Work Engagement as Mediator in the Relationship between Job Resources and Employees Turnover Intention among Nursing Practitioners in Saudia Arabia

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Abstract

The purpose of this quantitative study was to investigate the mediating influence of work engagement on the relationship between antecedents (e.g., supervisor support, performance feedback, autonomy, and learning opportunities) and consequence (turnover intention) among nursing practitioners in Royal Commission Medical Center (RCMC), Yanbu, Saudi Arabia. The study was conducted among a sample of 320 nurses from the RCMC, and data were analyzed using Pearson correlation and simple meditation analysis with SPSS's PROCESS macro model 4, to determine the influence of job resources on turnover intention through work engagement. Results of this study indicated significant negative correlations between age and turnover intention ($r = -0.139$; $p \leq 0.013$), salary and turnover intention, and a positive correlation between nationality and dedication $r = 0.128$; $p \leq 0.05$). Also, the results demonstrated that three dimensions of work engagement were significantly correlated with job resources and turnover intention. A limitation of the study lies in the method of data collection method, which participants self-reported in a questionnaire. The present study indicated Human Resource Development (HRD) professionals can both enhance the level of employee engagement and reduce the level of turnover intention, by improving employees' learning opportunities to meet their current and future job requirements. Providing learning opportunities to one group in the organization is inadequate; an implication of this study is for HRD professionals to provide learning opportunities across multiple departments to enhance the level of employee engagement and reduce the level of turnover intention.

Keywords: turnover intention, job resources, work engagement, JD-R model

1. Introduction

Work engagement, a specific instance of personal engagement, is an emerging concept that has captured the interest of many scholars and practitioners in human resources development (HRD) and organization development (OD) fields. Schaufeli and Bakker (2004) stated that work engagement refers to "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (p. 2). Kahn (1990) described personal engagement as "the simultaneous employment and expression of a person's 'preferred self' in task behaviors that promote connections to work and to others, personal presence, and active full role performances" (p. 700).

Sweetman and Luthans (2010) stated that a lack of employee engagement is an existential threat to contemporary organizations. Towers Perrin (2008) revealed that one out of every five employees in 31 countries is fully engaged in their work, while 4 out of 10 employees were disengaged. In the Towers Perrin study, companies with highly engaged employees experienced a 28% growth in earnings per share (EPS), while companies with low engagement levels among employees experienced an 11.2% decline in EPS. Economy-wide, Athey (2008) estimated that the lack of engagement at work might have cost the United States $350 billion annually in the

early 2000s. Little wonder that, as Ketter (2008) noted, work engagement has become an organizational priority since early 2000.

Work engagement also affects employee turnover. Abbasi and Hollman (2000) stated that turnover refers to the movement of employees from one organization to another or changing their status from employed to unemployed. Alexander and his colleagues observed that substantial costs are associated with employee turnover (Alexander, Bloom, and Nuchols, 1994). For instance, a study estimated that turnover in Illinois parks and recreation agencies involved new employee hiring costs ranging from $2,647 to $23,142, depending on the particular positions that needed to be filled as a result of the turnover (McKinney, Bartlett, and Mulvaney, 2007).

1.1 Significance of the Study and Research Gap

In the Kingdom of Saudi Arabia (KSA), health organizations face many challenges due to the high rate of turnover among nurses (Al-Ahmadi, 2006; Al-Mutairi, 2017; Alboliteeh, 2015; Almalki, Fitzgerald & Clark, 2011; Walston, Al-Harbi & Al-Omar, 2007). In 2015, the Ministry of Health reported that 172,483 nurses in Saudi Arabia constituted 54.7% of the total healthcare workforce. However, the proportion of nurses who were Saudi nationals was only about 32.3% of the total number of nurses and 4.1% of the nurses in the private health sector (Almalki et al., 2011). A study conducted in 2007 reported that the average tenure among non-Saudi physicians and nurses in Saudi Arabia is only 2.3 years (Walston et al., 2007). One reason for the low average tenure among expatriates might be that they prefer to migrate to Western countries after a few years due to better opportunities and training facilities (Almalki et al., 2011). Using more recent data, Alboliteeh (2015) concluded that approximately 43% of nurses in Saudi Arabia expressed an intention to leave the profession in the future. Almalki and his colleagues asserted that the problem of turnover is not only rampant not only among expatriates but among nurses of Saudi nationality as well (Almalki et al., 2011).

In light of the current state of instability in the nursing workforce in Saudi Arabia, efforts must be made to prevent turnover among nurses. Meeting this challenge requires that adequate research is conducted to understand causes of turnover and what practices best predict high retention rates. Research that is specifically relevant to the social and cultural context of Saudi Arabia is particularly needed. A study conducted in Saudia Arabia revealed that one of the most significant factors affecting the turnover rate among medical staff is the level of work engagement (Aboshaiqah et al., 2016). Recently, a study examined mediating effects of work engagement on the relationship between job resources and employee turnover intention in Western countries, but few investigations of this topic have been conducted in Saudi Arabia (Abdulla, Djebarni & Mellahi, 2011). The results of Western research cannot be automatically generalized to apply to the Saudi Arabian context because of some fundamental cultural differences between Saudi Arabia and Western countries (Ali, 1996). In particular, the JD-R Model has been tested more thoroughly in Western nations than in Eastern countries (Burke, 2010; Idris, Dollard & Winefield, 2011). Therefore, an essential contribution to expanding the research on work engagement in Saudi Arabia and other Asian nations would be to test the assumptions of the JD-R model in these locales.

Hence, the most important benefit of conducting this study is to contribute to filling the research lacuna in Saudia Arabia and the Middle East when it comes to the mediating effects of work engagement on the relationship between "antecedent" job resources (i.e., supervisory support, performance feedback, autonomy, and learning opportunities) and "consequence" (employees' turnover intention in the Saudi context). Additionally, the results of this study might help employers determine an appropriate balance between job resources and job demands in the workplace. Furthermore, the results might identify the most important job resources that could enhance employees' work engagement.

