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University College Cork, Ireland Coláiste na hOllscoile Corcaigh

# Ethical leadership and decision authority effects on nurses' engagement, exhaustion and turnover intention

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## ABSTRACT

**Aim:** The aim of the present study was to investigate emotional exhaustion, work engagement, and turnover intention in the nursing profession by exploring the antecedent effects of ethical leadership and job components such as decision authority.

**Background:** Emotional exhaustion, low work engagement, and high turnover intention are prevalent issues in the nursing profession. The experience of feeling overworked has led to feelings of burnout and low morale among nurses in Ireland, which has prompted the authors to identify potential variables that reduce these outcomes – in this case, ethical leadership and decision authority.

**Design:** A descriptive, cross-sectional survey design was utilised across three hospital sites.

**Methods:** A cross-sectional sample of 89 nurses was recruited from three Irish hospitals to capture the experience of nurses between December 2017 and February 2018. Hypotheses were tested using path model analysis.

**Results:** Ethical leadership positively predicted decision authority among nurses. Ethical leadership also had an indirect effect on all three outcome variables (work engagement, exhaustion, and turnover intention). Further effects were noted in relation to the mediators in relation to the three outcome variables. Decision authority had a positive effect on work engagement and related to lower turnover intention.

**Conclusions:** The present study demonstrated the role of ethical leadership as a mechanism to positively affect job control and work experience outcomes for nurses at work. Ethical leadership style in hospitals and providing nurses with the authority to make decisions can improve their work experience and help to engage, support, and retain nurses.

**Impact:** The study found support for the positive role of ethical leadership in relation to decision authority and as a positive predictor of work engagement, negative predictor of emotional exhaustion and turnover intention among nurses.

**Keywords:** Ethical leadership, engagement, exhaustion, turnover intention, nurse, nursing, decision authority

## **INTRODUCTION**

The nursing profession places numerous demands on staff, many of which require a number of diverse skills and behaviours (García-Sierra, Fernández-Castro, & Martínez-Zaragoza, 2016) in a fast-paced work environment (Fairchild, 2010). As a result of these demanding work conditions, many in the nursing profession struggle with feelings of burnout and low morale (Hu, Schaufeli, & Taris, 2017). This is further compounded by high turnover within nursing. In the Republic of Ireland, for example, turnover is one of the causes as well as outcomes of these demanding work conditions. For example, the turnover rate of staff nurses in Ireland is almost twice that of clinical support staff (HSE, 2017). Furthermore, almost three out of four student nurses intend to leave Ireland to go overseas where working conditions and pay are better (Irish Nurses and Midwifery Organisation, 2018; Fegan, 2018; Cotter, 2018). This means as student nurses are trained, only a minority are retained. Indeed, since 2010, 14,000 nurses had left Ireland (MacNamee, 2017) which means that nursing staff levels in Irish hospitals are 17% lower than they were 10 years ago, which has drastically increased nurses' job demands (Higgins, 2018). While job demands and low pay are known to contribute to turnover, turnover in turn generates a chronic shortage of staff and thus high workload, strain and poor morale for many professionals. In essence, job demands and turnover have created a vicious, self-reinforcing cycle which contributes to poor health among nurses. As a result, it is important to find ways within hospitals' domain to combat negative work outcomes (see also Van Den Tooren & De Jonge, 2008), reduce job demands and increase job resources in order to engage staff, reduce potential exhaustion, and potential turnover.

## BACKGROUND

The purpose of this study is to examine ethical leadership and decision authority as potential mechanisms to address negative working outcomes for nurses. We propose that such leadership style can have a positive effect on nurses' decision authority and thus enable them to better manage job demands, thus contributing to work engagement, lower emotional exhaustion and turnover intention.

### Leadership as a predictor of job resources and demands

Leadership can be defined as a process whereby one influences many to attain goals that reflect a shared vision (Northouse, 2017). Leadership style can play an important role in shaping the experience of employees, including their experience of the demands and resources provided to them by their respective leaders. Previous research has further demonstrated that effective nursing leadership can have a positive impact on the work environment (Shirey, 2009), on patient outcomes (Wong & Cummings, 2007), and on reduced adverse events such as medication errors (Wong, Cummings, & Ducharme, 2013). Cummings et al. (2010) conducted a systematic review of the nursing leadership literature, and found leadership styles focused on people and relationships (supportive, transformational, consideration, and resonant) to be positively related with higher nurse job satisfaction, enhanced staff well-being, and increased organizational productivity and commitment. Ethical leaders are individuals who display characteristics such as honesty, caring for others, and fairness, while also ensuring that ethical conduct is being maintained in their workplace (Brown, Treviño, & Harrison, 2005). Interview data demonstrated that ethical leaders were perceived as trustworthy, caring, and principled in decision-making (Treviño et al., 2003).

This also means that ethical leaders may play an important role in determining employees' job resources and experience and reactions to job demands.

