

## The influence of authentic leadership on newly graduated nurses' experiences of workplace bullying, burnout and retention outcomes: A cross-sectional study

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### ARTICLE INFO

#### Article history:

Received 8 December 2011

Received in revised form 7 May 2012

Accepted 26 May 2012

#### Keywords:

Authentic leadership

Burnout

Health

New graduate nurses

Retention

Workplace bullying

### ABSTRACT

**Background:** Retaining skilled and engaged nurses is critical during a time of shortage, however growing reports of workplace bullying threaten nurses' health and wellbeing, especially the transition of newly graduated nurses entering the profession. High rates of burnout and turnover among new nurses puts additional strain on limited financial resources in healthcare organizations and can compromise the quality of care provided to patients.

**Objectives:** The purpose of this study is to test a model linking authentic leadership to new graduate nurses' experiences of workplace bullying and burnout, and subsequently, job satisfaction and intentions to leave their jobs.

**Methods:** This study employed a cross-sectional survey design with 342 new graduate nurses (defined as less than two years of practice experience) working in acute care hospitals in Ontario, Canada. Participants completed a questionnaire with measures of authentic leadership, workplace bullying, burnout, job satisfaction and turnover intentions. The model was tested using path analysis techniques within structural equation modeling.

**Results:** The model fit indices suggested that the original hypothesized model did not adequately fit the data ( $\chi^2 = 33.59$ ,  $df = 5$ ,  $p = .000$ ,  $\chi^2/df = 6.72$ ,  $IFI = .937$ ,  $CFI = .937$ ,  $RMSEA = .130$ ), thus an additional theoretically justified direct path from authentic leadership to job satisfaction was added, which improved the fit substantially ( $\chi^2 = 5.26$ ,  $df = 4$ ,  $p = .261$ ,  $\chi^2/df = 1.32$ ,  $IFI = .997$ ,  $CFI = .997$ ,  $RMSEA = .030$ ). Authentic leadership had a negative direct effect on workplace bullying, which in turn had a direct positive effect on emotional exhaustion. Authentic leadership also influenced job satisfaction indirectly through bullying and emotional exhaustion. Authentic leadership, workplace bullying and emotional exhaustion all had significant direct effects on job satisfaction, which in turn, was related to lower turnover intentions.

**Conclusions:** The findings from this study demonstrate the fundamental importance of authentic leadership in creating supportive working environments. An authentic leadership style may reduce the probability of a unit culture of workplace bullying developing, contributing to a nursing workforce that is less burned out, more satisfied with their job, and ultimately, less likely to leave their position.

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## What is already known about the topic?

- Newly graduated nurses have an alarmingly high rate of burnout and turnover in their first few years of practice.
- Workplace bullying is a threat to the successful transition of newly graduated nurses to the workforce, as nurses exposed to these detrimental behaviors are more likely to have lower job satisfaction and increased intentions to leave their job.

## What this paper adds

- This study is the first to report evidence to suggest that unit manager authentic leadership practices may reduce the probability of new graduate nurses' experiences of bullying in their first two years of practice.
- The findings demonstrate that nursing leaders' authentic leadership practices promote healthy workplace conditions that positively influence factors that encourage new graduate nurse retention.

## 1. Introduction

Recently, the World Health Organization (WHO) identified the worldwide increase in workplace bullying as a serious threat to nurses' health and wellbeing and has identified the need to eliminate workplace violence as a high priority (WHO, 2010). In nursing, several studies have reported increasing levels of workplace bullying in the general nursing population (Hutchinson et al., 2008; Quine, 2001) and more recently among new graduate nurses (Laschinger et al., 2010; McKenna et al., 2003; Simons, 2008). Previous research has demonstrated a link between bullying and workplace psychosocial factors, such as role conflict, social climate, and work control (Einarsen et al., 1994; Vartia, 1996). This phenomenon poses a threat to the successful transition of new nurses to the graduate role and may increase attrition from the nursing workforce, adding to the current shortage of nurses.

New graduate nurses are particularly vulnerable to negative workplace behavior that negatively impacts their job and career satisfaction and their mental and physical health. Worklife issues that threaten new graduate retention are a concern for nurse administrators (Beecroft et al., 2008; Kovner et al., 2009) given reports of turnover rates as high as 60% in the first year of employment (Beecroft et al., 2001; Bowles and Candela, 2005; Brewer et al., 2011). Researchers have expressed concern that many new graduates may actually leave the profession altogether as a result of stressful working conditions (Griffin, 2005; Scott et al., 2008). As a large cohort of the nursing workforce approaches retirement, a cadre of new nurses who find their work fulfilling is essential for sustaining the nursing workforce and for ensuring that nursing resources are available to provide high quality patient care in the future. Thus, every effort must be made to create working conditions that are welcoming to newcomers and support the positive transition from the student to graduate role.