2. Review of Related Literature

2.1 The Concept of Work Engagement

During the past several decades, job satisfaction has been a concern for many organizations and it was measured for the first time in the 1930s (Saari & Judge, 2004). Job satisfaction refers to "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1975, p. 1304). The term "job satisfaction" refers to a worker's general feelings and attitudes regarding his/her employment. Fernandez (2007) insisted that employee satisfaction is different from employee engagement. Additionally, Bakker and Leiter (2010) argue that job satisfaction is concerned with the effect of work on employees while engagement is concerned with employees' attitude at work. Therefore, a satisfied employee is not necessarily an engaged employee.

Additionally, engagement can be differentiated from organizational commitment. Organizational commitment refers to "the relative strength of an individual's identification with, and involvement in, a particular organization"

(Mowday, Steers & Porter, 1979, p. 226). Leiter and Maslach (1997) explained that commitment could be predicted through engagement. Macey and Schneider (2008) argued that commitment could be an aspect of engagement. However, it is not sufficient for engagement. Saks (2006) described the distinction between work engagement and organizational commitment by clarifying that organizational commitment is about employees' attitudes toward the organization, while work engagement is about the level of involvement in the work role. Three features describe work commitment: (a) a strong desire on the part of the employee to remain part of the organization, (b) an employee's belief in the company's values, mission, and vision; and (c) the readiness of workers to exert great efforts to achieve the organization's goals and objectives (Armstrong, 2009).

According to Saks (2006), work engagement is different from job involvement because it concentrates on how workers attend to the duties assigned to them in the organization. Furthermore, work engagement involves the use of measures for cognition, leadership support, and employee emotions. Work engagement can be an antecedent to job involvement in the sense that workers who are highly engaged in their work become more involved in their jobs. Therefore, work engagement can make an excellent connection between employees and organizations, as well as ensure that employees are working harder to achieve the desired outcomes for the organization.

2.2 Roles of Work Engagement

During the 1970s and 1980s, human resources (HR) practitioners focused on job satisfaction and organizational commitment to improving employee performance. Starting in the early 1990s, practitioners began to shift their attention to work engagement. The Merriam-Webster dictionary (n.d.) defines engagement as "emotional involvement or commitment." Work engagement occurs when an employee has an active and fulfilled mind that exhibits their energy and dedication in achieving the goals and objectives of the organization. The use of the term work engagement has been changing since the 1990s. Initially, work engagement was based on workers' satisfaction with their duties, in contrast to current usage whereby workers' output defines their engagement.

Work engagement has gained attention over the past twenty years because it is positively related to several outcomes (namely, employee performance, retention, productivity and satisfaction). Even though work engagement has gained attention over the last twenty years, it remains inconsistently defined and conceptualized (Schaufeli, 2013; Schaufeli & Bakker, 2010; Shuck & Wollard, 2010). With no universal or fixed conceptualization of work engagement, researchers have operationalized and measured the concept in many different ways (Macey & Schneider, 2008). This section will review the conceptualization of work engagement in the 1990s, 2000s, and 2010s in both business and academic settings.

Engagement in the workplace began to be conceptualized by several scholars as "job engagement" (Maslach, Schaufeli & Leiter, 2001), "employee engagement" (Harter, Schmidt & Hayes, 2002), "work engagement" (Schaufeli, Salanova, González-Romá & Bakker, 2002), and "psychological state engagement" (Macey & Schneider, 2008). The following section will review each of these conceptualizations and the measurement tools used for their operationalization.

Similar to their earlier study (Maslach & Leiter, 1997) conceptualized engagement as "the positive antithesis of burnout," but in this study used the term "job engagement" rather than other terms like "personal engagement" (Maslach et al., 200, p. 416). In 2001, researchers also focused on prolonged interpersonal and psychological job stressors with an emphasis on three dimensions of burnout (exhaustion, cynicism, and inefficacy) and the job characteristics (workload, control, rewards and recognition, community and social support, perceived fairness, and values) that can have a significant impact on job engagement. Maslach et al. (2001) found that engagement can be the positive antithesis of burnout. They used a burnout inventory to investigate the relationship between job characteristics and burnout. Specifically, they found workload and control conditions could play important roles in enhancing engagement, and they argued that a lack of feedback and autonomy reduces the level of engagement.

Furthermore, they found that heavy workload resulted in exhaustion among employees, leading to lower performance. Exhaustion was also the most reported dimension because of its adverse impacts on job engagement. Exhaustion implied the stress dimension of burnout. In this study, exhaustion prompted depersonalization whereby the workers distanced themselves from their work and their clients emotionally and cognitively. Moreover, the study also found that workers developed a cynical attitude when they felt that they were discouraged and exhausted, which led to reduced personal achievements (Maslach et al., 2001). The researchers concluded that burnout leads to a higher employee turnover rate resulting in lower job productivity, as well as reduced job commitment and satisfaction among employees.

Harter et al. (2002) selected a sample of 198,514 participants from 7,939 business company units across 36

companies to determine the correlation between employee engagement and outcomes of the business units. The researchers used the Gallup workplace audit (GWA) instrument (Gallup Q12 Employee Engagement Questionnaire; Gallup Organization, 1992−1999) to examine employee perceptions regarding work satisfaction, supervisory practices, work motivation, and teamwork effectiveness. Dependent variable measures included customer satisfaction, loyalty, profitability, productivity, turnover, safety, and composite performance. The results of Harter and colleagues' 2002 study found that the business units recorded a positive correlation of ($r = 0.77$) between personal satisfaction and employee engagement. The study also found that there were no meaningful correlations between composite performance and employee engagement. Additionally, the study also found that there were no meaningful correlations between performance and employee engagement. They suggested that any changes in management practices that lead to increased employee satisfaction might help to improve the organizations' profit.

2.3 Factors Influencing Work Engagement

Since 2010, researchers have conducted studies to investigate the main factors that can influence work engagement, such as employees' cognitive, emotional, and behavioral states (Shuck & Wollard, 2010); human resource development practices (Rurkkhum & Bartlett, 2012); burnouts (Hakanen & Schaufeli, 2012); positive emotions (Ouweneel, Le Blanc & Schaufeli, 2013); leader support (Hewitt, 2015); and ethical standards (Mauno, Ruokolainen, Kinnunen & De Bloom, 2016). The following sections explain the research on each of these factors that are potential influences on work engagement.

