>
<td>12.2</td>
</tr>
<tr>
<td>50 – 54</td>
<td>21.8</td>
<td>16.7</td>
<td>18.8</td>
<td>13.1</td>
</tr>
<tr>
<td>55 – 59</td>
<td>12.6</td>
<td>19.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 – 64</td>
<td>16.8</td>
<td>16.0</td>
<td>34.7</td>
<td>9.2</td>
</tr>
<tr>
<td>65 +</td>
<td>16.8</td>
<td>7.7</td>
<td></td>
<td>5.1</td>
</tr>
</tbody>
</table>

Note: ‘Permanent nurse faculty’ refers to tenured/tenurable faculty who teach nursing courses in a university and permanent full-time or permanent part-time faculty who teach nursing courses in a college (CNA/CASN, 2012a).

**Reliability.** Low reliability of measures increases the chances of not finding relationships when relationships actually exist. Therefore, reliability affects conclusion validity, which is the degree to which conclusions made about relationships in the data are reasonable (Trochim, 2006). In this study, two instruments had arguably low reliability. Nunnally and Berstein (1994) suggest that a reliability coefficient of .70 or higher is acceptable. Other scholars provide ranges for judging reliability coefficients. For instance, DeVellis (1991) suggests the following: much above .90, consider shortening the scale, .80 to .90 is very good, .70 to .80 is respectable, .65 to .70 is minimally acceptable, .60 to .65 is undesirable, and below .60 is unacceptable. Two instruments used in this study are considered “minimally acceptable” in accordance with DeVellis’ (1991) recommendations. Although the Workload Index used to measure the construct, workload, and the School-Level
Environment Questionnaire used to measure resource adequacy, demonstrated adequate reliability in previous studies (see Appendix D), they demonstrated low reliability in this study. Specifically, the Workload Index had a Cronbach’s alpha of .69 and the School-Level Environment Questionnaire had a Cronbach’s alpha of .66. If there is a relationship between workload and intent to remain and resource adequacy and intent to remain, the relatively low reliability coefficients of the instruments could have prevented the uncovering of these relationships. However, it can be argued that a relationship between workload and intent to remain and resource adequacy and intent to remain do not, in fact, exist. For instance, correlation analysis shows that the relationship between workload and intent to remain and resource adequacy are very weak and non-significant ($r = -.11$, $p = .24$ and $r = .006$, $p = .94$, respectively). Moreover, setting the level of significance to an alpha of .10, which increased the odds of finding a true relationship in the population, still did not result in a relationship between workload, resource adequacy, and intent to remain.

**Sample Size.** The sample size of 119 part-time nurse faculty is small relative to the number of variables (Tabachnick & Fidel, 2013). The small sample size may have impacted the external validity of the study. Specifically, the part-time nurse faculty population may not be represented by the study sample, limiting generalizability of study findings to the population.

In addition, there may not have been sufficient power to detect relationships in the population due to the small sample size (Tabachnick & Fidel, 2013). This may have weakened internal study validity. Lack of power in this study may be the reason why 12 of the 19 hypothesized relationships were found to be non-significant, despite previous empirical evidence to suggest their existence.

**Implications for Use of Study Results**

**Implications for Part-time Nurse Faculty**

Study findings demonstrate the importance of the leader’s influence on part-time nurse faculty intent to remain employed. Findings indicate that support provided by the leader by showing concern, providing praise and recognition, and implementing work procedures in a fair manner, contribute to part-time nurse faculty job satisfaction, which in turn, influences intent to remain. However, the part-time nurse faculty member also plays an important part in the leader-subordinate relationship. Since part-time nurse faculty are not
typically as involved in organizational life as full-time faculty, they are more likely to feel disconnected and not as included in daily operations. Therefore, it is important for part-time nurse faculty to communicate their expectations of the leader and what they expect in procedures that may affect their role, such as performance evaluations, course assignment, and curriculum development. Recognition may also serve as a compass for the part-time nurse as it provides concrete information about the degree to which his/her efforts align with the leader’s and departmental expectations. The importance is that part-time nurse faculty initiate dialogue with their leader.

**Implications for Nursing Leadership**

Findings from this study support a large and growing body of literature that establishes the importance of the work attitude, job satisfaction, and its influence on employee intent to remain employed in the organization (Chen & Baron, 2006; Chen et al., 2005; Christian, 1986; Cummings et al., 2010; Daly & Dee, 2006; Donohue, 1986; Fain, 1987; Garbee & Killacky; Gormley, 2007; Gurney et al., 1997; Marriner & Craigie, 1997; Sarmiento et al., 2004; Shieh et al., 2001; Snarr & Krochalk, 1996; Sullivan, 2001; Tourangeau et al., 2013). If part-time nurse faculty have high levels of global satisfaction with their job, they will have high levels of intent to remain. It is therefore important that nursing program deans or directors focus efforts on establishing and maintaining high levels of job satisfaction. Job satisfaction is also a link between the workplace factors, leader support, recognition, procedural justice and intent to remain.

Findings underscore the salience of the leader in influencing intent to remain through job satisfaction. Because recognition and procedural justice involve leader behaviour, deans and directors can influence the levels of satisfaction among their part-time faculty employees not only through behaviours deemed supportive, but also through specific behaviours to make part-time employees feel that they are being recognized for their efforts, and implementing their organizational procedures. A meta-analysis of studies that examined factors affecting job satisfaction in nurse faculty showed that various leader behaviours contribute to nurse faculty job satisfaction (Gormley, 2003). Nurse faculty that found their leader to be considerate, respectful, warm, and who defines and organizes group activities and relationships, had higher levels of job satisfaction. In Cummings et al.’s (2010) systematic review of nursing leadership studies, specific behaviours and skills that leaders
can employ to enhance nurses’ job satisfaction and intent to remain were identified. The activities that consistently result in higher levels of nurse job satisfaction are those that can be categorized as relational. Relational focused leadership styles can encompass transactional (or transformational) leadership styles such that the leader motivates employees to do more than originally intended or thought possible by employing inspiration and motivation, intellectual stimulation, and individualized consideration. Individualized consideration is another relational focused leadership style that focuses on understanding employees’ needs and working consistently to help employees reach their full potential. Resonant leadership styles focus on emotional intelligence, which is used to inspire and coach employees.

The faculty role can be highly variable. Faculty are expected to consistently engage in the scholarship of teaching, research, service, and integration (Creech, 2008) in order to meet the faculty/department and organizational goals while sharing their knowledge and expertise to develop competent nurses. This study shows that recognizing and acknowledging part-time nurse faculty, their achievements and performances can demonstrate that the leader appreciates the employee’s efforts and accomplishments, enhancing their job satisfaction. Recognition may be especially vital for part-time nurse faculty as they are not as engaged in daily organizational activities and relationships with colleagues and leaders. Thus, they may feel isolated and dissatisfied without consistent positive acknowledgement of efforts put forth and organizational outcomes achieved.

As this study suggests, part-time nurse faculty evaluate the degree of fairness displayed by their leaders in decision-making during organizational procedures, which affects the employee’s job satisfaction. Unlike distributive justice, procedural justice does not focus on outcomes (e.g., pay, performance evaluations, promotions); rather, it is the fairness that is the focus, suggesting that a fair process has a symbolic aspect that is not related to outcomes (Magner et al., 1994). The use of fair procedures may convey to part-time nurse faculty that they are esteemed, valued employees, not simply viewed as a commodity to teach one or two courses per semester, but as expert nurses whose background, experiences, and personality fit well with the organizational goals, culture, and team. The establishment and implementation of fair and consistent decision-making procedures may be of greater importance to part-time nurse faculty who may not be as involved in or as aware of
daily organizational activities because of the reduced hours physically spent within the organization. Deans and directors can establish procedural justice by providing fair interpersonal treatment of part-time faculty and by adequately explaining organizational decisions (Greenberg, 1990).