The Job Demands-Resources (JD-R) model is an important model in this context (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). According to this model, when the work environment lacks resources, individuals struggle to cope with high demands and fail to achieve their goals (Demerouti et al., 2001). This is where leadership can play an important role. A short introduction to both job resources and demands clarifies this further. Job resources relate to the social, psychological, physical, or organizational aspects of a job that reduce job demands and carry motivational potential (Bakker & Demerouti, 2007). As such, access to job resources can facilitate employees to attain work goals, stimulate personal development, and furthermore lessen psychological and physiological effects of high job demands (Demerouti et al., 2001). Job resources are extant at four levels: organizational (such as career opportunities); the organization of work (such as participation in decision-making); interpersonal and social relations (such as supervisor support); and at task level (such as skill variety) (Bakker & Demerouti, 2007). Job demands encompass the social, psychological, physical, and organizational aspects of a job that necessitate unremitting physical or mental effort, and consequently have either a psychological or physiological effect (Demerouti et al., 2001). Examples of job demands include physical demands, emotionally-demanding client interactions, or a detrimental work environment.

In the current paper, one concept is particularly of interest in relation to work organization, namely, decision authority. In the current study, decision authority refers to "the amount of freedom that a worker has, to choose and to plan his tasks and is closely related to participation and involvement" (Adriaenssens, De Gucht, & Maes, 2015, pg. 657). In the case of hospital settings, it is proposed that when nurses have managers who adopt ethical leadership style, these leaders will also consider the needs of their nurses' ability to make decisions in line with decision authority and support them so that they are able to exercise control over job demands. This leads to the following hypotheses:

H1: Perceived ethical leadership of nurse leaders is a positive predictor of decision authority among nurses.

### Job resources and employee reactions

The importance of reducing job demands and providing more job resources to improve nurses' experience, well-being at work and commitment has been explored and demonstrated in a number of articles. Key variables are work engagement, emotional exhaustion, and turnover intention. The first variable, work engagement, is regarded as the antipode of burnout; it is defined as a positive work-related mind-set that is characterized by dedication, vigor, and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002). The second variable of interest is emotional exhaustion. Emotional exhaustion is, together with diminished personal accomplishment and depersonalization, a characteristic of burnout (Maslach & Jackson, 1986). The third variable is turnover intention, defined as a purposeful and conscious willingness to depart from the organisation (Tett & Meyer, 1993). Job demands are associated predominantly with the emotional exhaustion component of employee burnout, while job resources are principal predictors of work engagement (Bakker & Demerouti, 2007). This is due to job demands necessitating effort and expending energetic reserves, while job resources fulfil essential psychological requirements, such as the need for autonomy (Bakker & Demerouti, 2014).

Several studies have studied nurses and provide further evidence regarding the role of job demands and resources on their well-being and turnover. Increased job resources are associated with a significant increase in nurses' work engagement (Hu et al., 2017), such as increased learning opportunities, co-worker support, and supervisor support (Sarti, 2014). A decrease in job demands is associated with lower emotional exhaustion and burnout in nurses (Adriaenssens et al., 2015; García-Sierra et al., 2016). Both job demands and resources are known to impact actual and intentional turnover, with high demands and low resources increasing turnover intention (Rahnfeld, Wendsche, Ihle, Müller, & Kliegel, 2016) and actual turnover (Gao, Newcombe, Tilse, Wilson, & Tuckett, 2014).

Building on the previous section, it is proposed that decision authority is a positive predictor of work engagement. In addition, decision authority is expected to reduce emotional exhaustion and turnover intention among nurses. These hypotheses are also supported by the work that shows decisional involvement positively influences nurses' work engagement (Sullivan Havens, Warshawsky, & Vasey, 2013) and that job control is a significant determinant of work engagement in nurses (Laschinger, Grau, Finegan, & Wilk, 2012). Furthermore, previous research has found the greater the perception of decision authority the greater the work engagement (Macey, Schneider, Barbera, & Young, 2009). Thus, employees who perceive their leaders as ethical are more likely to feel dedicated, vigorous, and absorptive at work (Engelbrecht et al., 2014). In addition, emotional and physical job resources have been shown to moderate the relationship between high demands and emotional exhaustion in nurses (Van Den Tooren & De Jonge, 2008). Turnover intention may also be reduced via decision authority as having some ability to make decisions and thus manage demands may maintain morale, satisfaction and nurses' ability to provide quality care (Mosadeghrad, 2013). Indeed, Chiu, Chung, Wu, & Ho (2009) demonstrated nurses' turnover intention to be the highest in work settings characterised by high job demands and low job control. However, in this case, we were interested in the individual direct effects of both decision authority as this may not coincide in the workplace. This means their interactive effects were not the focus of the paper, nor was the role of decision authority as a moderator considered here. This leads to the following hypotheses:

H2: Nurses' decision authority is positive predictor of work engagement (H2a) and a negative predictor of emotional exhaustion (H2b) and turnover intention (H2c).

