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New nurses' perceptions of professional practice behaviours, quality of care, job satisfaction and career retention

Abstract

Aim: To test a model examining the effects of structural empowerment and support for professional practice on new graduate nurses' perceived professional practice behaviours, perceptions of care quality, and subsequent job satisfaction and career turnover intention.

Background: The Nursing Worklife Model describes the relationship between environmental factors that support nursing practice and nurse and patient outcomes. The influence of support for professional practice on new nurses' perceptions of professional nursing behaviours within this model has yet to be tested.

Method: Structural equation modeling in Amos software was used to analyze data from a national survey of new graduate nurses across Canada (n = 393).

Findings: The model fit the data reasonably well: $\chi^2 (124) = 360.054$, $\chi^2/df=2.904$, CFI=. 913, IFI=. 914, RMSEA=.070. The results supported our hypothesized model. The professional practice behaviours, as an individual contributor, mediated the relationship between organizational empowerment, support for professional practice and quality of care, which in turn negatively associated with career turnover intention among new nurses. All paths in the model were significant.

Conclusion: The results suggest that job satisfaction and career retention of new nurses are related to their perceptions of work environment factors that support their professional practice behaviours and high quality care.

Implications for nursing managers: To diminish nurse job dissatisfaction and intention of career turnover, and to enable them to deliver high quality patient care, nurse managers need to encourage individual professional behaviours, and employ organizational empowerment strategies to support nurses' professional practice.

Keywords: empowerment, nursing, professional practice behaviours, patient care quality, job satisfaction, career turnover

Background

The World Health Organization (2011) has recognized nurse retention as a worldwide priority, as both developed and developing countries face a nursing workforce shortage. Given reports of turnover rates as high as 60% in the first year of employment (Beecroft et al. 2008, Brewer et al. 2011), it is important for health administrators to understand factors that contribute to new graduate nurse retention and encourage them to stay in the nursing profession throughout their working lives (Laschinger et al. 2010).

Nursing researchers from different countries have studied new graduate nurses with the aim of finding effective strategies to support successful transition to practice and improve retention (Maben et al. 2006, Laschinger and Fida 2014). Findings have consistently shown that work environments play a key role in new nurses' commitment to their place of employment and job satisfaction (Laschinger 2012, Huang et al. 2012, Phillips et al. 2014). In particular, worklife issues and opportunities for professional development are important factors that affect new graduate retention (Beecroft et al. 2008, Kovner et al. 2009, Laschinger 2008). However, new nurses' perceptions of professional nursing behaviours within the current work environment in relation to their perceptions of care quality and career retention has yet to be examined.

Therefore, the purpose of this study was to test a hypothesized model linking structural empowerment, support for professional practice, perceived professional practice behaviours, care quality, job satisfaction, and career turnover intention.

Conceptual Framework for the study

The Nursing Worklife Model (NWLM) (Leiter & Laschinger 2006, Laschinger 2008) describes the link between structural empowerment, supportive professional practice environments, and positive nurse and patient outcomes (Manojlovich and Laschinger 2007, Laschinger 2008). According to Kanter's (1977,1993) behavior organizational theory, structural empowerment refers to a set of four workplace structures (information, support, resources and development opportunities) that employees need to be effective in their jobs. Laschinger (2008) with her colleagues (Laschinger et al.2003) further found that the organizational characteristics of Magnet hospitals are consistent with structural empowerment. In these studies, supportive professional practice environments are nursing work environments. They are characterized by features originally identified in the Magnet Hospital study by Aiken and Patrician (2000), which is nurse autonomy, control over the practice environment, and positive nurse-physician relationships. The NWLM suggests that empowering nursing work environments result in higher levels of support for professional practice which together result in positive nurse and patient outcomes, such as, job satisfaction, better patient care quality, and fewer adverse events (Manojlovich and Laschinger 2007, Laschinger 2008).