One challenge that deans and directors may face is the reality that part-time nurse faculty have reduced number of hours at the organization. This likely reduces the face-time between leader and part-time faculty, which may limit any relationship-building, support, or praise and recognition needed by part-time nurse faculty. Due to their limited number of hours at the organization, part-time nurse faculty are likely not to be as involved in departmental operations and procedures. This may mean that they are not as aware or involved in procedures as their full-time colleagues. Because increasing face-to-face contact with part-time faculty may be impossible, nursing leaders should consider other ways to show their support, provide meaningful recognition, implement fair procedures, influence job satisfaction, and ultimately, intent to remain employed. The following recommendations are made:

- All faculty in a leadership position attend one leadership workshop annually to learn how to be an effective leader.
- Have regular contact (e.g., bi-weekly) with part-time nurse faculty via email or phone apart from regular emails/phone calls about departmental operations.
- Establish a forum for part-time staff that meets monthly with the leader. These meetings can be designed for the leader to provide an update of the operations, praise reports, opportunities at the faculty (e.g., research, training, conferences, etc.), and for part-time faculty to address concerns and provide feedback. Remote access (e.g., Skype) should be available for part-time faculty to attend.
- Provide a departmental orientation for all newly-hired part-time staff. In addition to the typical information provided (e.g., pay, benefits, resources available), include detailed information about procedures such as performance evaluation, curriculum development, professional development opportunities.

Implications for Policy

This study has implications for universities and colleges and accreditation. Educational institutions need to be educated on the importance of workplace factors and their
effect on part-time nurse faculty intent to remain. This can be accomplished by the nursing department collecting annual or bi-annual assessments of the work environment from the perspective of the individual faculty. This data as well as turnover and shortage data can be analyzed for determinants and trends. The educational institution can also be provided with accreditation reports. As for accreditation bodies such as the Canadian Association of Schools of Nursing, they can build into their accreditation process, work environment assessments at both the unit and individual level. Accreditation bodies can provide nursing schools with valid and reliable measures of leader behaviours, recognition, procedural justice, and job satisfaction.

**Theoretical Contributions**

There are several theoretical implications of the theory of part-time nurse faculty intent to remain employed in the academic organization. First, the model may be most applicable to part-time employees. As discussed in chapter one, descriptive research shows that part-time nurse faculty are different than their full-time counterparts with respect to demographics (Creech, 2008; Westera, 1992), job responsibilities (Creech, 2008; Westera, 1992), and job attitudes (Wareham, 1996; Westera, 1992). These differences may manifest in perceptions of the work environment, responses to the work environment, intentions, and behaviours. The original model was developed using previous empirical research that typically examined full-time employees only. However, of the 12 workplace variables found to be associated with intent to remain in previous studies and hypothesized to be related to part-time nurse faculty intent to remain in this study, only three were statistically significant. It is not clear why the other variables did not impact part-time nurse faculty intent to remain even though they have been found to influence intent to remain of full-time employees. It could be that the less involved part-time employees are in their job, the less they encounter and/or find some workplace factors relevant to their satisfaction and intent to remain employed.

Second, if the goal of one’s research is developing more fully specified models that explain intent to remain employed, suppression effects should be investigated. A suppressor variable correlates with one or more predictor variable. It ‘suppresses’ outcome-irrelevant variance of one or more predictors, enhancing the relationship between the other predictor(s) and the outcome variable. Given its function, a suppressor variable is also referred to as an
‘enhancer’ (Pandey & Elliot, 2010). In intent to remain research, researchers may find that one or more predictors are uncorrelated with the outcome variable. The question then arises about whether analysis beyond bivariate analysis should include independent variables that are not correlated with the dependent variable (Pandey & Elliot, 2010). In this study, organizational tenure had a very weak and non-significant correlation with intent to remain, suggesting that this variable is unimportant for the prediction of intent to remain. However, including organizational tenure in the regression equation enhanced the relationship between age and intent to remain, improving the understanding of intent to remain. In sum, to accurately assess the contribution of each independent variable to the outcome, intent to remain employed, intent to remain theories should retain all relevant theoretical predictors, including those variables that may not be correlated with intent to remain at the bivariate level.

Third, intent to remain theories should include a causal order where work attitudes, such as job satisfaction and organizational commitment, mediate the relationships between various work environment factors and intent to remain. The study of the psychology of attitudes provides evidence that people evaluate their work conditions, which generates attitudes towards the attitude object(s) [i.e., work condition(s)]. This formed attitude then impacts behaviour. Eagly and Chaiken (1993) consider intentions a form of behaviour.

Finally, there is more to learn about the part-time nurse faculty population. This study’s model explained 16% of the variance of intent to remain. Similarly, Tourangeau et al.’s (2013) model of full-time nurse faculty, 19.6% of the variance was explained. In contrast, Boyle et al.’s (1999) model explained 52% of the variance of intent to remain; Tourangeau and Cranley’s (2006) model explained 34% of the variance. These studies examined intent to remain of hospital nurses. And much of what is known about the intent to remain phenomena among nurses has been theorized and examined among full-time acute care nurses. The initial model presented in this study was developed using theory and empirical research of full-time employees primarily, simply because there is very little research of part-time employee intent to remain. The number of variables that were found to be non-significant may indicate that the study of part-time nurse faculty should include new areas of research. One potential area of research that has not been examined among part-time nurse faculty intent to remain is work motivation. Work motivation is a psychological
process that results from an interaction between the individual and the environment (Latham & Pinder, 2005), and is defined as “a set of energetic forces that originates both within as well as beyond an individual’s being, to initiative work-related behaviour, and to determine form, direction, intensity and duration” (Pinder, 1998, p. 11). It may be that part-time nurse faculty are intrinsically motivated who seek enjoyment, interest, self-expression, satisfaction of curiosity, or personal challenge in their work (Amabile, 1993). In addition, part-time nurse faculty, whose primary role as teacher may be influenced to remain employed by various work conditions that impact teaching, feelings about teaching (and students), and outcomes of teaching.

**Future Research**

Four areas of future research are suggested. First, the revised model can be tested using structural equation modeling (SEM). The causal model has the characteristics appropriate for the SEM approach, specifically direct and indirect effects, and causal sequences amongst constructs. Second, a longitudinal study could test the hypothesized causal relationships among the constructs suggested by the findings of this study. Testing the revised model using a longitudinal design will provide stronger evidence of the causal ordering of constructs (Price, 2001). Third, should researchers choose to examine relationships between constructs from the original model and intent to remain, some instruments should be improved. Special effort should be made to improve the measurement of workload and resource adequacy. Results from confirmatory factor analysis indicate that not all aspects of particular study constructs (i.e., role conflict, professional growth opportunities, recognition, distributive justice, procedural justice, burnout, and organizational commitment) are being captured by the instruments. Improving the measurement of these constructs may increase the percentage of explained variance in intent to remain employed. Fourth, research using an interventional quasi-experimental design may provide more practical and concrete evidence for nursing administration. Leaders can be taught about effective leadership styles and behaviours, including fairness techniques and outcomes compared pre and post. It is suggested that future research use resources, such as the Registered Nurses’ Association of Ontario’s *Building and Sustaining Nursing Leadership* (2006) healthy work environments best practice guideline to develop an empirically supported intervention.
Final Summary Conclusions

This study has provided interesting and new knowledge about the predictors of part-time nurse faculty intent to remain, a relatively unexamined phenomenon. The purpose of this research study was to test and refine a theoretical model of part-time nurse faculty intent to remain employed in the academic organization. Specifically, the impact of demographics, workplace characteristics, responses to the workplace, and external characteristics, on intent to remain.