#### Leadership as an indirect predictor of employee reactions

Leadership is an additional factor that is not addressed in the JD-R model but is pertinent to the nursing profession. Ethical leadership has some attention in the health profession, specifically in regards to nursing (Makaroff, Storch, Pauly, & Newton, 2014). Such leadership has been shown to reduce emotional exhaustion (Chughtai, Byrne, & Flood, 2015) and increase work engagement (Den Hartog & Belschak, 2012). Mastracci (2017) further noted that ethical leadership is associated with nurses' decreased experience of burnout and an increase in helpful behaviours. In the context of our research then, nurse leaders are pivotal figures in healthcare organizations. In this paper it is proposed that ethical leadership of nurse leaders may have direct effects and indirect efforts. On the one hand, ethical leadership may have direct effects on job resources such as decision authority. On the other hand, ethical leadership may – via these variables – have an indirect effect on nurses' work engagement, emotional exhaustion and turnover intention.

Several examples demonstrate the potential direct and indirect impact of ethical leadership. For example, ethical leaders empower their employees by providing them with increased decision authority (Bellingham, 2003) and enhanced autonomy (Piccolo, Greenbaum, Den Hartog, & Folger, 2010). Furthermore, ethical leaders engender trust which has been shown to mediate the relationship between ethical leadership and work engagement (Chughtai et al., 2015). This suggests that nurse leaders who act as ethical leaders and give their nurses decision authority will also have a positive effect on their subordinates' work engagement and reduced emotional exhaustion and turnover intention. This leads to the following hypotheses:

H3: Ethical leadership of nurse leaders indirectly predicts higher work engagement (H3a), lower emotional exhaustion (H3b) and turnover intention via decision authority (H3c).

## THE STUDY

### Aim

The aim of the study was to explore the relationship between ethical leadership style and three work experience variables reported by nurses – all being mediated by decision authority. The three work experience variables are nurses' reported work engagement, their emotional exhaustion, and turnover.

### Design

The design was an independent group design that entailed a cross-sectional data collection effort using a paper questionnaire.

### **Participants**

Overall, 170 questionnaires were distributed to the potential population of nurses in three small hospitals in Ireland. A convenience sample of 93 participants was recruited (response rate of 54.7% of potential participants at the three hospitals). Of the 93 questionnaires submitted, 89 had been completed. There were no inclusion or exclusion criteria other than that the participant had to be a nurse.

### **Data collection**

Data collection commenced in December 2017 and finished in February 2018 in Ireland. In all cases, the copies of paper questionnaires with consent and debrief forms (and unmarked envelopes) were made freely available to nurses on their respective hospital wards. Potential participants were made aware of this research with the help of recruitment posters. Each hospital was provided with a closed drop box which was regularly picked up by the researcher. The paper questionnaire comprised eight sections including measures on ethical leadership, decision authority, work engagement, emotional exhaustion, and turnover intention. Participant information included gender, age (categories), job position, tenure and hours worked per week.

#### **Ethical considerations**

The study commenced following ethical approval being granted by the university and the three hospital ethics boards. Participants received a consent form to be submitted with the paper questionnaire. In addition, all participants received an additional information sheet which described the study, their rights, and the contact details for the researcher and her supervisor. In addition, depending on the hospital provision, the information sheet also included the contact details for hospital specific support as agreed with each of the hospitals.

#### Measures

The paper questionnaire included several measures. The descriptive and reliability information for these is provided in Table 1.

**Ethical leadership**. This was measured using the 10-item Ethical Leadership Scale (ELS) (Brown et al., 2005). Responses ranged from 1 =Strongly Disagree to 5 = Strongly Agree. An example item is "My manager/supervisor listens to what employees have to say." A high score on the ELS indicates that an individual perceives their supervisor as demonstrating high ethical leadership (Brown et al. 2005).

**Decision authority**. This was assessed using the 5-item Decision Authority subscale from the LQWLQ-N scale (Maes et al., 1999), featuring the same response options. An example item is "I have a say in decisions that concern my work." A high score on the Decision Authority subscale reflects a high level of perceived decision authority.

**Work engagement**. This was measured using the 9-item version of the Utrecht Work Engagement Scale (UWES-9) (Schaufeli, Bakker, & Salanova, 2006). An example item is "I am immersed in my work." All items had a response range from 0 = Never to 6 = Always. A high score on the UWES-9 reflects high perceived work engagement.

**Emotional exhaustion**. This was captured using the 9-item Emotional Exhaustion subscale from the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981). An example item is "I feel burned out from my work." Responses ranged from 1 = A few times a year to 6 = Every day. A high score on the Emotional Exhaustion subscale reflects high perceived emotional exhaustion.

**Turnover intention**. The seventh section contained a 7-item Turnover Intention scale based on validated scales by Bozeman and Perrewé (2001) and an item by Chalykoff and Kochan (1989. An example item is "Before long I will be leaving this organisation." The response options ranged from 1 = Strongly Disagree to 5 = Strongly Agree. A high score on this scale reflects high perceived turnover intention.