Kanter (1977, 1993) suggests that employee behaviours partially depend on the structural support in place, thus, it is logical to expect that nurses who have access to empowerment structures and support for professional practice will be able to enact professional practice behaviours as a result. These behaviours in turn should lead to high quality care for patients,

positively influencing new graduate nurses' satisfaction at work and their desire to stay in the profession. Past studies have demonstrated support for the NWLM with a positive association between structure empowerment and support for professional practice among nurses in the US (Manojlovich and Laschinger 2007), Canada (Laschinger 2008), and Australia (Roche, Laschinger and Duffield 2015). What has not been examined is professional practice behaviours as a mechanisms through which support for professional practice influences quality of care, job satisfaction, and career retention among new nurses.

Theory Related Research

Structural Empowerment

According to Kanter's (1977, 1993) model of structural empowerment, employees who can access and mobilize necessary information, resources, support, and opportunities are empowered to accomplish their work and achieve organizational goals. Access to information refers to supplying technical knowledge about the job as well as information relevant to organization goals, policies, and decision making. Access to resources refers to the ability to obtain the necessary material, time, and money to accomplish job demands. Access to support involves receiving constructive feedback, guidance, and emotional support from supervisors, peers and subordinates. Access to opportunities provides individuals with challenges and opportunities to learn and grow professionally. Structural empowerment is an organizational characteristic of healthy work environments that support professional practice and optimizes nurses' contributions (Cowden and Cummings 2012).

Past studies have shown that structural empowerment creates and sustains a work environment that facilitates the employee's choice to invest in professional actions and behaviours. This is exemplified by the modified Nursing Worklife Model (Laschinger 2008),

suggesting that the effect of structural empowerment on nurses' professional practice behaviours is mediated through a supportive work environment. Manojlovich (2005) found a positive association between structurally empowering hospital work environments and nurses' perceptions of professional practice behaviours. Professional practice environment characteristics (e.g., decisional involvement, quality nurse-physician relationships) have been shown to mediate the relationship between structurally empowering work conditions and both job satisfaction (Manojlovich and Laschinger, 2007) and nurse-assessed patient care quality (Laschinger 2008). These findings suggest that Kanter's notion of structural empowerment is an important addition to the original NWM (Leiter and Laschinger, 2006) and offers practical evidence-based guidance for improving working conditions in nursing.

Support for Professional Practice

Support for professional practice environments are characterized by autonomy, control over the practice environment, and positive nurse-physician relationships, which first identified in the Magnet Hospital study by Aiken and Patrician (2000). Autonomy concerns whether nurses are free to make important patient care decisions and control their own practice based on their professional knowledge and experience (Laschinger et al. 2003). Control over practice environments refers to nurses' power to influence policy and practices within their organization (Aiken et al 2001). Collaborative nurse-physician relationships reflect positive, respectful working relationships between nurses and physicians.

Studies have also shown that magnet hospitals, which are recognized as highly supportive professional nursing practice environments, achieve more positive patient outcomes, such as lower mortality rates and higher patient satisfaction (Aiken et al. 2008). Supportive professional nursing practice environments have been associated with nurse retention (Aiken et al. 2011,

Hinno et al. 2012, Roche, Laschinger and Duffield 2015) and lower levels of job dissatisfaction (Aiken et al. 2011, Vahey et al. 2004). Collaborative nurse-doctor relationships and communication have been shown to positively influence outcomes for nurses and patients in magnet hospitals, such as safety and quality of health care and well-being and job satisfaction of nurses (Aiken et al. 2008, Schemalenberg and Kramer 2009).

Structural empowering have been linked to support for professional nursing practice. Havens and Laschinger (1997) and Laschinger et al. (2003) found that structural empowerment was strongly associated with nurses' perception of autonomy, and nurses' involvement in decisions related to both the content and the context of their daily practice, suggesting that access to the empowerment structures of information, support, resources, and opportunities facilitates effective nursing autonomous practice. Almost and Laschinger (2002) found a significant relationship between perceptions of workplace empowerment and collaboration with physicians among Canadian nurses. Laschinger et al. (2003) further suggested that nurse-physician collaboration was strongly related to nurses' perceptions of informal power and support.