Shuck and Wollard (2010) conducted a study by reviewing 159 scholarly articles to find an accurate definition of employee engagement. They defined it as "an individual employee's cognitive, emotional, and behavioral state directed toward desired organizational outcomes" (Shuck & Wollard, 2010, p. 103). The study analyzed 144 studies after removing 15 studies because they were unrelated to the topic. The findings indicated that employee sabotage, employee burnout, and high turnover were barriers that hindered employee work engagement. The study also found that many people who go to work are disengaged from their duties and responsibilities. The researchers suggested that employees need to have an active mind to achieve a high degree of work engagement. The study also concluded that HR managers need to develop policies, strategies and provide resources that motivate workers in performing their duties.

A study by Rurkkhum and Bartlett (2012) also investigated the relationship of human resource practices with employees' work engagement. In this study, the researchers explored the correlation between organizational citizenship behavior and employee engagement in Thailand. A sample of 522 employees in four large regions of Thailand participated in the study. The researchers found a positive correlation between the workers' organizational citizenship behavior and their level of work engagement. The study concluded that perceptions of human resource development played a significant role in an employee's decision whether or not to actively engage in the organization. Workers were more engaged when they realized that they had an opportunity to increase their development within the organization through training and promotion.

2.4 Job Demands-Resources Model

The job demands-resources (JD-R) model is used to predict employee engagement, burnout, and organizational performance. Demerouti and her colleagues developed the JD-R model. The JD-R assumes that the workplace environment can be conceptualized as sets of job demands and job resources. The resources can determine the level of work engagement among employees (Demerouti et al., 2001). Additionally, Bakker and Demerouti (2007) noted that job resources might buffer job strain if employees have enough job resources. The JD-R model aims to determine how job resources can reduce the stresses on employees that are caused by high job demands (Demerouti, et al., 2001). The JD-R model is a popular model of work engagement, and it can be applied to a variety of work environments in terms of improving employee well-being and performance (Bakker & Demerouti, 2007).

Additionally, the JD-R model has been used as the theoretical framework for many studies, and scholars prefer to use this model rather than other models (e.g., DCM). In the DCM developed by Karasek (1979), an assumption is that job strain can occur if employees face high job demands while having low job control. The major disadvantage of using the DCM model is that it just uses work overload and time pressure as job demands, and uses job control as the only job resource. The selected job resource and job demands of the DCM cannot be generalized to all occupations because the content and nature of every job are different. Additionally, selected job resources might not help to reduce the impact of job demands because each job has its types of job resources and demands (Bakker & Demerouti, 2007; Bakker & Leiter, 2010).

Van Veldhoven, De Jonge, Bosma, and Schaufeli (2005) conducted a study among 37,291 Dutch employees to

determine which model can be better used to predict work engagement. Specifically, they compared the JD-R model and the DCM. They found that the JD-R model is better than the DCM in terms of providing the best explanation for the relationship between job characteristics and employees' well-being. Schaufeli and Bakker (2010) also recommended the JD-R model over other models as it is a more restrictive model that considers work engagement as a mediator variable in the relationship between job resources and positive outcomes.

2.5 Work Engagement Antecedents

Job resources (e.g., social support, supervisory coaching, performance feedback, and time control) are the most important predictors of turnover intentions, with work engagement serving as a mediating variable (Bakker et al., 2003; Schaufeli & Bakker, 2004). Job resources refer to "the physical, psychological, social, or organizational aspects of the job that: (a) are functional in achieving work-related goals; (b) reduce job demands and the associated physiological and psychological costs; and (c) stimulate personal growth and development" (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007, p.122). Moreover, job resources can be found at the macro level, the organizational level, the interpersonal level, the specific job level, and the task level (Demerouti & Bakker, 2011).

Job resources play an essential role in terms of enhancing work engagement. Kahn (1990) regards job resources as one of the three main drivers of workers' engagement. He stated that job resources could help to make employees more engaged in their work when job resources are available and accessible to employees. Additionally, job resources can improve the levels of employees' intrinsic and extrinsic motivations (Bakker & Demerouti, 2007). Schaufeli, Bakker, and Van Rhenen (2009) conducted a longitudinal study of 201 telecom managers. They found that when employers provide enough resources for their employees, the work engagement level in the organization increased.

Moreover, a study by Bakker, Hakanen, Demerouti, and Xanthopoulou (2007) examined the relationship between job resources and work engagement. A sample of 805 teachers from secondary and vocational schools in Finland was selected by the researchers to explore whether job resources promote work engagement when job demands are high. The findings indicated that leadership support, appreciation of the expected performance, and innovativeness were significant job resources for teachers because they countered the negative effects of students' actions. Similarly, Alkhadhuri (2018) conducted a comparative international study among 677 physicians and nurses in the Sultanate of Oman and the United Arab Emirates to examine the relationships among job demands, job satisfaction, and work engagement. He found that the most substantial positive relationship for work engagement was with job satisfaction ($r = 0.562$). Concerning the role of job resources in work engagement, he examined three job resource factors: autonomy, supervisory coaching, and performance feedback, and he found a moderate positive association between work engagement and job resources ($r = 0.425$) when he combined the job resources score. Taking the results of all these studies together, the author can hypothesize that job resources can play an essential role in enhancing the level of work engagement among employees. Thus, the following section will explain the influence of four job resources as antecedents of work engagement: (a) supervisory support, (b) performance feedback, (c) job autonomy, and (d) learning opportunities.

2.6 Turnover Intention

Turnover intention refers to "conscious and deliberate willfulness to leave the organization" (Tett & Meyer, 1993, p. 262). Abbasi and Hollman (2000) defined turnover in their study as the movement of employees from an organization to another organization or a change in status from employed to unemployed. Employee turnover costs U.S. businesses approximately \$11 billion annually, and about \$1 million for every ten managerial employees deciding to quit their jobs (Abbasi & Hollman, 2000). In the same vein, Alexander, Bloom, and Nuchols (1994) insist that the costs of employee turnover are substantial for any organization.