### **Data analyses**

SPSS version 23 was used to analyse the descriptive properties of the data, the reliability of the scales and the correlations between the five scales. All hypotheses were tested using a path model (LISREL 9.20). The adequacy of model fit was assessed by examining if comparative fit index (CFI; Bentler, 1990) exceeded 0.95, root mean square error of approximation (RMSEA; Browne & Cudeck, 1993) was below 0.08 and standardized root mean square residual (SRMR; Jöreskog & Sörbom, 1989) was below 0.05 (see also Hu & Bentler, 1999). In the first model, the model fit appeared appropriate ( $\chi^{2}$  = 4.31, df = 3, p = .230, CFI = .99, RMSEA = .070, SRMR = .042). The

 $\chi^2$ /degrees of freedom value fell below 5, which suggests acceptable fit (Marsh & Hocevar, 1985). In order to identify variance explained when the model included just one outcome variable at a time, the PROCESS procedure by Hayes (2013) with SPSS Vs. 23 was used.

## Validity and reliability

Overall mean scores were used and imputed where relevant for missing values (less than 5% among some variables). The descriptives for the composites are presented in Table 1. All scales had good reliability (Cronbach's  $\alpha > .70$ ) and the scales were largely moderately correlated with one another. There was no evidence of multi-collinearity above .6. Decision authority correlated with work engagement, emotional exhaustion, turnover intention and ethical leadership. There were no significant differences in terms of the responses collected from the three hospitals, so all further analyses included the total sample.

Table 1. Pearson correlations between all of the scale variables.

Scale Variable		α	Mean	SD	1	2	3	4	5
1.	Ethical Leadership	0.95	4.11	0.63	-				
2.	Decision Authority	0.84	3.07	0.23	.36**	-			
3.	Work Engagement	0.89	3.40	0.82	.37***	.47***	-		
4.	Emot. Exhaustion	0.93	2.11	2.02	17	28**	42***	-	
5.	Turnover Intention	0.92	2.38	1.00	23*	47***	55***	.53***	-

*Note.* \* p < .05, \*\* p < .01, \*\*\* p < .001. N = 89. Cronbach's  $\alpha$ . SD, standard deviation.

## RESULTS

The voluntary participants included 6 men and 81 women (with two missing values) between the ages of 18 to 65. Thirty-one participants (34.8%) were staff nurses, 4 (4.5%) were senior staff nurses, 19 (21.3%) were nurse specialists, 6 (6.7%) were clinical nurse manager 1, 20 (22.5%) were clinical nurse manager 2, 4 (4.5%) were clinical nurse manager 3, 4 (4.5%) were assistant director of nursing, and 1 (1.1%) did not specify their job position. Regarding work experience, 12 (13.5%) had worked 0-4 years, 7 (7.9%) had worked 5-9 years, 23 (25.8%) had worked 10-19 years, 45 (50.6%) had worked  $\geq$  20 years, and 2 (2.2%) did not specify their level of work experience. Regarding hours worked per week, none worked part-time at less than 15 hours per week, 14 (15.7%) worked part-time  $\geq$  15 hours per week.

### **Hypothesis-testing**

Our hypotheses specified several relationships. The first predictor of interest was ethical leadership which was expected to be a positive predictor of decision authority (H1). Second, the mediator was expected to predict employees' work engagement (H2a), emotional exhaustion (H2b) and turnover intention (H2c). Third, an indirect effect was proposed between ethical leadership and the outcome variables via decision authority (H3). No control variables were included as most demographics were categorical in compliance with requests from the ethical board to limit participant identifiability as much as possible.

Figure 1 outlines the findings for the direct effects. Accordingly, ethical leadership positively predicted decision authority ( $\beta = 0.41$ , t = 3.71, p < .05), in support of H1. Furthermore, decision authority predicted work engagement ( $\beta = 0.56$ , t = 5.18, p < .01) and lower turnover intention ( $\beta = -0.25$ , t = -2.22, p < .05), but not emotional exhaustion ( $\beta = -0.10$ , t = .71, p = ns). These results further provide support for H2a, H2c, but not H2b. The lack of support for H2b might be due to the correlation between both work engagement and exhaustion, leading to a suppression effort as the mediator might explain part of the relationship.



Note. N = 89.  $\beta$  is the standardized path coefficient; direct effects — and indirect effects —

Figure 1. Direct effects observed in the path model

As expected, ethical leadership was a significant indirect predictor (*c*') of work engagement ( $\beta = .23$ , t = 3.09, p < .05; H3a) and turnover intention ( $\beta = -.22$ , t = -3.05, p < .05; H3c) as well as emotional exhaustion ( $\beta = -.13$ , t = -2.27, p < .05; H3b), supporting H3. The result for the emotional exhaustion suggests a partial indirect effect as ethical leadership did have a significant direct effect (*c*) on emotional exhaustion ( $\beta = -.19$ , t = -2.27, p < .05) but the direct effect of decision authority on emotional exhaustion (*b*) was not significant.