Successful new graduate transition is facilitated by positive work environments, characterized by constructive working relationships among nurses and respect for learning needs of newcomers to the profession (Scott et al., 2008). Yet, increased demands of current workplaces are stressful for nurses who report high levels of burnout and absenteeism (Greco et al., 2006; Laschinger et al., 2004). Even more alarming, Cho et al. (2006) found that 66% of new graduate nurses reported severe burnout, and Rudman and Gustavsson (2011) found that 50% of Swedish newly graduated nurses experienced a significant increase in burnout and subsequent intentions to leave the profession in their second year of practice. The cost of replacing a new graduate nurse is high, both in financial and organizational productivity terms (Beecroft et al., 2001; Brewer et al., 2011; Lindsey and Kleiner, 2005). Indeed, Brewer et al. (2011) estimated the system cost of the 15% first year new graduate turnover rate found in their study of American hospital nurses to be approximately \$728 million in 2007.

Effective strategies for preventing bullying are dependent on the quality of working environments that are created by nurse leaders. Organizational effects on employees are influenced by the behaviors of leaders as a result of the way they manage the job context and job content (Leka et al., 2010). Research in the general management field has shown that leadership, particularly a negative or non-supportive leadership style, is an important factor in the prevalence of workplace bullying (Agervold and Mikkelsen, 2004; Hauge et al., 2007, 2011; Skogstad et al., 2007). On the other hand, authentic leadership, a relationship-focused style of leadership, has been found to be related to outcomes not likely to occur in bullying environments, such as, organizational citizenship behaviors (Walumbwa et al., 2008), a supportive work group (Wong and Cummings, 2009), and group spirit or 'esprit' (Henderson and Hoy, 1983). However, few studies have examined the relationship between leadership behaviors and the prevalence of workplace bullying in nursing (Tomey, 2009). Given the key role of nursing leaders in creating positive work environments that promote retention and job satisfaction (Duffield et al., 2009; VanOyen Force, 2005; Weberg, 2010), a study that examines the relationship between nursing leadership behaviors and the prevalence of workplace bullying and its effects is warranted. The purpose of this study is to test a model linking authentic leadership to new graduate nurses experiences of workplace bullying and burnout, and subsequently, job satisfaction and intentions to leave their jobs.

### 1.1. Theoretical framework

Our theoretical framework integrated Avolio et al.'s (2004) authentic leadership model, Einarsen et al.'s (1998) notion of workplace bullying, and Leiter and Maslach's (2004) burnout model to examine workplace factors that influence new graduate retention outcomes. Authentic leadership is a positive relationship-focused leadership style that emphasizes self-awareness, honesty and transparency, behavioral integrity, and consistency (Avolio et al., 2004). In fact, authentic leadership has been posited

as a “root construct” or key ingredient of other positive forms of leadership (Avolio and Gardner, 2005) and theorized to influence performance through emphasis on people’s strengths rather than weaknesses (Wong and Cummings, 2009). Authentic leadership is “a pattern of transparent and ethical leader behavior that encourages openness in sharing information needed to make decisions while accepting input from those who follow” (Avolio et al., 2009, p. 424). Authentic leaders build trusting work environments that engage followers through four types of behaviors: *balanced processing*, *relational transparency*, *internalized moral perspective*, and *self-awareness* (Walumbwa et al., 2008). *Balanced processing* refers to behaviors of leaders who try to gather and analyze all relevant data and viewpoints, both positive and negative, before making important decisions. *Relational transparency* involves being open with others, sharing thoughts and feelings and encouraging others to share their ideas, challenges and opinions. *Internalized moral perspective*, refers to self-regulation that is guided by internal moral standards and values resulting in behaviors and decisions consistent with those values. Finally, authentic leaders show *self-awareness* by acknowledging their own strengths and weaknesses and understanding how they affect others. According to Avolio et al. (2009), authentic leaders create conditions that foster trust and promote employee identification with leaders and the organization thereby building confidence and accomplishing work goals and culminating in increased employee and organizational performance. Authentic leaders demonstrate a sense of genuine caring for employees and for open and honest dialogue about what is and is not working well in their work relationships based on ethical and moral standards.

There is empirical support for Avolio et al.’s (2004) authentic leadership in both the general management and nursing literature. In the management literature, authentic leadership is a significant predictor of job satisfaction and organizational commitment (Walumbwa et al., 2008) and satisfaction with one’s supervisor (Peus et al., 2011). In nursing, authentic leadership has been linked to greater trust in management, empowerment, work engagement, and higher ratings of patient care quality (Wong et al., 2010). Authentic leadership behavior promotes positive relationships between leaders and employees which results in higher employee engagement and work satisfaction (Giallonardo et al., 2010).