Many researchers share the widely held view that there are several factors behind employee turnover, and no one reason will explain it thoroughly. Harrison, Torres, and Kukalis (1988) argued that employees or employers might be the cause of employee turnover. Additionally, some of the reasons why turnover is high in some companies are a lack of support, a lack of promotion opportunities, low wages, and an unhealthy working environment.

A study by Halbesleben and Wheeler (2008) investigated the relative roles of work engagement in predicting turnover intention and job performance. A sample of 573 employees working in different industries in the United States was selected randomly to participate in the study. The respondents consisted of 225 males and 348 females. The results of the study showed that there was a negative correlation ($r = - 0.16$) between work engagement and the intention of the employees to leave the organization. The study also reported that those employees who were less engaged easily detached themselves from the organizations. The researchers concluded that those workers

who were highly engaged did not feel like leaving because they felt they had put a lot of energy and skills into building the organization's reputation.

3. Theoretical Framework

This study intends to use the JD-R model as a theoretical framework to investigate the mediating effects of work engagement on the relationship between job resources (supervisory support, performance feedback, autonomy, and learning opportunities) and employees' turnover intention (Figure 1-3). Using the JD-R model can be an advantage for the study because researchers could substitute other types of job resources that can buffer the undesirable influence of job demands on employees and increase work engagement in the workplace (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007).

3.1 Conceptual Framework of the Study
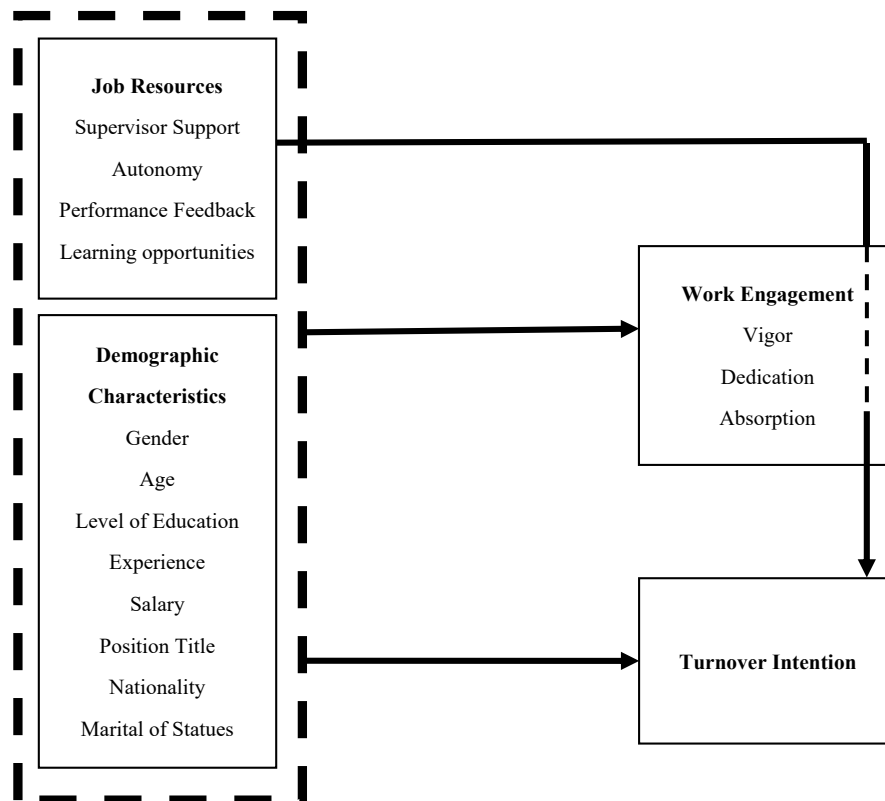
Note. This figure demonstrates the JD-R Model adapted from Bakker and Demerouti (2007).

4. Methods

A quantitative exploratory approach was used for this study. This study postulates that enhancing employees' work engagement through job resources could reduce employee turnover intention. Bakker and Demerouti (2008) found that job and personal resources could play an important role in improving the level of engagement in the workplace. Additionally, this study assumes that job resources might increase employees' work engagement. Job resources will be categorized as (a) supervisory support; (b) performance feedback; (c) autonomy; and (d) learning opportunities. Furthermore, Hobfoll (2001) developed the conservation of resources (COR) theory that supports the positive role of job resources on employee engagement. The COR theory outlines the importance of job resources for employees in the following ways: (a) job resources can help employees to deal with stress in the workplace, and (b) providing job resources can lead employees to invest what they gained from resources to protect against future resource losses.

Additionally, this study aims to develop a profile of the participants— nursing practitioners in KSA—by identifying their demographic characteristics (e.g., age, gender, education level, position title, experience, etc.). An examination of demographic characteristics will be necessary for the study because it is helpful to identify

features and factors contributing to significant differences in work engagement.

The second part of the study will ask participants to identify the impact of the job resources on their level of work engagement. Use of the Utrecht Work Engagement Scale- UWES-9 could help to measure the work engagement of medical practitioners in the KSA and find the mediating role of work engagement between job resources and turnover intentions.

The authors will illuminate the effect of work engagement in mitigating business problems from employee turnover and offer practical applications of the results to the business world. The improvement of the level of work engagement in the workplace could lead to the reduction of employee turnover rate.

4.1 Research Questions

To explore the mediating effects of work engagement on the relationship between "antecedent" job resources (performance feedback, supervisory support, job autonomy, and learning opportunities) and the "consequence" of employees' turnover intention in the Saudi context, the following questions guided the study:

RQ1. To what extent do the demographic characteristics of nurses (i.e., gender, age, level of education, marital status, years of work experience, job category, nationality, and salary) influence turnover intention and three work engagement dimensions (vigor, dedication, and absorption)?

RQ2. To what extent do the four job resource dimensions (performance feedback, supervisory support, job autonomy, and learning opportunities) influence the work engagement dimensions (vigor, dedication, and absorption) and turnover intention among nurses working in the health services program at the RCMC in Yanbu, KSA?

RQ3. To what extent do the dimensions of work engagement influence employee turnover intention among nurses working in the health services program at the RCMC in Yanbu, KSA?

RQ4. To what extent does work engagement mediate the relationship between the various job resources and employees' turnover intention among nurses working in the health services program at the RCMC in Yanbu, KSA?