All three outcome variables were related to one another in the path model, as expected and reported in the correlations reported in Table 1. Emotional exhaustion related positively with turnover intention ( $\beta = .35$ , t = 3.50, p < .05) and negatively with work engagement ( $\beta = .32$ , t = -2.99, p < .05). Turnover intention was negatively associated with work engagement ( $\beta = .44$ , t = -2.58, p < .05).

A separate analysis was conducted to clarify the amount of variance explained when the model included one outcome variable at a time, while also controlling for categorical covariates (such as hospital site, gender, age, experience, position and hours worked). The model including both ethical leadership and decision authority explained 44% of the variance in work engagement when the covariates were included (29% without these variables). All direct and indirect path coefficients were positive and significant at  $p \le 0.01$ . The independent and mediator variable also explained 14% of emotional exhaustion (8 % when the covariates were excluded). All direct path

coefficients were significant at  $p \le 0.02$ , with the relationship between decision authority and emotional exhaustion being negative as expected. The indirect and negative effect was marginally significant (p = .06), which suggests the suppression effect may indeed play a role. The independent and mediator variable also explained 33% of turnover intention (24% when the covariates were excluded). All direct and indirect path coefficients were significant at  $p \le 0.02$ , with the effects in relation to turnover intention being negative as expected.

#### DISCUSSION

The purpose of the current research was to examine the possibility that ethical leadership, if exhibited by nurse leaders, would have a positive effect on nurses' decision authority and thus enable them to better manage job demands, thus contributing to work engagement, lower emotional exhaustion and turnover intention. The majority of our hypotheses were supported in our small sample of Irish nurses.

As hypothesised, ethical leadership positively predicted decision authority of nurses at work (H1), in line with the suggestion that such leaders trust and support their nurses to make responsible decisions. Decision authority, in turn, had a positive effect on work engagement and related to lower turnover intention (H2a and H2c). This finding is in line with the proposition of the JD-R model (Bakker & Demerouti, 2007), and concurs with research discussed in the literature review about the positive impact of job resources – such as decision authority here - on work engagement in nurses (Laschinger et al., 2012; Sullivan Havens et al., 2013). These results also reflect findings that decisional involvement and job control – which decision authority suggests – have positive effects on work engagement (Sullivan Havens et al., 2013; Laschinger et al., 2012). The link of decision authority to lower turnover intention among nurses also reflects other studies on the positive effects of job resources (Chiu et al., 2009; Rahnfeld et al., 2016).

Moreover, ethical leadership also had a significant indirect effect on all three outcome variables (H3). The positive indirect effect of ethical leadership on work engagement reflects other findings involving the nursing profession (Hu et al., 2017) and is in line with research that found a positive association between ethical leadership and work engagement in other professions (Den Hartog & Belschak, 2012; Engelbrecht et al., 2014).

We also observed two significant indirect effects of ethical leadership on emotional exhaustion as well as turnover intention. The turnover intention effect matches the direct effects. However, the direct and indirect effects observed in relation to emotional exhaustion varied. Indeed, decision authority did not have a significant relationship with emotional exhaustion (H2b), despite research that has connected job resources to lower exhaustion (Adriaenssens et al., 2015; García-Sierra et al., 2016). This might be explained by the following. It is possible that decision authority in hospital settings may not be a strong enough resource to compensate for other strains and stressors that triggers emotional exhaustion in nurses. This suggests that decision authority may be a worthwhile job resource for initiatives aimed at increasing engagement and reducing turnover.

However, decision authority alone may not be sufficient to reduce emotional exhaustion given the contextual constraints that may limit nurses' opportunity as well as their ability to make decisions. The significant indirect effect of ethical leadership on emotional exhaustion via decision authority suggests that leadership style can make a significant difference for nurses. As Cummings et al. (2010) noted, leadership styles focused on people and relationships can contribute to staff

well-being. Having more authority to make decisions, when supported by a supportive manager, may foster greater emotional job resources and increase perceived job control, both of which has been shown to reduce emotional exhaustion in nurses (Van Den Tooren & De Jonge, 2008) and turnover intention (Chiu et al., 2009). Our indirect effects therefore suggest leadership can play an important role in addition to job resources such as decision authority in reducing emotional exhaustion among nurses.

## Limitations

A number of limitations apply. The sample included a small group of largely female nursing professionals in Ireland. Furthermore, the organizational climate was not assessed which may also be important to consider when investigating ethical leadership in nurses. In addition, the model focused on one central mediator – decision authority – an example of a job resource. According to the JD-R model, while both job demands and job resources initiate independent processes, they also exhibit an interactive effect (Bakker & Demerouti, 2014). These interactional effects may not be captured by measuring decision authority alone – even if this variable is a resource that has the potential to shape how job demands are managed. Furthermore, the JD-R model proposes that job resources moderate the effect of job demands on emotional exhaustion (Bakker et al., 2007). This was not explored in the current study as job demands vary widely by specialism in the nurse profession.