### 1.2. Influence of authentic leadership on bullying

We could find no published studies linking authentic leadership practices to workplace bullying, although the influence of other similar leadership styles on bullying has been studied. In a sample of over 10,000 employees in a variety of occupations in Norway, Hauge et al. (2011) found that when employees considered their leaders to be fair and supportive they reported fewer incidences of workplace bullying. They suggest that unsupportive and unfair leadership practices are likely to create an unfavorable work climate that may encourage bullying because of ambiguous standards about acceptable behavior in the workplace. Their results demonstrated unit

level leadership effects on employees’ shared perceptions of bullying on their unit. These findings highlight the role of unit managers in setting the standards for acceptable behaviors on their unit, and reinforce the role of unit leadership in creating a positive climate that does not tolerate bullying. Hauge et al.’s (2011) notion of leadership as fair and supportive behavior with followers is consistent with Avolio et al.’s (2004) authentic leadership model.

It is therefore reasonable to expect that authentic leaders could create work environments that do not condone bullying. Bullying often occurs in stressful work environments that frustrate employees’ efforts to accomplish their work goals for a variety of reasons, including role overload, unrealistic expectations, and role ambiguity (Hauge et al., 2007, 2011; Skogstad et al., 2007). These conditions seem less likely when nursing leaders consistently interact with followers in an open transparent manner and demonstrate integrity in their decision-making behavior. Previous research has shown that authentic leadership is related to greater employee engagement (Giallonardo et al., 2010; Wong et al., 2010), which has been associated with lower levels of burnout and higher job satisfaction in numerous studies (Christian et al., 2011; Schaufeli and Bakker, 2004). It is possible that authentic leadership practices may discourage bullying by building employee engagement.

### 1.3. Bullying

Bullying in the workplace has been described as ‘a situation where someone is subjected to social isolation or exclusion, his or her work and efforts are devalued, he or she is threatened, derogatory comments about him or her are said behind his or her back, or other negative behavior aimed to torment, wear down, or frustrate occur’ (Kivimaki et al., 2000, p. 656). Bullying has been linked to negative work outcomes in a variety of occupational groups including nursing (Einarsen et al., 1998; Quine, 2001; Sá and Fleming, 2008; Simons, 2008). A study of Norwegian nurses found that nurses classified as bullied had significantly higher levels of burnout, lower job satisfaction and psychological well-being than non-bullied nurses (Einarsen et al., 1998). Similar research by Sá and Fleming (2008) showed that approximately one out of six Portuguese nurses had been a victim of bullying and experienced significantly higher burnout as a result. In another study, nurses who reported being bullied were more likely to have lower job satisfaction, a higher propensity to leave their job, clinical levels of anxiety, and depression (Quine, 2001). Recently work has begun to focus on new graduate nurses. Simons (2008) found that 31% of new graduate nurses in their US sample experienced bullying at work and that bullying was significantly related to intent to leave their jobs. Laschinger et al. (2010) found a similar rate of bullying in a sample of Canadian new graduate nurses (33%). In that study, bullying was significantly related to burnout and workplace empowerment. Workplace bullying threatens new graduates’ transition to their new roles and consequently their job satisfaction, and may lead to their leaving the field. Clearly, strategies to prevent workplace bullying are required to

promote the retention of this valuable human resource. Nursing leadership plays an important role in putting strategies in place to prevent bullying and subsequent burnout of new graduate nurses. It is important that unit managers work closely with staff to develop anti-bullying policies and to ensure that they are enforced.

#### 1.4. Burnout

Burnout is a well-documented psychological response to chronic job stressors (Maslach, 2004). Burnout consists of three components—emotional exhaustion, cynicism and personal efficacy—however; emotional exhaustion is considered the core element of burnout (Leiter et al., 1998; Leiter and Maslach, 2004; Maslach and Leiter, 1997). Recent research on burnout in the new graduate population is particularly disturbing. Cho et al. (2006) found that 66% of new graduates experienced severe burnout, primarily related to disempowering workplace conditions. Similar findings were observed in a recent study by Laschinger et al. (2010), suggesting that this phenomenon continues to be a problem. Burnout results in increased absenteeism which can lead to lower levels of patient care quality (Michie and Williams, 2003). Therefore, the onus is on nurse leaders to create work environments that discourage burnout.

A recent Australian study of hospital nurses found that younger new graduate nurses were at higher risk for burnout and that support from supervisors was a significant predictor of low levels of emotional exhaustion (Spooner-Lane and Patton, 2007). Other studies have linked burnout to heavy workloads in nursing, and one study linked nurse burnout to higher patient mortality (Aiken et al., 2002). Vahey et al. (2004) also found that supportive management was related to lower levels of emotional exhaustion in hospital work environments and Balogun et al. (2002) found that support from supervisors and colleagues were fundamentally important factors influencing burnout. These results demonstrate the detrimental effects of burnout in the nursing profession in general and for new graduate nurses in particular. Given the pivotal role new nursing graduates play in sustaining the future nursing workforce, identifying leadership behaviors that reduce the likelihood of workplace bullying and burnout is important.