Overall, the evidence to date suggests that structural empowerment is an important precursor to supportive professional practice nursing environments. Based on the theoretical and empirical links between structural empowerment and supportive professional practice environment characteristics, it was reasonable to expect that new graduate nurses with access to information, support, resources, and opportunities to learn and develop would experience autonomy and a sense of control over their daily work and be encouraged to participate in collaborative practice with physicians.

Professional practice behaviours

Professional practice behaviours refers to the degree to which nurses' feel that they are able to practice according to their professional nursing standards (Manojlovich 2003). As Manojlovich (2003) explained, professional practice behaviours go above and beyond performing nursing tasks and include behaviours such as developing therapeutic relationships with patients, exercising clinical judgement, engaging in evidence-informed decision making about patient care planning and treatment, and collaborating with physicians. Unlike unregulated health care providers who perform predictable routine tasks assigned to them, Registered Nurses have the knowledge, education, and professional expertise to deal with and adapt to complex, non-routine, and unpredictable situations (College of Nurses of Ontario 2013, 2014, Manojlovich, 2003). Yet, without sufficient support nurses may be limited in their ability to engage in professional practice activities.

However, few studies have examined the effect of supportive professional practice environments on nurses' ability to engage in professional practice behaviours. Suhonen et al. (2014) found that nurses' perceptions of leadership, autonomy, and control over practice were significant predictors of being able to provide individualized patient care among elderly patients. In a longitudinal study Laschinger et al. (2014) found that perceived unit support for professional practice was positively related to perceptions of unit-level effectiveness to meet patient care needs.

In this study we suggest that nurses who have a large degree of autonomy and control in their jobs and work collaboratively with physicians (i.e. support for professional practice) are able to work to their full scope of practice, resulting in quality care for patients.

Perceived quality of care

Nurses' perceptions of patient care quality are developed over time during their day-to-day bedside care. Nurses' perceptions of patient care quality has been shown to be a reliable indicator of quality based on their professional expertise and experience, which has been used in several international studies (Aiken et al 2001 and 2002, Laschinger 2008, Laschinger and Fida 2015). We adopted the single item of instrument from the study of Aiken et al (2001). McHugh and Stimpfel (2012) found that nurse-assessed quality of care was significantly associated with objective hospital quality indicators, such as mortality rate, failure to rescue, and patient satisfaction.

Research evidence indicates that patients' safety and quality of care affects nurses' job and career satisfaction and turnover intentions (Laschinger 2012, Laschinger and Fida 2015, Zhu et al. 2014). It is logical to expect that professional practice behaviours influence the quality of care that nurses are able to provide, thus mediating the relationship between support for professional practice and patient care quality.

Job satisfaction

Job satisfaction is defined as the positive personal perception towards work and work experiences (Best and Thurston 2004). Job satisfaction has been associated with staff turnover, quality and efficiency of service, and patient satisfaction (Brewer et al. 2012, Laschinger and Fida 2015). Patient care is central to nursing, therefore being able to provide high quality care is important to nurses and influences their job satisfaction (Chang et al. 2009, Kalisch et al. 2011, Laschinger 2012, Lu et al. 2012). Kalisch et al. (2011) reported that inadequate staffing and nurses' reports of missed care were significant predictors of job satisfaction. These studies support that nurses who feel that they are able to provide their patients with excellent care will be

more satisfied with their jobs than those who feel that they are unable to provide patients with the standard of care that they deserve.