## **Future research**

While this research highlights the potentially beneficial role of both ethical leadership and decision authority, more work on potentially unknown job resources for nurses is needed (Keyko et al., 2016). In this paper, our model assumed one-directional causality – that leadership characteristics are able to influence staff well-being. However, it is possible that leaders themselves are embedded in a larger institutional context which hinders or facilitates their ability to express ethical leadership characteristics (e.g., Storch, Makaroff, Pauly, & Newton, 2013). This means the connection between leadership and resource and demands maybe reciprocal as research suggests that increased job resources can also enhance nurse leaders' ability to demonstrate ethical leadership (Makaroff et al., 2014).

## CONCLUSION

The current study noted a number of direct and indirect effect of ethical leadership via decision authority on work engagement, emotional exhaustion and turnover intention. These findings have several practical implications. First, hospital management may wish to assess leadership styles and job resources made available to nurses. This second part might require an appraisal of environmental variables with a view to restructuring and designing jobs, guaranteeing an appropriate skill mix amongst staff on duty (Gao et al., 2014; Jourdain & Chênevert, 2010). Efforts to review work processes may also provide nurses with more opportunity to make decisions (Chiu et al. 2009). Since team-based organisations offer nurses greater job control and more opportunities for involvement in comparison to hierarchical structures (Munro, Rodwell, & Harding, 1998), then the second recommendation would be the implementation of a work team model in order to increase nurses' participation in decision-making (Chiu et al., 2009). Another recommendation

would be for hospital management to offer nurses' educational training in areas such as leadership, decision-making, and conflict resolution (Mrayyan, 2004). This would also enable nurses to acquire prerequisite skills that will enhance their competence in decision-making, because without these skills their increased participation will likely result in apathy or frustration (Weston, 2010). And third, hospitals would benefit from the promotion of ethical leadership in nurses because it maintains the emphasis of the nursing occupation on professional values that support the thriving of patients, their families, and healthcare professionals themselves (Gallagher & Tschudin, 2010). Creating a positive work environment and evaluating as well as addressing resource adequacy will be important considerations (see also Twigg & McCullough, 2014), not just for nurse leaders, but also hospital management, policy makers and local community representatives.

#### **Conflicts of Interest**

No conflict of interest has been declared by the authors.

## REFERENCES

- Adriaenssens, J., De Gucht, V., & Maes, S. (2015). Causes and consequences of occupational stress in emergency nurses, a longitudinal study. *Journal of Nursing Management*, 23, 346-358. https://doi.org/10.1111/jonm.12138
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: state of the art. *Journal of Managerial Psychology*, 22, 309-328. https://doi.org/10.1108/02683940710733115
- Bakker, A. B., & Demerouti, E. (2014). Job Demands–Resources Theory. In P. Y. Chen, & C. L. Cooper, (Eds). Work and Wellbeing: Wellbeing: A Complete Reference Guide, Volume III. (pp. 37-64). Hoboken: Wiley Blackwell.
- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, *99*, 274-284. https://doi.org/10.1037/0022-0663.99.2.274
- Bellingham, R. (2003). Ethical leadership: Rebuilding trust in corporations. Amherst: HRD Press.
- Bentler, P. M. (1990). Comparative fit indices in structural models. *Psychological Bulletin*, 107, 238–246. https://doi.org/10.1037/0033-2909.107.2.238
- Brown, M. E., Treviño, L. K., & Harrison, D. E. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97, 117-134. https://doi.org/10.1016/j.obhdp.2005.03.002
- Browne, M. W., & Cudeck, R. (1993). Alternate ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing Structural Equation Models* (pp. 136–162). Newbury Park, CA: Sage.
- Bozeman, D. P., & Perrewé, P. L. (2001). The effect of item content overlaps on organizational commitment questionnaire-turnover cognitions relations. *Journal of Applied Psychology*, 86, 161-173. https://doi.org/10.1037/0021-9010.86.1.161
- Chalykoff, J., & Kochan, T. A. (1989). Computer-aided monitoring: Its influence on employee job satisfaction and turnover. *Personnel Psychology*, *42*, 807-834. https://doi.org/10.1111/j.1744-6570.1989.tb00676.x