#### 1.5. Job satisfaction and turnover intention

The primary outcomes of interest in this study were new graduate nurse retention factors, specifically job satisfaction and job turnover intentions. Using meta-analytic procedures Griffeth et al. (2000) demonstrated that intention to turnover was the best predictor of actual turnover across studies. Job dissatisfaction, while not highly prevalent among new graduate nurses (Giallonardo et al., 2010; Kovner et al., 2009; Ulrich et al., 2010), when present, has been linked to many negative organizational outcomes including poor working relationships and high turnover intentions (Ulrich et al., 2010). These findings suggest that paying attention to working conditions that promote job satisfaction is an

important strategy for retaining new nurses. Despite moderate levels of job satisfaction, turnover intentions are alarmingly high in the first years of practice. In a study of nurses with less than two years of experience Scott et al. (2008) found that 45% intended to leave their current position within the next three years, comparable to Beecroft et al. (2008) who reported that 35% intended to leave their position within the next year. A Canadian study by Lavoie-Tremblay et al. (2008) found the new graduate nurse job turnover intention rate to be as high as 62%. New graduates' reasons for leaving their current position include poor management, a lack of challenges, desire for experience in a new clinical area, and stressful working conditions (Kovner et al., 2007; Lavoie-Tremblay et al., 2008). Given the high rates of turnover reported in these studies and the resulting loss of skilled labor and high cost to health care organizations, strategies for retaining new nurses are crucial to the success of the profession. Several studies have shown that positive leadership styles are significant predictors of nurses' job satisfaction (Giallonardo et al., 2010; Weberg, 2010).

## 2. Methods

### 2.1. Specific aims

The aim of this study was to test a model linking new graduate nurses' perceptions of their immediate supervisor's authentic leadership behaviors to their experiences of workplace bullying and burnout in Canadian hospital work settings, and ultimately to job satisfaction and turnover intentions (see Fig. 1). Based on our theoretical framework and previous research from the nursing and management literature, we predicted that higher levels of authentic leadership would be associated with lower levels of workplace bullying. Previous research has linked bullying to unfair and unsupportive leadership practices (Hauge et al., 2011; Johnson, 2009). Bullying in turn was hypothesized to have both a direct effect on job satisfaction as well as an indirect effect through burnout (emotional exhaustion). Several studies have linked experiences of bullying in the workplace and employee burnout (Einarsen et al., 1998, Laschinger et al., 2010; Sá and Fleming, 2008) and Laschinger et al. (2009a) found that workplace incivility, a related phenomenon, was associated with higher levels of job dissatisfaction of nurses. The effect of emotional exhaustion on job dissatisfaction is well established (Laschinger et al., 2009b, 2011; Leiter and Maslach, 2004). Finally, and consistent with previous research, job dissatisfaction in turn was expected to be related to higher turnover intentions (Hayes et al., 2006; Price and Mueller, 1981).

### 2.2. Participants

We tested the model using data from a Canadian study of newly graduated nurses with less than two years of experience in acute care hospitals across Ontario. A sample of all nurses who met this criteria was drawn from the

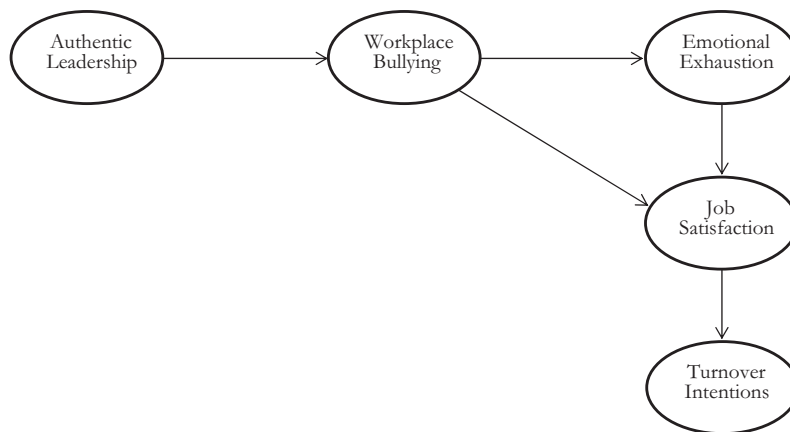


Fig. 1. Hypothesized study model.

registry list of practising nurses in Ontario ( $N=907$ ). A survey was mailed to participants' home addresses using methods described by Dillman (2007) to improve survey response rates. A total of 365 surveys were returned, of which 23 did not meet the criteria (worked outside of acute care), for a final sample of 342 nurses (38% response rate). Approval from the university ethics review board was received before the study was conducted. Data for this study were collected from July to October of 2010.