Consistent with the hypothesized model, study findings indicate higher levels of part-time nurse faculty satisfaction with the job overall, predict intent to remain. Surprising in this research is the direction of the relationship between age and intent to remain. As part-time nurse faculty increase in age, their level of their intent to remain employed declines. Organizational tenure enhances the relationship between age and intent to remain. This research shows that leadership is important in enhancing part-time nurse faculty intent to remain. Specifically, high levels of leader support, recognition, and procedural justice affect high levels of intent to remain in the academic organization, mediated by job satisfaction. Surprisingly, the more opportunities perceived to exist outside of the employing organization, the higher the level of part-time nurse faculty intent to remain employed.

While this study has some limitations, the study findings have both theoretical and practical implications for part-time nurse faculty, nursing leadership, and education and accreditation bodies. Limitations in cross-sectional study design along with study results have generated new directions for theoretical development, methodological considerations, and new areas of research.

In conclusion, this study begins to provide insights into a relatively unexamined area of research that is useful for leadership in nursing college and university programs. Part-time nurse faculty are an important part of our nursing education system. Moreover, we need to retain qualified part-time nurse faculty to help manage the current and predicted shortages of nurses. This study provides needed answers about the factors that can encourage part-time nurse faculty to remain in the education system.
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# Appendix A
## Summary of Nurse Faculty Intent to Remain and Retention Studies

<table>
<thead>
<tr>
<th>Author</th>
<th>Purpose</th>
<th>Study Design</th>
<th>Sample and Setting</th>
<th>Findings</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| Barrett, Goldenberg, & Faux (1992) | Describe the career patterns and job satisfaction of Ontario university and college nurse educators | Exploratory Descriptive | n = 24 full-time college  
 n = 20 full-time university  
 6 Ontario, Canada nursing schools | Retention factors for university educators  
 • Increased salaries  
 • More peer support  
 • Less division competition  
 • Increasing status and understanding of nursing discipline within university  
 Retention factors for college educators  
 • Opportunity for professional growth opportunities and development | Small sample  
 Convenience sample |
| Brendtro & Hegge (2000) | Describe the state of the nursing faculty shortage | Descriptive | n = 288 graduate-prepared nurses  
 (n = 79 nurse faculty)  
 1 US state | Incentives to attract and retain faculty:  
 • Closer proximity to work  
 • Improved compensation  
 • More realistic professional expectations  
 • Increased opportunities to continue clinical practice while teaching | Faculty without graduate-degree excluded |
| Brewer, Zayas, Kahn, & Sienkiewicz (2006) | Determine major barriers to nursing recruitment and retention | Exploratory | 9 focus groups  
 n = 56, including nurse faculty  
 1 US state | Retention challenges:  
 • Work intensity  
 • Staffing and scheduling  
 • Lack of empowerment  
 • Traveling nurses  
 • Workforce compensation  
 • Barriers to continuing education  
 • Work culture | Small nurse faculty sample |
| Cavenar (1987) | Test a causal model of retention of nurse faculty | Correlation | n = 206 full-time  
 n = 17 part-time | Predictors of retention:  
 • Role ambiguity: $\beta = -.19$  
 • Role conflict: $\beta = -.12$  
 • Work satisfaction: $\beta = .17$  
 • Promotional satisfaction: $\beta = .15$ | Small part-time sample |
| Clark (1988) | Examine the effectiveness of an orientation program | Descriptive | n = 105 full-time  
 n = 16 part-time | Perceived orientation effectiveness predicted ITR ($p < .001$) | Small part-time sample size |
<table>
<thead>
<tr>
<th>Author</th>
<th>Purpose</th>
<th>Study Design</th>
<th>Sample and Setting</th>
<th>Findings</th>
<th>Limitations</th>
</tr>
</thead>
</table>
| Garbee & Killacky (2008) | Discover set of predictor variables that best predict nurse faculty intent to stay in nursing education | Mixed-methods        | $n = 316$ full-time 39 US nursing schools | ITR 1 year:  
- Job satisfaction: $r = .40, p < .001$  
- Organizational commitment: $F(1,314) = 75.01, p < .001, R^2 = .19$  
- Leader behaviour (consideration): $F(1,312) = 22.70, p < .001, R^2 = .07$  
- Mentoring: not significant  
ITR 3 years:  
- Hours worked per week: $F(3,312) = 3.06, p < .05, R^2 = .07$  
- Differences between groups:  
  - 40 hours: $M = 8.24, SD = 2.48$  
  - 60 hours: $M = 7.13, SD = 2.45$  
ITR 5 years:  
- Job satisfaction: $r = .36, p < .001$  
- Organizational commitment: $F(1,314) = 81.23, p < .001, R^2 = .21$  
- Leader behaviour (consideration): $F(1,312) = 28.88, p < .001, R^2 = .09$  
- Mentoring: not significant | Part-time participants not included                                    |
| Horat (2008)          | Explore the experiences that influenced new nurse faculty’s decision to stay or leave academia within the first three years of employment | Phenomenological     | $n = 30$ University in 1 US state | 5 major themes:  
1. Perceiving the Role  
2. Influencing Role Development  
3. Staying With  
  - 55% wanted to stay  
4. Teetering on the Edge  
  - 35% had thoughts of leaving  
  - pay, workload, feelings of powerlessness; under a microscope, not promoted, pressure to earn doctorate influenced thoughts  
5. Reflecting Afterthoughts on Leaving  
  - 3 left when offered a higher paying position | Small sample                                                                |
<p>| Lambert (1991)        | Determine factors                                                      | Descriptive          | Retention group: Retention group: Retention factors | Small sample of                                                                                     |</p>
<table>
<thead>
<tr>
<th>Author</th>
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<th>Findings</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Influencing retention and attrition of nurse educators</td>
<td>Questionnaire &amp; telephone interviews</td>
<td>n = 136</td>
<td>• Working conditions: 41%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Attrition group: n = 36</td>
<td>• Interpersonal relations: 40%</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>1 US state</td>
<td>• Personal attitudes, attributes, and opinions: 34%</td>
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<td></td>
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<td></td>
<td></td>
<td>• Work itself: 22%</td>
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<td></td>
<td></td>
<td></td>
<td>• Personal needs: 22%</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>• Physical environment: 19%</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>• Administration: 13%</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>• Salary: 8%</td>
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<td></td>
<td></td>
<td><strong>Attrition group: Retention factors</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>• Personal needs: 13%</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>• Salary: 8%</td>
<td></td>
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<td></td>
<td></td>
<td>• Administration: 6%</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>• Working conditions: 3%</td>
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<tr>
<td>Lane, Esser, Holte, &amp; McCusker (2010)</td>
<td>Explore the constructs of intent to remain and job satisfaction</td>
<td>Qualitative</td>
<td>n = 74</td>
<td>Factors that influence ITR:</td>
<td>Convenience sample</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>23 community colleges in 1 US state</td>
<td>• Relationship with co-workers</td>
<td></td>
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<tr>
<td>Plawecki &amp; Plawecki (1976)</td>
<td>Determine factors associated with recruitment and retention of nurse educators</td>
<td>Descriptive</td>
<td>n = 92 graduate-prepared faculty</td>