- Chiu, Y.-L., Chung, R.-G., Wu, C.-S., & Ho, C.-H. (2009). The effects of job demands, control, and social support on hospital clinical nurses' intention to turnover. *Applied Nursing Research*, 22, 258-263. https://doi.org/10.1016/j.apnr.2008.02.006
- Chughtai, A., Byrne, M., & Flood, B. (2015). Linking ethical leadership to employee well-being: the role of trust in supervisor. *Journal of Business Ethics*, *128*, 653-663. https://doi.org/10.1007/s10551-014-2126-7
- Cotter, R. (2018a, February 19th). 'Dropping like flies' Promises of 'double the salary and half the work' lure cash-strapped Irish nurses to United Arab Emirates and Australia as figures show 1,343 nurses applied for jobs abroad last year. Retrieved from: https://www.thesun.ie/news/2204445/promises-of-double-the-salary-and-half-the-work-lure-cash-strapped-irish-nurses-to-united-arab-emirates-and-australia-as-figures-show-1343-nurses-applied-for-jobs-abroad-last-year/ (19 December 2019).
- Cummings, G. G., MacGregor, T., Davey, M., Lee, H., Wong, C. A., Lo, E., Stafford, E. (2010). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 47, 363-385. https://doi.org/10.1016/j.ijnurstu.2009.08.00
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job-Demands Resources Model of Burnout. *Journal of Applied Psychology*, 86, 499-512. https://doi.org/10.1037/0021-9010.86.3.499
- Den Hartog, D. N., & Belschak, F. D. (2012). Work Engagement and Machiavellianism in the Ethical Leadership Process. *Journal of Business Ethics*, 107, 35-47. https://doi.org/10.1007/s10551-012-1296-4
- Engelbrecht, A. S., Heine, G., & Mahembe, B. (2014). The influence of ethical leadership on trust and work engagement: An exploratory study. *SA Journal of Industrial Psychology*, 40, 1-9. http://dx.doi.org/10.4102/sajip.v40i1.1210
- Fairchild, R. M. (2010). Practical ethical theory for nurses responding to complexity in care. *Nursing Ethics*, *17*, 353-362. https://doi.org/10.1177/0969733010361442
- Fegan, J. (2018, January 16). UK and Australia poaching Ireland's 'burnt-out' nurses. Retrieved from: https://www.irishexaminer.com/ireland/uk-and-australia-poaching-irelands-burnt-out-nurses-465823.html (19 December 2019).
- Gallagher, A., & Tschudin, V. (2010). Educating for ethical leadership. *Nurse Education Today*, 30, 224-227. https://doi.org/10.1016/j.nedt.2009.11.003
- Gao, F., Newcombe, P., Tilse, C., Wilson, J., & Tuckett, A. (2014). Models for predicting turnover of residential aged care nurses: A structural equation modelling analysis of secondary data. International *Journal of Nursing Studies*, 51, 1258-1270. https://doi.org/10.1016/j.ijnurstu.2014.01.011
- García-Sierra, R., Fernández-Castro, J., & Martínez-Zaragoza, F. (2016). Relationship between job demand and burnout in nurses: does it depend on work engagement? *Journal of Nursing Management*, 24, 780-788. https://doi.org/10.1111/jonm.12382
- Hayes, A. F. (2013). Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. New York: The Guilford Press.
- Higgins, A. (2018, May 20th). Hospitals in crises: Ireland's hospitals have 2,299 fewer nurses than they had ten years ago despite dramatic increase in the demands. Retrieved from: https://www.thesun.ie/news/2597671/irelands-hospitals-have-2299-fewer-nurses-than-they-had-ten-years-ago-despite-dramatic-increase-in-the-demands/ (19 December 2019).

Hu, L.-T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1–55. https://doi.org/10.1080/10705519909540118

Hu, Q., Schaufeli, W. B., & Taris, T. W. (2017). How are changes in exposure to job demands and job resources related to burnout and engagement? A longitudinal study among Chinese nurses and police officers. *Stress & Health*, 33, 631-644. https://doi.org/10.1002/smi.2750

HSE. (2017). Staff Turnover Report 2017. Dublin: Health Service Executive.

- Irish Nurses and Midwives Organisation. (2018). 2018 Nursing and Midwifery Internship Survey: Undergraduate Nursing and Midwifery 4th Year Students Plans for When they Graduate. Dublin: Irish Nurses and Midwives Organisation.
- Jöreskog, K. G., & Sörbom, D. (1989). *LISREL 7 user's reference guide*. Chicago, IL: Scientific Software International.
- Keyko, K., Cummings, G. G., Yonge, O., & Wong, C. A. (2016). Work engagement in professional nursing practice: A systematic review. *International Journal of Nursing Studies*, 61, 142-164. https://doi.org/10.1016/j.ijnurstu.2016.06.003
- Laschinger, H. K., Grau, A. L., Finegan, J., & Wilk, P. (2012). Predictors of new graduate nurses' workplace well-being: Testing the job demands–resources model. *Health Care Management Review*, 37, 175-186. https://doi.org/10.1097/HMR.0b013e31822aa456
- Lee, T.-Y., Tzeng, W.-C., Lin, C.-H., & Yeh, M.-L. (2009). Effects of a preceptorship programme on turnover rate, cost, quality and professional development. *Journal of Clinical Nursing*, *18*, 1217-1225. https://doi.org/10.1111/j.1365-2702.2008.02662.x
- Macey, W. H., Schneider, B., Barbera, K. M., & Young, S. A. (2009). *Employee engagement: Tools for analysis, practice and competitive advantage*. London: Wiley-Blackwell.
- Maes, S., Akerboom, S., Van der Doef, M., & Verhoeven, C. (1999). *De Leidse Arbeidskwaliteit* Schaal – verpleegkundigen versie. [The Leiden Quality of Working Life Questionnaire – Nurses version]. Leiden, The Netherlands: Gezondheidspsychologie, Universiteit Leiden.
- Makaroff, K. S., Storch, J., Pauly, B., & Newton, L. (2014). Searching for ethical leadership in nursing. *Nursing Ethics*, 21, 642-658. https://doi.org/10.1177/0969733013513213
- Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor to the study of selfconcept: First- and higher-order factor models and their invariance across groups. *Psychological Bulletin*, 97, 558–562. https://doi.org/10.1037/0033-2909.97.3.562
- Maslach, C., & Jackson, S. E. (1986). *Maslach Burnout Inventory: Manual Research Edition*. Palo Alto: Consulting Psychology Press.
- Mastracci, S. (2017). Beginning Nurses' Perceptions of Ethical Leadership in the Shadow of Mid Staffs. *Public Integrity*, *19*, 250-264. https://doi.org/10.1080/10999922.2016.1231506
- MacNamee, G. (2017, January 14th). 'Sick and tired': Why Ireland's' nurses are leaving in their droves. Retrieved: http://www.thejournal.ie/irish-nurses-sick-and-tired-3181227-Jan2017/ (17 December 2019).
- Mosadeghrad, A. M. (2013). Occupational Stress and Turnover Intention: Implications for Nursing Management. *International Journal of Health Policy and Management*, 1, 169-176. https://doi.org/10.15171/ijhpm.2013.30
- Mrayyan, M. T. (2004). Nurses' autonomy: influence of nurse managers' actions. *Journal of Advanced Nursing*, 45, 326-336. https://doi.org/10.1046/j.1365-2648.2003.02893.x
- Munro, L., Rodwell, J., & Harding, L. (1998). Assessing occupational stress in psychiatric nurses using the full job strain model: the value of social support to nurses. *International Journal of Nursing Studies*, 35, 339-345. https://doi.org/10.1016/S0020-7489(98)00049-2