### 2.3. Instrumentation

We used standardized questionnaires to measure the major study variables. All measures had acceptable reliability (see Table 2). The Authentic Leadership Questionnaire (ALQ) (Avolio et al., 2007) was used to measure the four components of nurses' perception of manager authentic leadership: (1) relational transparency; (2) moral/ethical; (3) balanced processing and; (4) self-awareness. The manager was defined as the formal leader of the clinical unit where they worked the majority of their time. Sixteen items (4 items per subscale) were rated on a 5-point Likert scale ranging from 0 (not at all) to 4 (frequently, if not always). A total authentic leadership score was obtained by averaging the four subscales. Acceptable internal consistency has been reported, as evidenced by Cronbach's alphas ranging from .70 to .90 (Walumbwa et al., 2008). Confirmatory factor analysis has supported the four dimensions of the ALQ (Walumbwa et al., 2008).

Bullying behaviors were measured using the Negative Acts Questionnaire-Revised (Einarsen and Hoel, 2001) which was designed to measure three inter-related factors associated with person-related bullying (12 items), work-related bullying (7 items) and physically intimidating bullying (3 items). A total of 22 items were rated on a 5-point Likert scale ranging from 1 (never) to 5 (daily). This tool has previously demonstrated acceptable internal consistency (Cronbach's  $\alpha = .77-.92$ ) and predictive validity in a sample of newly graduated nurses (Laschinger et al., 2010). Confirmatory factor analysis supported a three factor structure and construct validity has been demonstrated (Einarsen and Hoel, 2001).

The emotional exhaustion subscale of the Maslach Burnout Inventory-General Survey (MBI-GS) was used to measure new graduate burnout (Schaufeli et al., 1996). Five items representing the core component of burnout, emotional exhaustion, were rated on a 7-point Likert scale ranging from 0 (never) to 6 (daily). Leiter and Maslach (2004) argue that a high score on emotional exhaustion ( $>3.0$ ) is indicative of burnout. Cronbach alpha coefficients for this scale in nursing samples have ranged from .88 to .89 (Cho et al., 2006; Greco et al., 2006). Taris et al. (1999) established predictive validity for the emotional exhaustion subscale by demonstrating significant correlations in the hypothesized direction with high job demands (positive) and low decision authority (negative) across two different samples.

Retention outcomes were assessed using (Hackman and Oldham, 1975) job satisfaction scale and Kelloway et al.'s (1999) turnover intentions scale. The job satisfaction scale (4 items) and the turnover intentions scale (3 items) are both rated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). The job satisfaction scale and turnover intentions scale have both previously demonstrated acceptable internal consistency (Cronbach's  $\alpha = .82$ ; and  $\alpha = .92$ , respectively) and construct validity (Kelloway et al., 1999; Laschinger et al., 2011).

### 2.4. Data analysis

Data analysis was performed using the Statistical Package for the Social Sciences (SPSS) (version 16.0) and Analysis of Moment Structures (AMOS) statistical software programmes (version 17.0). Descriptive statistics for all study variables were computed as well as reliability assessments of study instruments. The hypothesized model in this study was analyzed using structural equation modelling (SEM) techniques. While there are differing views as to the optimal sample size for SEM, a generally accepted guideline from the literature is a sample size of 200 or more cases (Kline, 2005), thus our final sample of 342 was sufficient for path analysis. All observed variables exhibited multivariate normality. Missing data were estimated using the full information maximum likelihood (FIML) method which uses all of the information of the

**Table 1**  
Participant demographic variables.

Demographics		M	SD
Age		28.10	6.58
Years as a registered nurse		1.04	0.24
Years in current organization		0.97	0.30
Years on current unit		0.88	0.65
Frequencies		N	%
Gender	Female	313	91.5%
	Male	26	7.6%
Education	Baccalaureate	336	99.4%
	Masters	2	0.6%
	PhD	0	0%
Employment	Full-time	212	62.0%
	Part-time	94	27.5%
	Casual	33	9.6%
Unit specialty	Medical–surgical	189	55.3%
	Critical care	78	22.8%
	Maternal–child	28	8.2%
	Mental health	23	6.7%
Hours worked (week)	Other	14	4.1%
	Less than 20 h	13	3.8%
	20–39 h	219	64.0%
	Over 39 h	100	29.2%
Immediate supervisor	Nurse	321	93.9%
	Non-nurse	17	5.0%

observed data, including mean and variance for the missing portions of a variable, given the observed portion(s) of other variables (Wothke, 1998).

There is little consensus in the SEM literature concerning the best index of overall fit for evaluating structural equation models (Hoyle, 1995). Based on (Hoyle and Panter, 1995) recommendations, several criteria were used to evaluate the fit of the model. These included omnibus fit indices such as the Chi-square ( $\chi^2$ ) and the Chi-square/degrees of freedom ratio ( $\chi^2/df$ ) (Jöreskog and Sörbom, 1989) and incremental fit indices such as the Comparative Fit Index (CFI) (Bentler and Bonett, 1980), and the Incremental Fit Index (IFI) (Bollen, 1989). The  $\chi^2$  is interpreted as the test of the difference between the hypothesized model and the just identified version of the model. Low nonsignificant values are desired (Kline, 2005). However, the  $\chi^2$  is very sensitive to sample size, thus, in a model with a relatively large sample size, the null hypothesis is expected to be rejected almost all of the

time. Because of this limitation, the incremental fit indices were also used. These fit indices indicate the proportion of improvement of the hypothesized model relative to a null model, typically one assuming no correlation among observed variables. The generally agreed-upon critical value for the CFI and IFI is 0.90 or higher (Kline, 2005). In addition, the Root Mean Square Error of Approximation (RMSEA), a measure of poor fit advocated by Browne and Cudeck (1989) was used, and evaluated using (Hu and Bentler, 1999) criteria that a low value (between 0 and 0.06) is indicative of a good fitting model.