Career turnover intention

Career turnover intention refers to the desire to leave one's current profession (Kelloway, et al. 1999). Job dissatisfaction has been cited as a major contributory factor to nurses' intentions to leave their jobs and, potentially, nursing altogether (Coomber and Barriball 2007, Hayes et al. 2006). Job dissatisfaction has also been shown to be a significant predictor of new graduate nurses' actual job turnover (Kovner et al. 2012) and has been associated with their job and career turnover intention (Laschinger 2012 and Laschinger et al. 2014). We propose that job dissatisfaction may be particularly damaging to new graduate nurses' perceptions of the nursing profession because they may question not only their current work situation but their overall career choice as well, leading them to explore careers outside of nursing.

Hypothesized Model

Based on empirical research evidence related to the theory of structural empowerment, Magnet hospital model and the Nursing worklife model, we suggest that new nurses who experience greater structural empowerment in their workplace will get more organizational supports for professional practice, and that will positively relate to their individual professional practice behaviour, and subsequently result a higher quality of care. In turn, this will lead to an increasing job satisfaction and intention to stay in a nursing career. To our knowledge, these relationships have yet to be tested in a single study (see Figure 1).

INSERT FIGURE 1 ABOUT HERE

Aim

The purpose of this study was to examine the influence of structural empowerment and support for professional practice on new graduate nurses' perceived professional practice behaviours, perceptions of care quality, and subsequent job satisfaction and career turnover intention.

Methods

Design and Sample

A non-experimental predictive design was used to test our hypothesized model by analyzing the 2nd phase of data from a three-phase national survey of Canadian new graduate nurses that have graduated since June 2012.

After ethics approval, following a proportionally stratified sampling method, a total of 3906 new graduates across Canada received a survey package that included a letter explaining the study, a questionnaire, return envelope and coffee voucher in the phase 1 between November 2012 and March 2013. A one year follow-up survey package was sent to the 1,012 participants who completed the survey in Phase I between May and July 2014. 410 completed surveys were returned for a response rate of 40.5%. Since Amos does not provide for the application of any of missing data in SEM, we used the mean imputation to replace the missing value within each scale. However, 17 participants had all data missing from one or more scales, so they were excluded for the final analysis (n = 393). According to Hoyle and Panter's (1995) suggestion, the sample size over 200 is sufficient for the SEM.

Instruments

Valid and reliable instruments were used to assess each of the major study variables in the hypothesized model. A new two-item scale was developed for this study to assess new graduate nurses' global overall perceptions of nurses' use of professional behaviours in their work environments. Sample items were: "I am able to practice nursing in a way that reflects my standards of professional nursing practice" and "I feel nursing colleagues on my unit provide comprehensive patient care that meets professional nursing standards." It codes as "1=strongly disagree, 2=disagree, 3=hard to decide, 4=agree, 5=strongly agree". The psychometric properties of the study instruments and the alpha coefficients of these measurements in this study are presented in Table 1.

INSERT TABLE 1 ABOUT HERE

Data analysis

SPSS (version 23, IBM 2014) was used to calculate descriptive statistics. Structural equation modeling with maximum likelihood estimation was conducted with Amos (version 23, IBM, 2014) to test the proposed model. SEM analyses evaluate the fit between the hypothesized model and the observed relations among variables in the data. On the basis of Hoyle and Panter's (1995) recommendations, we used the following fit indices to assess the model fit: χ^2 , χ^2 ratio, the Comparative Fit Index (CFI), Incremental Fit Index (IFI), and the Root Mean Square Error of Approximation (RMSEA).

Results

Descriptive statistics

Most participants were female (91.2%), with an average age of 29.2 years, and predominantly trained at the baccalaureate degree level (93.9%). Most worked full-time (63%), with an average of 2.7 years of nursing experience (see Table 2).

INSERT TABLE 2 ABOUT HERE

Means, standard deviations, and Pearson's r correlations among variables in our model are presented in Table 3. It is worth noting that professional practice behaviours was significantly correlated with structural empowerment ($r=.42$), support for professional practice ($r = .56$), perceived quality of health care ($r = .48$), job satisfaction ($r = .52$), career turnover intention ($r = -.53$). It indicates professional practice behaviours is an important component that relates to other variables in the model.