- Northouse, P. G. (2017). *Introduction to Leadership: Concepts and Practices*. (4th ed.). Thousand Oaks: SAGE Publications.
- Piccolo, R. E., Greenbaum, R., Den Hartog, D. E., & Folger, R. (2010). The relationship between ethical leadership and core job characteristics. *Journal of Organizational Behavior*, 31, 259-278. https://doi.org/10.1002/job.627
- Rahnfeld, M., Wendsche, J., Ihle, A., Müller, S. R., & Kliegel, M. (2016). Uncovering the care setting-turnover intention relationship of geriatric nurses. *European Journal of Ageing*, 13, 159-169. https://doi.org/10.1007/s10433-016-0362-7
- Sarti, D. (2014). Job resources as antecedents of engagement at work: evidence from a long-term care setting. *Human Resource Development Quarterly*, 25, 213-237. https://doi.org/10.1002/hrdq.21189
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire. *Educational and Psychological Measurement*, 66, 701-716. https://doi.org/10.1177/0013164405282471
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71-92. https://doi.org/10.1023/A:1015630930326
- Shirey, M. (2009). Authentic leadership, organizational culture, and healthy work environments. *Critical Care Nursing Quarterly*, *32*, 189-198. https://doi.org/10.1097/CNQ.0b013e3181ab91db
- Storch, J., Makaroff, K. S., Pauly, B., & Newton, L. (2013). Take me to my leader: The importance of ethical leadership among formal nurse leaders. *Nursing Ethics*, 20, 150-157. https://doi.org/10.1177/0969733012474291
- Sullivan Havens, D., Warshawsky, N. E., & Vasey, J. (2013). RN work engagement in generational cohorts: the view from rural US hospitals. *Journal of Nursing Management*, 21, 927-940. https://doi.org/10.1111/jonm.12171
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organisational commitment, turnover intention, and turnover: path analyses based on meta-analytic findings. *Personnel Psychology*, 46, 259-293. https://doi.org//10.1111/j.1744-6570.1993.tb00874.x
- Treviño, L. K., Brown, M., & Hartman, L. P. (2003). A qualitative investigation of perceived ethical leadership: Perceptions from inside and outside the executive suite. *Human Relations*, 56, 5-37. https://doi.org/10.1177/0018726703056001448
- Twigg, D., & McCullough, K. (2014). Nurse retention: A review of strategies to create and enhance positive practice environments in clinical settings. *International Journal of Nursing Studies*, 51, 85-92. https://doi.org/10.1016/j.ijnurstu.2013.05.015
- Van Den Tooren, M., & De Jonge, J. (2008). Managing job stress in nursing: What kind of resources do we need? *Journal of Advanced Nursing*, 63, 75-84. https://doi.org/10.1111/j.1365-2648.2008.04657.x
- Wong, C. A., & Cummings, G. G. (2007). The relationship between nursing leadership and patient outcomes: a systematic review. *Journal of Nursing Management*, 15, 508-521. https://doi.org/10.1111/j.1365-2834.2007.00723.x
- Wong, C. A., Cummings, G. G., & Ducharme, L. (2013). The relationship between nursing leadership and patient outcomes: a systematic review update. *Journal of Nursing Management*, 21, 709-724. https://doi.org/10.1111/jonm.12116