### 3. Results

#### 3.1. Participants

The demographic profile of the sample is presented in Table 1. The majority of nurses were female (92%), averaging 28 years of age and 1.04 years nursing experience. All responders were baccalaureate prepared. Most worked on either medical–surgical units (55%) or critical care units (23%) on a full time basis (62%) and part-time basis (28%). Most (64%) worked between 20 and 39 h per week. This demographic profile is similar to provincial statistics for nurses within 5 years graduation (CIHI, 2009).

#### 3.2. Descriptive statistics and correlations

Table 2 presents the means, standard deviations, Cronbach's alpha reliabilities and intercorrelations among major study variables. New graduate nurses ratings of their managers' use of authentic leadership behaviors fell between 'sometimes' and 'fairly often' on a 4-point scale ( $M=2.47$ ) similar to Wong et al.'s (2010) study of experienced nurses and studies in the general management literature. The overall mean frequency of workplace bullying exposure was low ( $M=1.57$ ), however, 29.2% of nurses met Einarsen et al.'s (1998) criteria for classifying employees as 'bullied' (experiencing at least two of these bullying behaviors on a weekly or daily basis in the last month). Similar to Simons (2008) sample of new nurses, work-related bullying was the most frequent form of bullying (23.4%) followed by personal attacks (7.9%) and physical bullying (3.2%). Even though participants had only

**Table 2**  
Means, standard deviations, range, Cronbach's alpha<sup>a</sup> and correlation coefficients for major study variables.

	M	SD	Range	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1. Authentic leadership	2.47	.85	0–4	.95											
2. Transparency	2.57	.84	0–4	.89	.83										
3. Moral/ethical	2.54	.90	0–4	.89	.75	.84									
4. Balanced processing	2.44	1.00	0–4	.90	.71	.76	.81								
5. Self-awareness	2.27	1.11	1–5	.90	.69	.69	.81	.93							
6. Workplace bullying	1.57	.55	1–5	-.34	-.28	-.24	-.37	-.34	.92						
7. Personal	1.41	.57	1–5	-.28	-.23	-.20	-.31	-.26	.93	.93					
8. Work-related	1.92	.73	1–5	-.37	-.30	-.25	-.40	-.38	.89	.70	.80				
9. Physical	1.41	.64	1–5	-.19	-.15	-.13	-.20	-.19	.63	.46	.49	.66			
10. Emotional exhaustion	2.90	1.51	0–6	-.23	-.17	-.20	-.25	-.20	.46	.35	.53	.24	.92		
11. Job satisfaction	3.07	.88	1–5	.40	.33	.32	.40	.38	-.46	-.36	-.52	-.23	-.47	.80	
12. Job turnover	2.66	1.26	1–5	-.30	-.28	-.28	-.28	-.24	.32	.25	.35	.20	.35	-.64	.87

<sup>a</sup> Cronbach alphas on the diagonal.

**Table 3**

Direct and indirect standardized coefficients for hypothesized and final model structural paths.

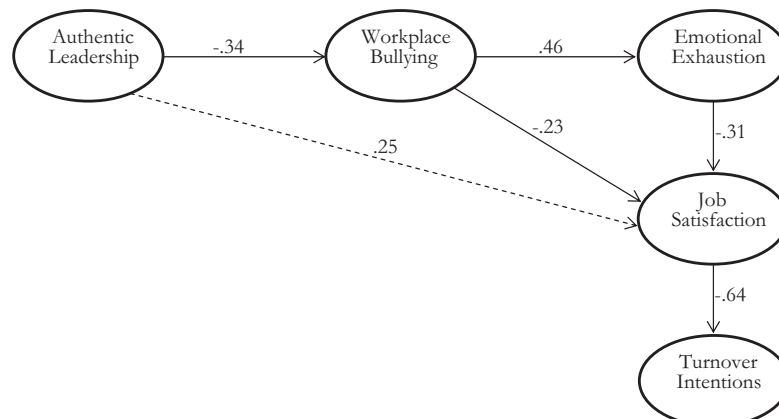
Structural paths	Standardized direct effect ( $\beta$ )	Standardized indirect effect ( $\beta$ )
<i>A. Hypothesized model</i>		
Authentic leadership → Workplace bullying	-.343	-
Authentic leadership → Emotional exhaustion	-	-.158
Authentic leadership → Job satisfaction	-	.158
Authentic leadership → Job turnover	-	-.102
Workplace bullying → Emotional exhaustion	.459	-
Workplace bullying → Job satisfaction	-.308	-.153
Workplace bullying → Job turnover	-	.296
Emotional exhaustion → Job satisfaction	-.332	-
Emotional exhaustion → Job turnover	-	.214
Job satisfaction → Job turnover	-.643	-
<i>B. Final model</i>		
Authentic leadership → Workplace bullying	-.343	-
Authentic leadership → Emotional exhaustion	-	-.158
Authentic leadership → Job satisfaction	.254	.129
Authentic leadership → Job turnover	-	-.246
Workplace bullying → Emotional exhaustion	.459	-
Workplace bullying → Job satisfaction	-.233	-.143
Workplace bullying → Job turnover	-	.241
Emotional exhaustion → Job satisfaction	-.311	-
Emotional exhaustion → Job turnover	-	.199
Job satisfaction → Job turnover	-.641	-