<td>Retention factors:</td>
<td>Employment status not identified</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>1 US state</td>
<td>• Most important: work itself</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td>• Least important: salary</td>
<td></td>
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<td></td>
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<td></td>
<td>1 US state</td>
<td>• Job satisfaction with institutional characteristics: r = .17, p &lt; .05</td>
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<td></td>
<td></td>
<td>• Job satisfaction with salary &amp; benefits: r = .23, p &lt; .001</td>
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<td></td>
<td></td>
<td>• Job satisfaction with organizational climate: r = .24, p &lt; .05</td>
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<td></td>
<td></td>
<td>• Job satisfaction with support services &amp; facilities: r = .21, p &lt; .01</td>
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<td></td>
<td></td>
<td>• Job satisfaction with regulation procedures: r = .34, p &lt; .001</td>
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<td></td>
<td></td>
<td></td>
<td>• Overall Job satisfaction: r = .29, p &lt; .001</td>
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<tr>
<td>Author</td>
<td>Purpose</td>
<td>Study Design</td>
<td>Sample and Setting</td>
<td>Findings</td>
<td>Limitations</td>
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<tr>
<td>Rouse (2006)</td>
<td>Assess projected nurse faculty shortage, barriers to recruiting and retaining faculty</td>
<td>Descriptive</td>
<td>n = 84 full-time &amp; part-time</td>
<td>Relationship between Retention and facets of collegial support:</td>
<td>Small part-time sample</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>10 nursing schools</td>
<td>- Confidence &amp; trust: $r = -.25, p &lt; .001$</td>
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<td></td>
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<td>1 US state</td>
<td>- Team effort toward goal achievement: $r = -.25, p &lt; .001$</td>
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<td>- Open communication: $r = -.23, p &lt; .01$</td>
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<td>- Mutual support: $r = -.22, p &lt; .01$</td>
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<td>- Creativity: $r = -.16, p &lt; .05$</td>
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<td>- Freedom from threat: $r = -.23, p &lt; .01$</td>
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<td>- Overall collegial support: $r = -.24, p &lt; .001$</td>
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<td></td>
<td>Reasons for staying:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>- Love teaching</td>
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<td></td>
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<td></td>
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<td>- Enjoy students</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td>- Had positive relationships with peers and department heads</td>
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<td></td>
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<td>- Good retirement benefits</td>
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<td>- Ability to continue clinical practice</td>
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<td>- Flexible schedule</td>
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<td></td>
<td></td>
<td>- Invested in nursing</td>
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<td></td>
<td></td>
<td></td>
<td>- Long-term goals to be in academia</td>
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<tr>
<td>Ruel (2009)</td>
<td>Examine relationships between role ambiguity, role conflict, work role balance and intent to remain and job satisfaction</td>
<td>Correlation</td>
<td>n = 243 full-time</td>
<td>Relationship with ITR:</td>
<td>Convenience sample</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>17 schools throughout US</td>
<td>- Role conflict: $b = -.12, p = .032$</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Job satisfaction: $r = .38, p &lt; .05$</td>
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</tr>
<tr>
<td>Sullivan (2001)</td>
<td>Examine relationships between mentoring, job satisfaction, and intent to stay among nurse faculty mentees</td>
<td>Correlation</td>
<td>n = 51</td>
<td>Relationship with ITR:</td>
<td>Employment status not specified</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>31 nursing schools across US</td>
<td>- Job satisfaction: $r = .74, p &lt; .001$</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>- Satisfaction with work itself: $r = .55, p &lt; .001$</td>
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<td></td>
<td>- Satisfaction with supervision: $r = .46, p = .001$</td>
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<td></td>
<td></td>
<td>- Satisfaction with co-workers: $r = .23, p = .03$</td>
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<td></td>
<td></td>
<td>- Satisfaction with pay: $r = .30, p = .03$</td>
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<td></td>
<td>- Satisfaction with promotion opportunities: $r = .42, p = .002$</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>- Mentoring: not significant</td>
<td></td>
</tr>
<tr>
<td>Tourangeau, Ferron</td>
<td>Test a conceptual</td>
<td>Cross-sectional</td>
<td>n = 650 full-time</td>
<td>Determinants of ITR:</td>
<td>Model explained</td>
</tr>
<tr>
<td>Author</td>
<td>Purpose</td>
<td>Study Design</td>
<td>Sample and Setting</td>
<td>Findings</td>
<td>Limitations</td>
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</tbody>
</table>
| Patterson, Thomson, Saari, Widger, MacMillan (2013) *unpublished* | model of factors hypothesized to influence nurse faculty intention to remain employed | and part-time nurse faculty | Colleges & universities in Ontario, Canada | • Age: $\beta = -.301, p < .001$
• Quality of relationships with colleagues: $\beta = .140, p < .001$
• Satisfaction with salary and benefits: $\beta = .094, p = .013$
• Having dependents: $\beta = .128, p = .001$
• Satisfaction with job status: $\beta = .107, p = .005$
• Quality of education: $\beta = .098, p = .011$
• Satisfaction with access to required material resources: $\beta = .093, p = .017$
• Being unionized: $\beta = .087, p = .017$ | only 19.6% of the variance in intent to remain |
| Tourangeau, Thomson, Saari, Widger, Ferron, MacMillan (2012) | Determinants of nurse faculty intention to remain employed | Descriptive exploratory | $n = 37$
6 focus groups
Ontario, Canada colleges and universities | Themes:
1. Personal characteristics: age and proximity to retirement, marital status, job opportunities for partners, having dependents, health status, ability to look for other employment, turnover, work/life balance
2. Work environment and organizational support: quality of faculty/school leadership, organizational climate, quality leadership, leader fairness, supportive collegial relationships, quality of physical work environment, access to resources, remuneration, choice in job status, promotion opportunities, support for continuing education
3. Job content: autonomy, variety, research scholarship expectations, students
4. External characteristics: unionization and collective agreements, availability of outside opportunities, proximity of home and work, local economy | Small sample |
| Williamson, Cook, Salmeron, & Burton (2010) | Determine the factors that would encourage nurse faculty to remain employed past retirement age | Phenomenological | $n = 6$ full-time nearing retirement age
1 US state | Themes:
1. Security
2. Health Promotion
3. Relationships
4. Ego Protection
5. Fulfillment | Purposive sampling |
| Wolfertz (1999) | Investigate the relationship between institutional climate | Mixed-methods | $n = 49$ full-time, part-time, & administrators | • Sense of connectedness with the program
• Wages
• Integration | Small sample |
<table>
<thead>
<tr>
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<th>Findings</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>and recruitment and retention of part-time nurse faculty</td>
<td></td>
<td></td>
<td>• Teaching</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix B