4.2 Participants

The study was conducted among nurses working in the RCMC. The RCMC is located in the western province of Saudi Arabia in Yanbu Industrial City. The capacity of the RCMC is 342 beds with a total of 2,491 employees who work in three main divisions: the Medical Service Division, the Administrative Services Division, and the Medical Support Services Division. The Medical Support Services Division administers the Nursing Department. The target population of the study was all individuals who meet the following criteria: (1) the participant is employed as a nurse in the Madinah region, (2) the participant is a full-time employee, and (3) the participant's experience is one year or more. The sample was drawn from the target population.

4.3 Instrument

The survey instrument used in the present study adapts portions of several existing survey instruments and combines them in a single, web-based questionnaire. The survey questionnaire was developed by using the Survey Qualtrics website to collect data from participants. The survey instrument was modified from a combined pool of valid and reliable measurement tools previously tested and researched (Creswell, 2014; Sekaran & Bougie, 2013). The survey included 34 items compiled to understand the mediating effect of work engagement, and eight questions related to the demographic characteristics of the participants (e.g., gender, age, level of education, marital status, years of experience, position title, nationality, and salary).

Sample size adequacy was determined by using a table for deciding the minimum sample size (Krueger, 2001). Based on the table, the minimum size of the sample was estimated to be 196 employees. Because the researcher wanted a 95% confidence level and a 5% confidence interval, the Krejcie and Morgan table proposed 196 nurses as the sample size for this study.

5. Results

The collected data were analyzed by using SPSS and SPSS's PROCESS macro to answer the research questions. Before performing correlation and regression procedures, the researcher checked the reliability, normality, linearity, and homoscedasticity of the collected survey data. The results of these tests helped to assess the normality of the data distributions and the internal consistency of the summated Likert scale scores (Dillman, 2014). First, reliability was assessed using Cronbach's α, and the results showed internal consistency for all survey instruments with values for Cronbach's α ranging from 0.71 to 0.88. In the present study, the results of tests for internal consistency for all survey instruments produced Cronbach's α values that ranged from 0.71 to

0.88, indicating an acceptable level of reliability. However, the second item of the autonomy scale was excluded from the instrument to improve the Cronbach's α results from 0.43 to 0.71. Additionally, a normal P-P plot and histogram of residuals were used for assessing normality (Figures 2-3 and 3-3). They showed the residuals to be normally distributed。
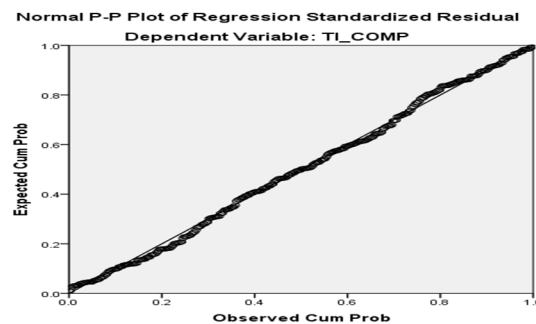

Figure 2. Normal P.P plot regression standardized residual

The histogram of residuals associated with the dependent variable, turnover intention, shows that the residual data points are normally distributed (Figure 2-3).
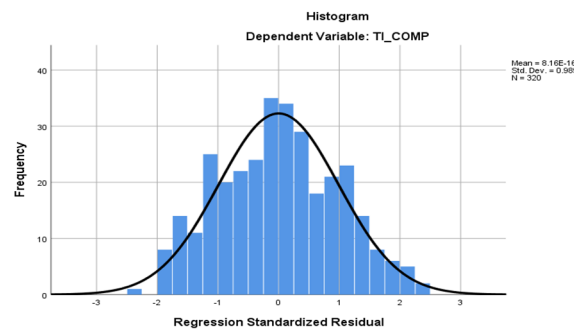

Figure 3. Histogram of residual distribution

Linearity was evaluated by generating a normal P-P Plot and scatterplot, which showed that the linearity of the relationships between variables met the acceptable levels for regression analysis. Homoscedasticity was assessed using Levene's test; the result showed α = 1, indicating that there was no significant difference in the equality of variance through the various conditions of the study. Therefore, the collected data from the respondents met all the criteria for performing all the chosen statistical procedures: correlation, multiple regression analysis, and simple mediation analysis.

Table 1. Basic descriptive statistics and Cronbach's alpha for scale variables (n = 320)

Variable	# of Items	M	SD	α
Job Resources	13	4.7	15.4	.88
Autonomy	2	5.2	2.8	.71
Performance Feedback	3	5	3.6	.71
Supervisory Support	4	2.8	3.1	.82
Learning Opportunities	4	3.3	2.8	.88
Work Engagement	9	5.76	8.5	.85
Turnover Intention	3	4.2	5.1	.86

The first three research questions were addressed by conducting bivariate correlations and multiple regression analyses. The first research question required an examination of the Pearson's correlation coefficients obtained for the relationships between the demographic characteristics (e.g., gender, age, level of education, marital status, years of experience, position title, nationality, and salary) and turnover intention, and between demographic characteristics and the three dimensions of work engagement (vigor, dedication, and absorption).

The first set of relationships examined were those between the demographic characteristics (i.e., gender, age, level of education, marital status, years of work experience, position title, nationality, and salary) and turnover intention. As shown in Table 4-4, the demographic variables of age and salary are of particular interest concerning their apparent influence on the dependent variable, turnover intention. The results indicate that there is a significant negative, though relatively low, correlation between age and turnover intention ($r = 0.139$; $p \leq 0.013$). This result means that for every one unit increase in age turnover intention decreases by about 0.14. Another significant relationship was found between salary and turnover intention ($r = -0.145$; $p \leq 0.01$), indicating that for every one unit increase in salary turnover intention decreased by about 0.15. As shown in Table 4-4, the demographic variables of age and salary are of particular interest for their apparent influence on the dependent variable, turnover intention.