INSERT TABLE 3 ABOUT HERE

Testing the Hypothesized Model

To determine model adequacy, the model was evaluated for its goodness of fit to the data (Kline 2005): the normed chi-square ($\chi^2/df > 2.0$) indicates reasonable model fit; values for the CFI and IFI range from 0 (poor fit) to 1 (perfect fit); value of RMSEA is an index that penalizes for lack of model parsimony and a value of zero indicates the best fit (RMSEA < 0.08 suggests reasonable fit). As illustrated in Figure 2, results showed that the model fits the data reasonably well ($\chi^2 (124) = 360.054$, $\chi^2/df = 2.904$, CFI = .913, IFI = .914, RMSEA = .070). All path

coefficients were significant and in the expected direction ranging from .47 to .85. Thus, the hypothesized relationships in our model were supported.

INSERT FIGURE 2 ABOUT HERE

Discussion

The results provided support for the hypothesized model and add to previous empirical support for the NWLM. In our study empowerment indirectly influenced new graduate nurses' experience of their work life through their perceptions of support for professional practice, their own and their colleagues' professional practice behaviours that influence quality of care. The results are consistent with previous studies testing the NWLM which demonstrated significant positive relationships between structural empowerment, support for professional practice, quality of patient care, and job satisfaction (Manojlovich and Laschinger 2007, Laschinger 2008). The NWLM has also been validated in the new graduate nurse population. For example, Laschinger, Finegan, and Wilk (2009) showed that empowerment was positively linked to support for professional practice which was negatively associated with experiences of incivility and burnout. The results of the current study add to this knowledge by demonstrating positive links between structural empowerment, support for professional practice, and new graduate nurses' perceptions of professional practice behaviours in their workplace.

An important finding from this study is that new graduate nurses' perceived ability to provide care according to professional standards is an important determinant of the quality of care they feel is provided on their units and that this in turn influences their job satisfaction. This

supports the claim that for professional nurses, meaningful accomplishment of work means that they are able to practice according to professional standards and provide high quality patient care (Laschinger et al. 2003, Manojlovich, 2003, Kalisch et al. 2011). Recent public inquiry about a high mortality rate in the Mid Staffordshire NHS in the UK found that a high nursing turnover rate among clinical nurses, who were disappointed that they or their colleagues could not practice according to their professional standards (Francis 2010). Chinese nurses also regarded the safety issue as the key reason for their leaving clinical care, as they thought that they lost the essential value of nursing (Zhu et al.2014). The evidence suggests that nurses are highly aware of the impact of their professional practice behaviours on patient safety and quality of care. When they perceived negatively about professional practice behaviours, levels of job dissatisfaction and turnover may arise together (Francis 2013, Maben et al. 2006, Zhu et al. 2015a).

New graduate nurses need support and guidance as they transition into their professional role (Scott et al. 2008) and this includes the development of professional practice behaviors. The new nurses are consistently looking for the good in their daily practice, and also invest energy in observing colleagues' practice behaviours according to standard of professional care, as they are required to reaffirm their commitment to the profession through the process of reconciliation (Björkström et al. 2008, Hart et al. 2014). Manojlovich (2003) pointed out, nurses' role goes beyond performing tasks for patients, but in order for nurses to exercise their clinical judgment based on their knowledge and expertise, their work environment must provide support for professional practice. This may be especially important for new members of the profession who are learning their professional role and may be unsure of their scope of practice. Disparities between the idealism and professionalism taught in nursing education programs and the realities

of the practice environment may be a source of job dissatisfaction, leading new graduate nurses to consider leaving nursing (Maben et al. 2006, Zhu et al. 2015b). Nurse residency programs that include ongoing mentorship and professional education for new graduate nurses that include discussions about professional practice have been shown to improve clinical decision making, nursing performance, and job satisfaction over the first year of practice (Bratt and Felzer 2011). This highlights the importance of not only providing new graduates with support for professional practice, but guidance and education as they take on their new role and learn how to practice as a professional nurse. Our results suggest that nurse managers can positively influence new graduate nurses' job satisfaction and retention by empowering and encouraging them to engage in professional practice behaviours that enable them to provide high quality care to their patients.