### Theoretical Concepts and Corresponding Instruments and Survey Items

<table>
<thead>
<tr>
<th>Construct</th>
<th>Conceptual Definition</th>
<th>Instrument Resource</th>
<th>Number of Items / Placement in Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td><strong>Intent to Remain Employed</strong></td>
<td>The conscious and deliberate wilfulness to remain employed in the organization (Tett &amp; Meyer, 1993).</td>
<td>3 items (author developed)</td>
</tr>
<tr>
<td><strong>Job Characteristics</strong></td>
<td><strong>Workload</strong></td>
<td>The amount of work nurses are required to do in order to fulfill their work role requirements.</td>
<td>Workload Index (Kim et al., 1996)</td>
</tr>
<tr>
<td></td>
<td><strong>Resource Adequacy</strong></td>
<td>The degree to which resources, in the form of human, physical surroundings, and equipment, are provided that are necessary to perform the role.</td>
<td>Resource Adequacy subscale of the School-Level Environment Questionnaire (SLEQ) (Johnson et al., 2007).</td>
</tr>
<tr>
<td><strong>Role Characteristics</strong></td>
<td><strong>Role Ambiguity</strong></td>
<td>Lack of necessary information to perform job duties (House &amp; Rizzo, 1972).</td>
<td>Role Ambiguity Scale (Rizzo et al., 1970)</td>
</tr>
<tr>
<td></td>
<td><strong>Role Conflict</strong></td>
<td>Inconsistent role obligations (House &amp; Rizzo, 1972).</td>
<td>Role Conflict Scale (Rizzo et al., 1970)</td>
</tr>
<tr>
<td></td>
<td><strong>Autonomy</strong></td>
<td>The ability of professionals to decide work patterns, to actively participate in major academic decision-making, to have their work evaluated by professional peers, and to be relatively free of bureaucratic regulations and restrictions (Baldridge et al., 1973)</td>
<td>Self-determination subscale from the Psychological Empowerment Scale (Spreitzer, 1995)</td>
</tr>
<tr>
<td><strong>Leader Characteristics</strong></td>
<td><strong>Leader Support</strong></td>
<td>An open, helpful, and positive relationship between leader and subordinate regarding work-related affairs.</td>
<td>Supervisor Support subscale from the Social Support Scale (Caplan et al., 1980)</td>
</tr>
<tr>
<td><strong>Work Group Characteristics</strong></td>
<td><strong>Co-worker Support</strong></td>
<td>A positive or helping relationship between co-workers.</td>
<td>Co-worker Support subscale from the Social Support Scale (Caplan et al., 1980)</td>
</tr>
<tr>
<td><strong>Organizational Characteristics</strong></td>
<td><strong>Professional Growth Opportunities</strong></td>
<td>Chances provided by the employer to develop skills and knowledge (Kim et al., 1996).</td>
<td>Developmental Experiences Scale (Wayne et al., 1997)</td>
</tr>
<tr>
<td></td>
<td><strong>Recognition</strong></td>
<td>Formal or informal acknowledgement of work-related performances or</td>
<td>Recognition Scale (Koys &amp; DeCotiis, 1991)</td>
</tr>
<tr>
<td>Construct</td>
<td>Conceptual Definition</td>
<td>Instrument Resource</td>
<td>Number of Items / Placement in Survey</td>
</tr>
<tr>
<td>---------------------------</td>
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</tr>
<tr>
<td>Distributive Justice</td>
<td>Perceived fairness of the amounts of work outcomes, such as compensation and work rewards, employees receive (McFarlin &amp; Sweeney, 1992).</td>
<td>Distributive Justice Index (Price &amp; Mueller, 1986)</td>
<td>#48 - #51</td>
</tr>
<tr>
<td>Procedural Justice</td>
<td>Perceived fairness of the policies and procedures used to make decisions (Greenberg, 1990).</td>
<td>Procedural Justice scale (McFarlin &amp; Sweeney, 1992)</td>
<td>4</td>
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<tr>
<td>Work Rewards</td>
<td>Tangibles employees receive as recompense for performing the job.</td>
<td>1 item (author developed)</td>
<td>1</td>
</tr>
<tr>
<td>External Characteristics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Career Opportunities</td>
<td>The extent of available career opportunities outside of the present employing organization.</td>
<td>1 item (Tourangeau &amp; Cranley, 2006)</td>
<td>1</td>
</tr>
<tr>
<td>Nurse Faculty Responses</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Burnout</td>
<td>A condition of emotional, mental, and physical exhaustion caused by long-term involvement in work situations that are emotionally demanding (Schaufeli &amp; Greenglass, 2001).</td>
<td>Emotional Exhaustion subscale of the Maslach Burnout Inventory – Educators Survey (MBI-ES) (Maslach et al., 1996)</td>
<td>8</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>The psychological attachment to and identification with an organization that makes separation from the organization difficult for the employee (Mowday et al., 1982).</td>
<td>Organizational Commitment Questionnaire (Mowday et al., 1982)</td>
<td>9</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>The positive, contented feelings nurse faculty have towards their work.</td>
<td>Job Satisfaction subscale of the Michigan Organizational Assessment Questionnaire (Cammann et al., 1983)</td>
<td>3</td>
</tr>
<tr>
<td>Nurse Faculty Demographics</td>
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<tr>
<td>Age</td>
<td>Chronological age since birth.</td>
<td></td>
<td>Section A: #2</td>
</tr>
<tr>
<td>Education Level</td>
<td>Post-secondary degree(s) an individual has successfully completed.</td>
<td></td>
<td>Section A: #3</td>
</tr>
<tr>
<td>Faculty Role Tenure</td>
<td>Amount of time (in years) an individual has been in a nurse faculty role.</td>
<td></td>
<td>Section A: #7</td>
</tr>
<tr>
<td>Organizational Tenure</td>
<td>Amount of time in years, an individual has been employed by the academic organization.</td>
<td></td>
<td>Section A: #6</td>
</tr>
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</table>
## Appendix C


<table>
<thead>
<tr>
<th>Latent Construct</th>
<th>% Assessed by Measurement Error</th>
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<td>Intent to Remain Employed</td>
<td>10%</td>
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<tr>
<td>Age</td>
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</tr>
<tr>
<td>Organizational Tenure</td>
<td>5%</td>
</tr>
<tr>
<td>Graduate-level Education</td>
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</tr>
<tr>
<td>Workload</td>
<td>5%</td>
</tr>
<tr>
<td>Resource Adequacy</td>
<td>10%</td>
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<tr>
<td>Role Ambiguity</td>
<td>10%</td>
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<tr>
<td>Role Conflict</td>
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<tr>
<td>Autonomy</td>
<td>5%</td>
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<tr>
<td>Leader Support</td>
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<td>Co-worker Support</td>
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<tr>
<td>Professional Growth Opportunities</td>
<td>10%</td>
</tr>
<tr>
<td>Recognition</td>
<td>10%</td>
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<tr>
<td>Distributive Justice</td>
<td>10%</td>
</tr>
<tr>
<td>Procedural Justice</td>
<td>15%</td>
</tr>
<tr>
<td>Work Rewards</td>
<td>5%</td>
</tr>
<tr>
<td>External Career Opportunities</td>
<td>20%</td>
</tr>
<tr>
<td>Burnout</td>
<td>10%</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>10%</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>15%</td>
</tr>
</tbody>
</table>
# Appendix D

**Pre-existing Study Instruments**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Instrument</th>
<th>Reliability</th>
<th>Validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workload</td>
<td>Workload Index (Kim et al., 1996)</td>
<td>.73 (Kim et al., 1996)</td>
<td>Discriminant; convergent (Kim et al., 1996)</td>
</tr>
<tr>
<td>Resource Adequacy</td>
<td>Resource Adequacy subscale of the School-Level Environment Questionnaire (SLEQ) (Johnson et al., 2007)</td>
<td>.86 (Johnson &amp; Stevens, 2006)</td>
<td>Construct (Johnson et al., 2007)</td>
</tr>
<tr>
<td>Role Ambiguity</td>
<td>Role Ambiguity Scale (Rizzo et al., 1970)</td>
<td>.79 - .89 (Acorn, 1991; Lu et al., 2007)</td>
<td>Construct (Schwab et al., 1983)</td>
</tr>
<tr>
<td>Role Conflict</td>
<td>Role Conflict Scale (Rizzo et al., 1970)</td>
<td>.82 - .86 (Acorn, 1991; Lu et al., 2007)</td>
<td>Construct (Schwab et al., 1983)</td>
</tr>
<tr>
<td>Autonomy</td>
<td>Self-determination subscale (Spreitzer, 1995)</td>
<td>.79 - .82 (Spreitzer, 1995)</td>
<td>Construct (Spreitzer, 1995)</td>
</tr>
<tr>
<td>Leader Support</td>
<td>Supervisor Support subscale (Caplan et al., 1980)</td>
<td>.80 (Lim, 1996)</td>
<td>Construct (Scheck et al., 1997)</td>
</tr>
<tr>
<td>Co-worker Support</td>
<td>Co-worker Support subscale (Caplan et al., 1980)</td>
<td>.80 (Lim, 1996)</td>
<td>Construct (Scheck et al., 1997)</td>
</tr>
<tr>
<td>Professional Growth Opportunities</td>
<td>Developmental Experiences Scale (Wayne et al., 1997)</td>
<td>.87 (Wayne et al., 1997)</td>
<td>Construct (Wayne et al., 1997)</td>
</tr>
<tr>
<td>Burnout</td>
<td>Emotional Exhaustion subscale of the Maslach Burnout Inventory – Educatory Survey (MBI-ES) (Maslach et al., 1996)</td>
<td>.90 (Lackritz, 2004)</td>
<td>Construct (Worley et al., 2008; convergent (Vanheule et al., 2007)</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>Organizational Commitment Questionnaire (Mowday et al., 1982)</td>
<td>.86 (Tetrick &amp; Farkas, 1988)</td>
<td>Construct; convergent; discriminant (Commeiras &amp; Fournier, 2001; Mowday &amp; Steers, 1979)</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>Job Satisfaction subscale of the Michigan Organizational Assessment Questionnaire (Cammann et al., 1983)</td>
<td>.84 (Bowling &amp; Hammond, 2008)</td>
<td>Construct: hypothesis-testing approach (Bowling &amp; Hammond, 2008)</td>
</tr>
</tbody>
</table>
Appendix E
Pre-notice Letter