Table 2. Bivariate correlation between demographic characteristics and the three dimensions of work engagement (n = 320)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
Gender	1												
Age	-0.043	1											
Education	.161**	-0.02	1										
Marital status	-0.062	.110*	.224**	1									
Experience	0.085	0.054	.192**	.344**	1								
Position	.146**	-0.043	.150**	0.003	-0.034	1							
Nationality	.427**	0.052	0.102	-0.02	.114*	-.197**	1						
Salary	.213**	0.012	0.009	.263**	.279**	-0.02	-.528**	1					
Turnover Intention	0.042	-.139*	0.008	-0.048	-0.076	-0.011	0.023	-.145**	1				
Work Eng.	0.067	0.089	0.046	-0.028	0.06	0.035	0.063	-0.089	-.230**	1			
Vigor	0.035	0.02	0.01	-0.092	-0.007	0.085	-0.01	-0.093	-.123*	.858**	1		
Dedication	0.085	.136*	0.079	0.014	0.066	-0.033	.128*	-0.056	-.313**	.881**	.652**	1	
Absorbing	0.056	0.082	-0.034	0.014	0.101	0.031	0.052	-0.077	-.165**	.833**	.527**	.632**	1

Note. **significant at the 0.01 level; * significant at the 0.05 level.

The results indicated that there was a significant negative, but relatively low, correlation between age and turnover intention ($r = -0.139$; $p \leq 0.013$) and between salary and turnover intention ($r = -0.145$; $p \leq 0.01$). Thus, age and salary were the only demographic variables examined in the study that statistically explained any of the variances in respondents' turnover intention.

The second part of research question 1 required the examination of the relationships between the demographic characteristics and the three dimensions of work engagement (vigor, dedication, and absorption). It was found that there were significantly positive, though relatively low, correlations between the demographic variable, Nationality, and the Dedication dimension of work engagement ($r = 0.128$; $p \leq 0.05$), and between the demographic variable, Age, and the Dedication dimension of work engagement ($r = 0.136$; $p \leq 0.015$). Thus, Nationality and Age were the only demographic variables examined in the study that statistically explained any of the variances in work engagement among the respondents.

Research question two focused on the relationships between the four dimensions of job resources (autonomy, performance feedback, supervisory support, and learning opportunities) and the three dimensions of work engagement (vigor, dedication, and absorption). The second part of RQ2 required testing the relationships between the job resource variables and turnover intention.

The results of bivariate correlation procedures revealed that all four dimensions of job resources included in the analysis were positively and significantly correlated with all three dimensions of work engagement. The analysis also found that autonomy had significantly lower, or only moderate, correlation with the three dimensions of work engagement (for Vigor, $r = 0.283$ with $p \leq 0.001$; for Dedication, $r = 0.283$ with $p \leq 0.001$; for Absorption, $r = 0.369$ with $p \leq 0.001$; and for Work Engagement Total, $r = 0.363$ with $p \leq 0.001$).

The results of bivariate correlation revealed that Performance Feedback was weakly to moderately correlated with the three dimensions of work engagement (for Vigor, $r = 0.317$ with $p < 0.001$; for Dedication, $r = 0.360$ with $p \leq 0.001$; for Absorption, $r = 0.318$ with $p \leq 0.001$; and for Work Engagement Total, $r = 0.386$ with $p \leq$

0.001).

Moreover, the results indicated that Supervisory Support was weakly to moderately correlate with the three dimensions of work engagement (for Vigor, $r = 0.237$ with $p \leq 0.001$; for Dedication, $r = 0.310$ with $p \leq 0.001$; for Absorption, $r = 0.378$ with p ≤ 0.001; and for Work Engagement Total, $r = 0.357$ with $p \leq 0.001$). Finally, Learning Opportunities was moderately correlated with Absorption ($r = 0.424$; $p \leq 0.001$), Vigor ($r = 0.336$; $p \leq 0.001$), Dedication ($r = 0.424$; $p \leq 0.001$), and Work Engagement Total ($r = 0.455$; $p \leq 0.001$).

Ultimately, all the job resources variables could statistically explain some variance in the three dimensions of work engagement. The strongest relationships were found between Learning Opportunities and Absorption ($r = 0.424$; $p \leq 0.001$) and Learning Opportunities and Dedication ($r = 0.417$; $p \leq 0.001$). The weakest relationships found were those between the work engagement dimension of Vigor and the job resource dimension of Supervisory Support ($r = 0.24$; $p \leq 0.001$) and between Vigor and the job resource dimension of Autonomy ($r = 0.28$; $p \leq 0.001$).

The second part of research question two focused on the relationships between the four types of job resources (autonomy, performance feedback, supervisory support, and learning opportunities) and turnover intention. The results of bivariate correlation revealed that the four types of job resources had weak to moderate negative correlations with turnover intention (for Autonomy, $r = -0.177$ with $p \leq 0.001$; for Performance Feedback, $r = -0.276$ with $p \leq 0.005$; for Supervisory Support, $r = -0.247$ with $p \leq 0.001$; for Learning Opportunities, $r = -0.276$ with $p \leq 0.001$; and for Job Resources Total, $r = -0.253$ with $p \leq 0.001$). The results of the bivariate correlations revealed that the four job resource variables could statistically explain some of the variances in turnover intention.

Research question three required testing the relationships between the three dimensions of work engagement and turnover intention. The results of bivariate correlation revealed that each of the dimensions of work engagement was weakly negatively correlated with turnover intention. Specifically, there was a weak negative correlation between turnover intention and Dedication ($r = -0.313$; $p \leq 0.001$); a weak negative correlation between Vigor and turnover intention ($r = -0.123$; $p \leq 0.005$); a weak negative correlation between Absorption and turnover intention ($r = -0.230$; $p \leq 0.001$); and a weak negative correlation between Work Engagement Total and turnover intention ($r = -0.165$; $p \leq 0.001$). Therefore, the results from bivariate correlation revealed that the three dimensions of work engagement only weakly explain the variance in turnover intention.

The last research question (RQ4) asks whether work engagement mediates the relationship between job resources and turnover intention. A simple mediation analysis using SPSS's PROCESS macro model 4 was used to determine the influence of job resources on turnover intention mediated by work engagement. To estimate the impact of work engagement as a mediator variable between job resources and turnover intention, the individual job resources variables were scored as a single variable called Job Resources Total, and the three dimensions of work engagement were combined to create a single mediator variable, called Work Engagement Total. RQ4 required an examination of the direct, indirect, and total effect pathways of job resources on turnover intention mediated by work engagement.