been a registered nurse for approximately one year they are already approaching severe burnout, with an average score on emotional exhaustion of 2.90, just below Leiter and Maslach's (2004) cut-off. New graduates were only somewhat satisfied with their current jobs (3.07 on a 5-point scale) but not highly likely to leave their current job (2.66 on a 5-point scale). Authentic leadership was significantly correlated with all major study variables: most strongly with work-related bullying ( $r = -.37$ ) and job satisfaction ( $r = .40$ ). Both job satisfaction and job turnover intent were significantly related to bullying and burnout, and to each other.

### 3.3. Test of the hypothesized model

The initial analysis of the hypothesized model revealed a less than adequate fit to the data ( $\chi^2 = 33.59$ ,  $df = 5$ ,  $p = .001$ ,  $\chi^2/df = 6.72$ ,  $IFI = .937$ ,  $CFI = .937$ ,  $RMSEA = .130$ ),

although all specified paths were significant and in the expected direction providing initial support for the model (see Table 3). To improve model fit we explored an additional direct path from authentic leadership to job satisfaction within the model based on theoretical reasoning and previous research linking authentic leadership to job satisfaction (Giallonardo et al., 2010; Jensen and Luthans, 2006). The revised model resulted in a substantially better fit to the data ( $\chi^2 = 5.26$ ,  $df = 4$ ,  $p = .261$ ,  $\chi^2/df = 1.32$ ,  $IFI = .997$ ,  $CFI = .997$ ,  $RMSEA = .030$ ). Authentic leadership had a significant negative direct effect on workplace bullying experiences ( $\beta = -.34$ ), which in turn, had a significant positive effect on emotional exhaustion ( $\beta = .46$ ). Bullying had both a direct negative effect on job satisfaction ( $\beta = -.23$ ) and an indirect negative effect through emotional exhaustion ( $\beta = -.13$ ). Authentic leadership influenced job satisfaction indirectly through workplace bullying and emotional exhaustion ( $\beta = .13$ ),



Note: Dotted Paths Represent Additions to the Hypothesized Model

Fig. 2. Final study model.

but also directly ( $\beta = .26$ ) as hypothesized in the revised model. Finally, job satisfaction had a direct effect on job turnover intentions ( $\beta = .64$ ). The standardized direct and indirect effects are presented in Table 3 and direct effects are illustrated in Fig. 2.

#### 4. Discussion

The results of this study support the proposition that nursing leaders' authentic leadership behaviors are associated with new graduates' experiences of bullying, burnout, job satisfaction, and job turnover intentions within the first two years of practice. Authentic leadership was an important factor influencing nursing retention outcomes by decreasing the likelihood of bullying and burnout, thereby improving new nurses' job satisfaction and lowering turnover intentions. Bullying was associated with higher levels of burnout (emotional exhaustion), and subsequently, lower job satisfaction and higher turnover intentions. These results are consistent with previous research linking positive leadership practices in general (Duffield et al., 2009; Hauge et al., 2011; Laschinger et al., 2011) and authentic leadership in particular with positive work outcomes (Walumbwa et al., 2008, 2010; Giallonardo et al., 2010; Wong et al., 2010). These findings highlight the importance of leadership in creating environments which discourage bullying and prevent burnout, thereby promoting retention of new graduate nurses.