Limitations

The findings of this cross-sectional study does not make causal claims. However, the model supported by SEM analysis provide an estimation of the relationships between indicators and latent variables and among latent variables themselves. It may suggest that encouraging professional practice behaviours among new nurses would improve quality care and reduce their intention of leaving nursing. Further work is needed to develop a more specific measure of professional practice behaviours beyond the global measure used in this study.

Conclusion

This new established Professional Practice Behaviours Model provides further support for the NWLM and adds to previous knowledge by showing that new graduate nurses' perceived

professional practice behaviours is an important mediator between support for professional practice, patient care quality and career retention.

Implications for Management

The results of this study suggest that it may be useful for hospital administrators and nursing managers to use the Professional Practice Behaviours Model as a guide to encourage new nurses to identify professional and unprofessional practice behaviours in their career beginning, and provide them in an open discussion and develop a good standard framework of professional practice behaviours as part of orientation. These strategies will create strong professional practice environments that empower new nurses to deliver high quality patient care based on professional nursing practice standards, thereby increasing job satisfaction and ultimately retention of the next generation of nurses.

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Figure 1. Hypothesized model



Figure 2. Final model



Model fit: $\chi^2 (124) = 360.054$, $\chi^2/df=2.904$, CFI=. 913, IFI=. 914, RMSEA=.070

*Note: All path in the expected direction are significant, $p < 0.001$.

Table 1. Study instruments

Variable	Instrument/Authors	# of Items	Scale Range	Cronbach's α
Structural Empowerment	Conditions for Work Effectiveness Questionnaire (Laschinger et al. 2001)	12	4-20	.85
Support for Professional Practice	Nursing Work Index (NWI-R) (Aiken and Patrician, 2000, modified)	6	1-5	.75
Professional Practice Behaviours	Professional Practice Behaviours (Laschinger, not previously published)	2	1-5	.70
Perceived Quality of Care	Aiken et al., 2001	1	1-4	-
Job Satisfaction	(Cammann et al.,1983)	3	1-5	.86
Career Turnover Intention	(Kelloway, et al., 1999)	2	1-5	.84

Table 2. Demographic variables (N = 393)

		M	SD
Age		29.1	6.8
Years of Experience as RN		2.6	0.5
		N	%
Gender	Female	356	90.8
	Male	36	9.2
Highest Degree Received	BScN	369	93.9
	MScN	3	0.8
	College Diploma	21	5.3
Employment Status	Full Time	246	62.6
	Part Time	119	30.3
	Casual	28	7.1
Unit Specialty	Medical-Surgical	167	42.5
	Critical Care	85	21.6
	Maternal-Child	48	12.2
	Mental Health	28	7.1
	Other Hospital Unit	65	16.6
Hours per Week	Less than 20 hours	9	2.3
	20 to 39 hours	233	60.4
	More than 39 hours	144	37.3

Table 3. Descriptive statistics and correlations for main study variables

	M	SD	1	2	3	4	5
1. Structural Empowerment	13.37	2.45	-				
2. Support for Practice Practice	2.88	.51	.38	-			
3. Professional Practice Behaviours	3.97	.73	.42	.56	-		
4 Perceived Quality of Health Care	1.75	.70	.30	.41	.48	-	
5. Job Satisfaction	3.97	.84	.38	.47	.52	.44	-
6. Career Turnover Intention	1.86	.98	-.26	-.21	-.30	-.24	-.53

Note: All correlations are significant ($\rho < .001$, 2-tailed)