Study: Part-time Nurse Faculty Intent to Remain Employed in the Academic Organization

[Date]

Dear Nurse Faculty Colleague,

We are writing to ask for your help with an important study being conducted by the Lawrence S. Bloomberg Faculty of Nursing, University of Toronto. In this study, we are asking nurses who work as part-time faculty in Ontario universities and colleges to understand what influences your intentions to remain employed in your academic organization. In the next few days, you will receive a request to participate in this project by answering questions about your perceptions and feelings about your job and your work environment.

We would like to do everything we can to make it easy for you to participate in the study. We are writing in advance because many people like to know ahead of time that they will be invited to complete a survey. This research can only be successful with the generous help of registered nurses like you.

To say thanks, you will be given the opportunity to select a non-profit, charitable organization to which we will make a donation on your behalf. We hope you will take approximately 15-20 minutes of your time to help us. Most of all, we hope that you enjoy the opportunity to share your perceptions about your academic work environment.

Regards,

Era Mae Ferron, RN MN
PhD Candidate / Investigator
Lawrence S. Bloomberg Faculty of Nursing
University of Toronto
130 - 155 College Street
Toronto, ON M5T 1P8
Phone: 416-978-6913
Email: eramae.ferron@utoronto.ca

Dr. Ann Tourangeau, PhD
PhD Candidate Supervisor
Associate Professor
Lawrence S. Bloomberg Faculty of Nursing
University of Toronto
130 - 155 College Street
Toronto, ON M5T 1P8
Phone: 416-978-6919
Email: ann.tourangeau@utoronto.ca
Letter of Explanation

Study: Part-time Nurse Faculty Intent to Remain Employed in the Academic Organization

[Date]

Dear Nurse Faculty Colleague,

We would like to invite you to participate in a doctoral research project we are conducting at the Lawrence S. Bloomberg Faculty of Nursing, University of Toronto. The purpose of the study is to explore the determinants of part-time nurse faculty intentions to remain employed in the academic organization. Your name was selected from the College of Nurses of Ontario registration list. If you are a RN, employed as a part-time nurse faculty member in an Ontario college or university, please consider participating in this study.

What is the purpose of the research?
This study focuses on the growing problem of the shortage of nurse faculty. In order to retain faculty to academia, we need to understand the factors that encourage retention to the academic organization. Survey responses will be used to develop, test, and refine theory about factors that influence Ontario part-time nurse faculty’s intent to remain employed in the academic organization, and to identify appropriate strategies to enhance retention to the academic organizations.

What does participation in this survey involve?
If you agree to participate in this study, you are asked to complete the survey included in this package. We estimate that the survey will take approximately 15-20 minutes to complete. The survey asks you about your perceptions of your job, your work environment, and your intent to remain employed. Participation in the study is confidential and voluntary. Your name will not be recorded on any of the forms. Only code numbers will be used. Your name will not be identified in any report or presentation that may arise from this study and your answers to the survey will remain confidential. Completion of the survey indicates your consent to participate in the study. You can refuse to answer any questions and you can withdraw from the study at any time.
What are the benefits?
Although you receive no direct benefits from participating in this study, you may find the survey is an opportunity to reflect upon your faculty role. The information you provide will assist in understanding factors that impact your intention to remain employed in your academic organization. Study findings will contribute to the development and refinement of theory and will help create appropriate strategies to help improve nurse faculty retention. To thank you for your participation in the survey, a small donation will be made to one of the following local charitable organizations, on your behalf: **Higher Ground Neighbourhood Outreach**, an organization that focuses on developing the musical gifts of children and youth (http://www.HGNO.org) and the **Heart and Stroke Foundation of Ontario**. A total of $500 will be donated on behalf of study participants.

What are the risks?
Although there are no known risks of participating in the study and minimal risk for psychological/emotional discomfort, you may experience distress or discomfort while completing the survey due to the nature of the questions. You are not obligated to complete any or all aspects of the survey. You may leave items blank or withdraw from the study at any time without providing a reason. Participation is voluntary.

How will confidentiality be maintained?
All aspects of the study, including results, will be strictly confidential and only the researchers will have access to information collected about your perceptions. Your employer will not have access to your survey data. No names or identifying information will be used in any presentation or report that may be published. Your responses will only be seen by Era Mae Ferron, nursing doctoral candidate and Ann Tourangeau, supervisor. All information will be securely locked in the research office of Era Mae Ferron and Ann Tourangeau at the Lawrence S. Bloomberg Faculty of Nursing, University of Toronto for two years, at which time surveys will be shredded.

What is the cost of completing the survey?
The cost to you will be the time to complete the survey, approximately 15-20 minutes.

Who do I contact if I have a question about the study?
If you have any questions, concerns, or comments, please do not hesitate to contact Era Mae Ferron or Ann Tourangeau using contact info found below. If you have any questions or concerns about your rights as a research participant, please contact the Office of Research Ethics at ethics.review@utoronto.ca or 416-946-3389.
CONSENT

I understand that by returning a completed survey, I have consented to being included in the described study and any questions I have were addressed to my satisfaction. I understand that my participation is voluntary and that I may withdraw at any time without affecting my employment. I understand that I will not benefit from my involvement in the study and that a copy of this form has been given to me. I voluntarily consent to participate in this study.

Please keep this letter for your own information.

Thank you very much for your consideration to participate in this study.

Era Mae Ferron, RN MN
PhD Candidate / Investigator
Lawrence S. Bloomberg Faculty of Nursing
University of Toronto
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Dr. Ann Tourangeau, PhD
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Lawrence S. Bloomberg Faculty of Nursing
University of Toronto
130 - 155 College Street
Toronto, ON M5T 1P8
Phone: 416-978-6919
Email: ann.tourangeau@utoronto.ca
[Date]

Dear Nurse Faculty Colleague,

Several days ago, a survey seeking information about your perceptions of your job and work environment and your intent to remain employed was mailed to you. Your name was drawn from the College of Nurses of Ontario member database.

If you have already completed the survey, please accept our sincere thanks. If not, we encourage you to do so today. We are especially grateful for your help because it is only by asking people like you to share your employment intentions, your perceptions of your job and work environment, that we can understand the factors that affect retention, and contribute to the development of effective retention strategies.

Thank you for considering to participate in this important study.

Sincerely,

Era Mae Ferron, RN MN
PhD Candidate

Dr. Ann Tourangeau, PhD
PhD Candidate Supervisor
Appendix H
Replacement Letter

Study: Part-time Nurse Faculty Intent to Remain Employed in the Academic Organization

[Date]

Dear Nurse Faculty Colleague,

Recently, you were sent a survey and follow-up reminder card for the above named study. To the best of our knowledge, it’s not yet been returned. If you have already completed the survey, we thank you for your contribution. We are writing again because of the importance that your responses. If you have not already done so, we encourage you to participate by completing the survey.