Consistent with previous research on workplace mistreatment, bullying was related to high levels of burnout (Einarsen et al., 1998; Laschinger et al., 2009a; Sá and Fleming, 2008). This is congruous with research linking bullying to other correlates of burnout, such as, anxiety and depression (Hansen et al., 2006; Hoel et al., 2004; Quine, 2001). Ongoing exposure to workplace stressors is the primary mechanism for developing severe burnout (Maslach and Leiter, 1997). The stress associated with workplace bullying is a likely precursor to burnout among new graduate nurses, therefore every effort must be made to create work environments that do not tolerate this behavior. Laschinger et al. (2010) found that empowering work environments were related to lower levels of bullying, suggesting that managerial efforts to empower nurses by ensuring access to the necessary support, resources and information needed to accomplish their work may lessen the probability of bullying. In another study Laschinger et al. (2009b) found that higher levels of workplace empowerment was related to lower levels of supervisor and co-worker incivility, a related concept, adding further empirical support for this suggestion. Also, implementation and enforcement of zero-tolerance anti-bullying policies have been shown to be effective. Arnetz and Arnetz (2000) found that establishing a system for reporting all incidents of bullying in an organization resulted in significantly lower levels of bullying. As workplace bullying gains more attention, many organizations have begun to develop proactive approaches to preventing this problem. While it is encouraging that a relatively small proportion of new graduates experienced bullying (29%), the results revealed that these negative experiences have serious personal and organizational

effects. Given the negative effects of bullying and burnout demonstrated in the general management literature (Maslach and Leiter, 1997; Quine, 1999; Shirom et al., 2005) and the nursing literature (Duquette et al., 1994; Jackson et al., 2002; Quine, 2001), every effort should be made to eliminate bullying in the nursing workplace.

In this study authentic leadership behaviors had a positive influence on well-known nurse retention factors—job satisfaction and turnover intentions. Authentic leadership influenced job satisfaction indirectly through bullying and burnout as well as directly, highlighting the fundamental importance of positive leadership behaviors for new nurse retention. Job dissatisfaction and intent to leave one's job are the strongest predictors of actual turnover (Griffeth et al., 2000). Our results suggest that leadership practices that promote a supportive work climate by discouraging negative interpersonal interactions play an important role in retaining newly graduated nurses.

To our knowledge this study is the first to empirically link authentic leadership to new graduate nurses' workplace bullying experiences. This is an optimistic finding because according to Eigel and Kuhnert (2005) it is possible to develop authentic leadership behaviors. Applying constructive development theory, Eigel and Kuhnert (2005) developed a framework of Leadership Development Levels (LDL), which describes the gradually increasing level of maturity that guides the moral and mental capacities of leaders, culminating in an authentic leadership style. Authentic leadership is developed at the individual level in that leaders must have a stable sense of self-knowledge and actively identify with their role. However, the organization must also permit them to regulate their behavior and to demonstrate the type of leadership that is aligned with their role and personal values. As in other nursing studies, new graduate nurses' ratings of their immediate supervisors authentic leadership behaviors were moderate, suggesting there is still room for growth. Access to authentic leadership training opportunities for nursing managers appears to be important given the findings of our study. The results of this study add to our theoretical understanding of mechanisms through which authentic leadership may influence workplace mistreatment and subsequent burnout in relation to key workplace retention factors. The results provide support for existing theory on authentic leadership, bullying and burnout, and provide new information about how these concepts interrelate to explain new graduate retention. Further research is needed to explore other mechanisms through which leadership influences new graduate nurse retention, and to examine how personal resources factors influence new graduate transition to practice.

#### 4.1. Limitations

The findings of this study must be interpreted cautiously given the limitations of the cross-sectional study design, which precludes the ability to make statements of cause and effect (Pedhazur and Schmelkin, 1991). Further research is needed using longitudinal designs to track changes over time to better understand the transition process. Common method variance may also



be of concern when the same individual completes all measures, however it has been argued by Spector (2006) that multiple-item, well-designed scales decrease the likelihood of this. While low response rates may reduce the generalizability of the results, in survey research, no single response rate is considered a standard (Fink, 1995; Fowler, 1993). In anticipation of lower response rates typically associated with mail survey we took measures to promote responses (Dillman, 2007) and used a purposive sample of new nurses working in acute care hospitals to decrease potential differences between responders and nonresponders. Nevertheless the demographics of our final sample were consistent with the provincial database suggesting that it was somewhat representative of this cohort of nurses (CIHI, 2009). Finally, although our model demonstrated factors associated with new graduate retention factors, we acknowledge that there are numerous other factors not measured in this study that could account for new graduate retention. For instance, personal dispositional variables, such as resilience or coping self-efficacy, may play an important role in addition to authentic leadership. Further research should address these limitations.

## 5. Conclusions

The results of this study highlight the importance of leadership for creating healthy work environments that may discourage workplace bullying and the development of burnout, that lead to negative work attitudes that threaten new graduate retention. The results suggest that efforts should be made to assist nurse managers in developing and implementing authentic leadership practices as part of a strategy for eliminating workplace bullying and burnout in nursing work environments. Supportive work environments can facilitate transition and retention of new graduate nurses, thereby contributing to sustaining the nursing workforce in a time of severe shortage.

### Conflict of interest

None.

### Funding

University of Toronto, Nursing Health Services Research Unit. Funders had no role in the conduct of the research.

### Ethical approval

University of Western Ontario, Office of Research Ethics. Review Number: 16093E.

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