In preparation for the simple mediation analysis of the data from the respondents, the variables were examined in terms of linearity and normality to determine if the mediation procedure was statistically appropriate. Linearity was checked using scatterplots that indicated that the regression appeared fairly linear, and the Loess curve centered close to zero along the entire X-axis. To test for normality, a P-P plot was created that indicated that the data fit reasonably well with the diagonal line, although there were minor deviations. Thus, the data were found to conform to the assumptions for the use of multiple regression relatively well. The mediation effect of work engagement was measured using the most traditional model, which was proposed by Baron and Kenny (1986). Several regression analyses were conducted to examine the significance of the coefficients at each of the four steps of Baron and Kenny's procedure. The basic steps for mediation analysis involved the generation of regression equations: Job Resources → Turnover Intention; Job Resources → Work Engagement; and Job Resources + Work Engagement → Turnover Intention.

The effect of Job Resources Total on Turnover Intention was significant ($\alpha = -0.13$; $p \leq 0.00$). Similarly, the direct influence of Job Resources Total while controlling for work engagement was significant ($\alpha = -0.097$; $p \leq 0.003$). This result indicates that there was a small reduction in the effect of Job Resources Total in the total effect path and the direct effect path. Results of the mediation analysis confirmed that there was an indirect effect of Work Engagement Total in the relationship between Job Resources Total and Turnover Intention ($\alpha = -0.04$; SE: 0.01; 95% CI: -0.07 to -0.01). The results confirmed that Work Engagement Total did not have a full direct mediating effect on Turnover Intention, although the findings support a small partial mediation effect of Work

Engagement Total on the relationship between Job Resources Total and Turnover Intention.

5. Discussion

This research aimed to assess the mediating effects of work engagement on the relationship between its predictors (demographic characteristics, performance feedback, supervisory support, job autonomy, and learning opportunities) and its consequence (turnover intention) among nurses working at the RCMC in Yanbu, KSA. In this research project, several relationships encompassed by the research questions were tested. Based on a review of the scholarly work of others and the results of the present study, several conclusions can be made that may be crucial for an organization's success concerning human resource management.

Research question one focused on the relationships between the demographic characteristics of nurses (i.e., gender, age, level of education, marital status, years of work experience, job title, nationality, and salary) and turnover intention. The bivariate correlation results indicated that there were significant, negative, relatively low correlations between the age of the nurses and their turnover intention ($r = -0.139$; $p \leq 0.013$) and between salary and turnover intention ($r = -0.145$; $p \leq 0.01$). This result means that age and income can be factors in turnover intention especially for younger nurses, nurses with less work experience, and lower-salaried nurses. It was shown that for every one unit increase in the respondents' ages, turnover intention decreased by about 14%. In the current study, 68 nurses had high turnover intention scores (18 or higher on a scale where 21 was the highest score possible across the three turnover intention items). Of those 68 nurses, 71% had less than 10 years of nursing experience, 94% were 36 years or younger, and 88% earned 10,000 SR or less. The findings regarding salary, age, and experience are broadly in line with those of other researchers (e.g., Burdett, Carrillo-Tudela & Coles, 2011; Hokanson, Sosa-Fey & Vinaja, 2011). Those studies agreed that an employee's age and salary were predictors of an employee's turnover intention. Based on the results of this and other studies, older nurses are less likely to quit or leave their jobs. Additionally, the bivariate correlation results indicated that there was a significant positive, though relatively low, the correlation between age and dedication ($r = 0.136$; $p \leq 0.015$).

The results indicated that age has a negative relationship with turnover intention and a positive relationship with dedication suggested that age can be an important factor in employee retention. While many (91.2%) of the participants in this study were in the 30−39 years old category, human resource practitioners at the RCMC should place more weight on retention strategies for their employees. It may be especially important to pay specific attention to those nurses in their early- to mid-career years earning a lower income.

Research question two aimed to measure the influence of the four types of job resources (job autonomy, performance feedback, supervisory support, and learning opportunities) on the three dimensions of work engagement and turnover intention among nursing personnel at the RCMC. The results of this study indicated that all four of the job resources variables considered were positively and significantly correlated with each of the three dimensions of work engagement. The strength of the relationships between variables ranged from $r = 0.24$ ($p \leq 0.001$) to $r = 0.424$ ($p \leq 0.001$; see Chapter 4, Table 4-7). The strongest relationships found were between Learning Opportunities and Absorption ($r = 0.424$; $p \leq 0.001$) and between Learning Opportunities and Dedication ($r = 0.417$; $p \leq 0.001$); the weakest relationship (low correlation) was between Supervisory Support and Vigor ($r = 0.24$; $p \leq 0.001$).

The findings of this study were consistent with the results of previous studies in different occupational settings in which researchers found that job resources had statistically significant relationships to work engagement (Bakker & Demerouti, 2008; Bakker et al., 2007; Demerouti et al., 2001; Hakanen et al., 2006; Kahn, 1990; Schaufeli et al., 2009). Hakanen et al. (2006) reported that the most important predictors of work engagement were job resources. According to the JD-R model, an increase in job resources and a decrease in negative job demands enhance both organizational outcomes and employee performance. Bakker and Demerouti (2007) highlighted that job resources could improve, not only the level of engagement, but it can go further than that by improving employee motivation. Job resources are also considered an essential factor in reducing the impact of job demands on employees, supporting employees in achieving work goals, and stimulating growth, earnings, and development (Bakker & Demerouti, 2007; Bakker & Geurts, 2004; Schaufeli & Bakker, 2004). Based on the results of this study, one can conclude that job resources have been shown to have a positive effect on work engagement as well as on different organizational outcomes, such as employee performance and motivation.

The present study addressed how perceived learning opportunities for professional development are related to work engagement and turnover intention, and the findings of this study are consistent with the results of previous studies in different occupational settings (Demerouti et al., 2001; Schaufeli et al., 2009; Taneja, Sewell & Odom, 2015; Witt, Kacmar & Andrews, 2001).