The purpose of the study is to explore the determinants of part-time nurse faculty intentions to remain employed in the academic organization. Your name was selected from the College of Nurses of Ontario registration list. If you are a RN, employed as a part-time nurse faculty member in an Ontario college or university, please consider participating in this study.

What is the purpose of the research?
This study focuses on the growing problem of the shortage of nurse faculty. In order to retain faculty to academia, we need to understand the factors that encourage retention to the academic organization. Survey responses will be used to develop, test, and refine theory about factors that influence Ontario part-time nurse faculty’s intent to remain employed in the academic organization, and to identify appropriate strategies to enhance retention to the academic organizations.

What does participation in this survey involve?
If you agree to participate in this study, you are asked to complete the survey included in this package. We estimate that the survey will take approximately 15-20 minutes to complete. The survey asks you about your perceptions of your job, your work environment, and your intent to remain employed. Participation in the study is confidential and voluntary. Your name will not be recorded on any of the forms. Only code numbers will be used. Your name will not be identified in any report or presentation that may arise from this study and your answers to the survey will remain confidential. Completion of the survey indicates your consent to participate in the study. You can refuse to answer any questions and you can withdraw from the study at any time.
What are the benefits?
Although you receive no direct benefits from participating in this study, you may find the survey is an opportunity to reflect upon your faculty role. The information you provide will assist in understanding factors that impact your intention to remain employed in your academic organization. Study findings will contribute to the development and refinement of theory and will help create appropriate strategies to help improve nurse faculty retention. To thank you for your participation in the survey, a small donation will be made to one of the following local charitable organizations, on your behalf: Higher Ground Neighbourhood Outreach, an organization that focuses on developing the musical gifts of children and youth (http://www.HGNO.org) and the Heart and Stroke Foundation of Ontario. A total of $500 will be donated on behalf of study participants.

What are the risks?
Although there are no known risks of participating in the study and minimal risk for psychological/emotional discomfort, you may experience distress or discomfort while completing the survey due to the nature of the questions. You are not obligated to complete any or all aspects of the survey. You may leave items blank or withdraw from the study at any time without providing a reason. Participation is voluntary.

How will confidentiality be maintained?
All aspects of the study, including results, will be strictly confidential and only the researchers will have access to information collected about your perceptions. Your employer will not have access to your survey data. No names or identifying information will be used in any presentation or report that may be published. Your responses will only be seen by Era Mae Ferron, nursing doctoral candidate and Ann Tourangeau, supervisor. All information will be securely locked in the research office of Era Mae Ferron and Ann Tourangeau at the Lawrence S. Bloomberg Faculty of Nursing, University of Toronto for two years, at which time surveys will be shredded.

What is the cost of completing the survey?
The cost to you will be the time to complete the survey, approximately 15-20 minutes.

Who do I contact if I have a question about the study?
If you have any questions, concerns, or comments, please do not hesitate to contact Era Mae Ferron or Ann Tourangeau using contact info found below. If you have any questions or concerns about your rights as a research participant, please contact the Office of Research Ethics at ethics.review@utoronto.ca or 416-946-3273.
CONSENT
I understand that by returning a completed survey, I have consented to being included in the described study and any questions I have were addressed to my satisfaction. I understand that my participation is voluntary and that I may withdraw at any time without affecting my employment. I understand that I will not benefit from my involvement in the study and that a copy of this form has been given to me. I voluntarily consent to participate in this study.

Please keep this letter for your own information.

Thank you very much for your consideration to participate in this study.

[Signature]

Era Mae Ferron, RN MN
PhD Candidate / Investigator
Lawrence S. Bloomberg Faculty of Nursing
University of Toronto
130 – 155 College Street
Toronto, ON M5T 1P8
Phone: 416-978-6913
Email: eramae.ferron@utoronto.ca

[Signature]

Dr. Ann Tourangeau, PhD
PhD Candidate Supervisor
Associate Professor
Lawrence S. Bloomberg Faculty of Nursing
University of Toronto
130 – 155 College Street
Toronto, ON M5T 1P8
Phone: 416-978-6919
Email: ann.tourangeau@utoronto.ca
PART-TIME NURSE FACULTY INTENT TO REMAIN EMPLOYED IN THE ACADEMIC ORGANIZATION

Introduction
You are invited to participate in this survey that aims to gain a better understanding of factors that influence part-time nurse faculty’s intent to remain employed in the academic organization. The study involves Registered Nurses, employed as FACULTY MEMBERS on a PART-TIME basis in a UNIVERSITY or COLLEGE NURSING PROGRAM. The survey is confidential and anonymous, and only grouped data will be used for research purposes.

Instructions
When you are completing this survey, think of the academic organization where you work on a PART-TIME basis. Answer the questions in the space provided and return the questionnaire via mail in the accompanying pre-addressed, postage-paid envelope within one week of receipt.

Please complete this questionnaire ONLY if you are a RN who meets the following criteria:

a. Employed as a nurse faculty member
b. Employed part-time
c. Employed in an Ontario university or college
d. Have taught at least 1 RN or RPN course over the past year OR will teach at least 1 RN or RPN course over the next year

If you are employed as a nurse faculty member on a part-time basis in more than one Ontario university or college, please answer this questionnaire about the ONE organization with which you work the most hours.

If you do not meet the above criteria, place a CHECK in one of the boxes below and return the questionnaire. This will help us track our true response rate.

☐ I DO NOT WORK AS A PART-TIME FACULTY MEMBER IN A UNIVERSITY OR COLLEGE IN ONTARIO
☐ I DO NOT WISH TO PARTICIPATE IN THIS STUDY
### SECTION A: YOUR DEMOGRAPHICS

Please CHECK or WRITE the appropriate response.

1. **What is your gender?**
   - [ ] Female
   - [ ] Male

2. **What year were you born?**
   - [ ] 

3. **What is your highest level of education?**

<table>
<thead>
<tr>
<th>Education in Nursing</th>
<th>Education in Other than Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] RN Certificate</td>
<td>[ ] Certificate</td>
</tr>
<tr>
<td>[ ] RN Diploma</td>
<td>[ ] Diploma</td>
</tr>
<tr>
<td>[ ] RN Baccalaureate</td>
<td>[ ] Baccalaureate</td>
</tr>
<tr>
<td>[ ] RN Master’s</td>
<td>[ ] Master’s</td>
</tr>
<tr>
<td>[ ] RN Doctorate</td>
<td>[ ] Doctorate</td>
</tr>
</tbody>
</table>

4. **What type of academic organization do you work in?**
   - [ ] University
   - [ ] College
   - [ ] Other. Please specify: ________________________________

5. **What is the title closest to your academic rank?**
   - [ ] Instructor
   - [ ] Clinical Instructor
   - [ ] Sessional Instructor
   - [ ] Lecturer
   - [ ] Senior Lecturer
   - [ ] Professor
   - [ ] Assistant Professor
   - [ ] Associate Professor
   - [ ] Adjunct Professor
   - [ ] Other. Please specify: ________________________________
6. How many years have you worked at your current organization?

7. How many years have you worked as a nurse faculty / educator?

8. What proportion of full-time equivalents (FTEs) (i.e., proportion of full-time job) do you work at the position about which you are answering this questionnaire?

9. Would you prefer to work full-time (i.e., full-time employment contract) over part-time work if it were available?
   - [ ] Yes
   - [ ] No
   - [ ] Unsure

**SECTION B: YOUR CAREER AND CAREER PLANS**

The following statements concern your career plans. Please circle the number that best reflects your response.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Slightly Disagree</th>
<th>Neutral</th>
<th>Slightly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. (a) I intend to remain employed with my academic organization where I am currently employed part-time for the next 2 years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>(b) I intend to remain employed with my academic organization where I am currently employed part-time for the next 5 years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>(c) I intend to remain employed with my academic organization where I am currently employed part-time for the next 10 years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
### SECTION C: YOUR JOB

The following section is about your nurse faculty job. Circle the number that best reflects your response.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. There are nurse faculty career opportunities outside of my present academic organization.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I do not have time to get everything done on my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. I have to work very hard on my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. I have to work very fast on my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. The supply of equipment and resources is not adequate.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. The university/college library has sufficient resources and materials.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Adequate copying facilities and services are available to faculty.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. Facilities are inadequate for catering for a variety of classroom and learning groups of different sizes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. The supply of human resources, such as teaching assistants, research assistants, administrative and support staff, and information technologists, is adequate.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
## SECTION D: YOUR ROLE

The following section is about your nurse faculty role. Circle the number that best reflects your response.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Very False</th>
<th>False</th>
<th>Slightly False</th>
<th>Neutral</th>
<th>Slightly True</th>
<th>True</th>
<th>Very True</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. I know exactly what is expected of me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>21. I know that I have divided my time properly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>22. Explanation is clear of what has to be done.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>23. I feel certain about how much authority I have.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>24. I know what my responsibilities are.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>25. Clear, planned goals and objectives exist for my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>26. I have to do things that should be done differently.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>27. I have to defy a rule of a policy in order to carry out an assignment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>28. I receive incompatible requests from two or more people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>29. I do things that are apt to be accepted by one person and not accepted by others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>30. I work on unnecessary things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>31. I work with two or more groups who operate quite differently.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>32. I receive assignments without the manpower to complete them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>33. I receive assignments without adequate resources and materials to execute them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
### SECTION E: YOUR WORKPLACE RELATIONSHIPS

The following questions are about the support you receive from various people at work. Circle the number that best reflects your response.

<table>
<thead>
<tr>
<th>Question</th>
<th>Not At All</th>
<th>A Little</th>
<th>Somewhat</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>37. How much does your dean/director/supervisor-like person go out of his or her way to do things to make your work life easier for you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>38. How easy it is to talk to your dean/director/supervisor-like person?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>39. How much can your dean/director/supervisor-like person be relied on when things get tough at work?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>40. How much do your co-workers go out of their way to do things to make your work life easier for you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>41. How easy it is to talk to your co-workers?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>42. How much can your co-workers be relied on when things get tough at work?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

### SECTION F: YOUR ORGANIZATION

The following section is about your organization. Please circle the number that best reflects your response.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Slightly Disagree</th>
<th>Neutral</th>
<th>Slightly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>43. The orientation program provided by my employer was adequate.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
44. In my part-time nurse faculty position, I have often been given additional challenging assignments.

<table>
<thead>
<tr>
<th>Question</th>
<th>Not At All</th>
<th>To A Small Extent</th>
<th>To Some Extent</th>
<th>To Neither Extent</th>
<th>Some Extent</th>
<th>A Large Extent</th>
<th>A Very Large Extent</th>
</tr>
</thead>
</table>

45. In my part-time nurse faculty position, I have often been assigned jobs that have enabled me to develop and strengthen new skills.

<table>
<thead>
<tr>
<th>Question</th>
<th>Not At All</th>
<th>To A Small Extent</th>
<th>To Some Extent</th>
<th>To Neither Extent</th>
<th>Some Extent</th>
<th>A Large Extent</th>
<th>A Very Large Extent</th>
</tr>
</thead>
</table>

46. Besides formal training and development opportunities, to what extent has your dean/director/supervisor-like person you most often report to, helped to develop your skills by providing you with challenging job assignments?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

47. Regardless of your faculty’s policy on training and development, to what extent has your dean/director/supervisor-like person you most often report to, made a substantial investment in you by providing formal training and development opportunities?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>
The following statement concerns the REWARDS you receive from your employer for performing your faculty role. Work rewards include: salary, medical and retirement benefits; health, fitness, and childcare services, and; safe, easily accessible, and affordable parking.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Slightly Disagree</th>
<th>Neutral</th>
<th>Slightly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>52. The rewards that I receive from my employer for doing my nurse faculty job are adequate.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Rewards Are Not At All Distributed Fairly</th>
<th>Rewards Are Very Fairly Distributed</th>
</tr>
</thead>
<tbody>
<tr>
<td>53. To what extent are you fairly rewarded considering the responsibilities that you have?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>54. To what extent are you fairly rewarded taking into account the amount of education and training that you have had?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>55. To what extent are you fairly rewarded in view of the amount of experience that you have?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>56. To what extent are you fairly rewarded for the amount of effort that you put forth?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>57. To what extent are you fairly rewarded for the work that you have done well?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>58. To what extent are you fairly rewarded for the stresses and strains of your job?</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Very Unfair</th>
<th>Unfair</th>
<th>Neutral</th>
<th>Fair</th>
<th>Very Fair</th>
</tr>
</thead>
<tbody>
<tr>
<td>59. How fair or unfair are the procedures used to communicate performance feedback?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>60. How fair or unfair are the procedures used to determine pay raises?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
SECTION G: WORK RELATED FEELINGS

Please read each of the following statements carefully and decide if you ever feel this way about your part-time faculty job. If you have never had this feeling, circle “0”. If you have had this feeling, indicate how often you feel it by circling the appropriate number.

* Sample items. MBI-Educators Survey (MBI-ES). Permission received to reprint sample items. Copyright ©1986 Christina Maslach, Susan E. Jackson & Richard L. Schwab. All rights reserved in all media. Published by Mind Garden, Inc., www.mindgarden.com

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never</th>
<th>A Few Times a Year or Less</th>
<th>Once a Month or Less</th>
<th>A Few Times a Month</th>
<th>Once a Month</th>
<th>A Few Times a Week</th>
<th>Everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>63. I feel emotionally drained from my work.*</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>64.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>65.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>66.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>67. I feel burned out from my work.*</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>68.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>69.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>70.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Moderately Disagree</th>
<th>Slightly Disagree</th>
<th>Neutral</th>
<th>Slightly Agree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>71. I am willing to put in a great deal of effort beyond what’s normally expected in order to help this academic organization be successful.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>72. I talk up this academic organization to my friends as a great place to work for.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Statement</td>
<td>Strongly Disagree</td>
<td>Moderately Disagree</td>
<td>Slightly Disagree</td>
<td>Neutral</td>
<td>Slightly Agree</td>
<td>Moderately Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>---------------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------------</td>
<td>------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>73. I would accept almost any type of job assignment in order to keep working for this academic organization.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>74. I find that my values and the organization’s values are very similar.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>75. I am proud to tell others that I am part of this academic organization.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>76. This academic organization really inspires the very best in me in the way of job performance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>77. I am extremely glad that I chose this academic organization to work for over others I was considering at the time I joined.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>78. I really care about the fate of this academic organization.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>79. For me, this is the best of all possible organizations for which to work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>80. All in all, I am satisfied with my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>81. In general, I don’t like my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>82. In general, I like working here.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
Comments:
Is there anything else you’d like us to know about your intentions to remain employed with your academic organization?
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________

To thank you for your participation, please select ONE of the following charitable organizations to which a donation will be made on your behalf:

_______ Higher Ground Neighbourhood Outreach  
_______ Heart and Stroke Foundation of Ontario

Thank you for taking part of your very valuable time to complete this survey!

Please return this survey in the pre-addressed, postage-paid envelope to:

Attn: Era Mae Ferron  
Lawrence S. Bloomberg Faculty of Nursing  
University of Toronto  
130 - 155 College Street  
Toronto, ON M5T 1P8