To enhance the level of employee engagement and reduce the level of turnover intention, HR practitioners

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should improve employees' learning opportunities to meet their current and future job requirements. Providing learning opportunities to one group in the organization is inadequate; learning opportunities must be conducted across multiple departments to enhance the level of employee engagement and reduce the level of turnover intention. Berger and Berger (2010) classified employees into four groups based on the degree to which the organization was willing to invest in them: super keepers, keepers, key position backups, and solid citizens. HR/OD practitioners need to allocate "investments made by an organization today in the form of training, rewards, education, assignments, and development activities [also referred to as TREADs] appropriately among these groups" (Berger & Berger, 2010).

Turnover intention is an organizational outcome of considerable concern because the costs of employee turnover are substantial for organizations (Alexander, Bloom, & Nuchols, 1994). Thus, the second part of RQ2 aimed to measure the relationships between different kinds of job resources (job autonomy, performance feedback, supervisory support, and learning opportunities) and turnover intention. The results indicated that turnover intention was weakly and negatively correlated with all four types of job resources (job autonomy, performance feedback, supervisory support, and learning opportunities). These findings also are consistent with those of previous studies (e.g., Hansung & Madeleine, 2008; Knudsen et al., 2009). These studies found that different kinds of job resources (e.g., job autonomy, performance feedback, supervisory support, and learning opportunities) had a direct, negative effect on turnover intention.

Based on the results of this study and other scholarly work, job resources can increase the likelihood that employees will stay in the organization. Thus, the costs of employee turnover could be controlled, or at least managed, by providing employees with sufficient job resources, which leads to more engaged employees.

Research question three asks whether any of the dimensions of work engagement (vigor, dedication, and absorption) had an influence on turnover intention among nursing personnel at the RCMC. The results indicated that all of the dimensions of work engagement were negative, albeit weakly, correlated with turnover intention: Turnover Intention and Vigor, $r = -0.123$ with $p \leq 0.001$; Turnover Intention and Absorption, $r = -0.165$ with $p \leq 0.001$); and Turnover Intention and Dedication, $r = -0.313$ with $p \leq 0.001$; see Chapter 4, Table 4-9). Earlier studies also found a negative correlation between work engagement and employee turnover intention (Saks, 2006; Schaufeli & Bakker, 2004).

Research question four aimed to assess whether work engagement mediated the relationship between job resources and turnover intention. In other words, the idea behind this question was to test the effects of job resources on work engagement, which, in turn, affects turnover intention. To examine the strength of the relationships between the job resources and turnover intention, along with the effect of work engagement as a mediator variable, the four-step simple mediation model proposed by Baron and Kenny (1986) was employed. Baron and Kenny explained that establishing a mediating relationship could be done by testing three multiple regression models. In the current study, a simple mediation analysis with SPSS's PROCESS macro model 4 was used to evaluate the influence of job resources on turnover intention mediated by work engagement, and the results indicated that the mediation relationship was significant for all relationships examined.

First, the relationship between Job Resources Total (predictor) and Turnover Intention (outcome) was established (path c). Second, the relationship between Job Resources Total (predictor) and Work Engagement Total (mediator) was established (path a). Third, the relationship between Work Engagement Total (mediator) and Turnover Intention (outcome) was established (path b), as well as the estimated relationship between Job Resources Total and Turnover Intention controlling for Work Engagement Total (path c'). Frazier et al. (2004) explained that the power of tests of mediation is greatest when the relationships of path b and path a present comparable correlation coefficients and when the strength of the relationship of path b exceeds the strength of the relationship of the path a. In the present study, the relationship between Work Engagement Total and Turnover Intention (path b: $\alpha = -0.25$; $p = 0.02$) was stronger than the relationship between Job Resources Total and Work Engagement Total (path a: $\alpha = 0.14$; $p = 0.00$). Thus, the significant influence of work engagement (mediator) on turnover intention (outcome) was greater than the influence of job resources on work engagement ($-0.25 > 0.14$).

Additionally, the results indicated that the total effect of Job Resources Total (path c) on Turnover Intention was significant ($\alpha = -0.13$; $p = 0.00$). Similarly, the direct effect of Job Resources Total (path c') while controlling for Work Engagement Total was significant ($\alpha = -0.097$; $p = 0.003$). This result indicates that there was a small reduction of the effect of Job Resources Total in the *total effect path* and the *direct effect path*. In short, work engagement was found to mediate the relationship between available job resources and turnover intentions, and this finding is also consistent with previous studies (e.g., Schaufeli & Bakker, 2004). Taken together, the results

confirmed that work engagement did contribute a small partial mediation between job resources and turnover intention.

Again, because the turnover intention is considered an organizational outcome of great interest due to the substantial costs of employee turnover (Alexander, Bloom & Nuchols, 1994; Bluedorn, 1982), the results of this study may be used to further identify and develop strategies to reduce employee turnover and to improve the level of engagement among nursing personnel.

6. Recommendations for Future Research

There are two obvious recommendations for future research. First, scholars can extend this study by adding job demands and personal resources as independent variables in this kind of research design. Also, while in the present study the three dimensions of work engagement (vigor, dedication, and absorption) were computed as one variable in the simple mediation analysis, scholars may test the mediating influence of the three dimensions of work engagement (vigor, dedication, and absorption) on the relationship between antecedents (e.g., job resources, personal resources, and job demands) and consequences (e.g., turnover intention, job satisfaction, creativity, and productivity) independently.

In addition, future studies could be done with a modification of the data collection method. For example, the cognitive interview method can be used instead of using a survey instrument to collect data from participants. The cognitive interview method can be used to obtain more accurate information about the most important antecedents of work engagement. The type of interaction between interviewer and interviewee can affect the quality of the information obtained. Thus, scholars can conduct studies by using a qualitative data collection method instead of, or in addition to, quantitative methods.

7. Limitations

This study has some limitations. First, although the target population of the study consists of all nurses working in the Madinah region in the western part of Saudi Arabia, the data of this study were collected only from nurses working at the RCMC. This fact may limit the sample's representativeness of the entire population in the region, and make it more difficult to generalize the results of this study to other hospitals in the Madinah region, or even to other professions in the RCMC.

Second, the data collection method is a critical part of the research process because the quality of the collected data is conditioned by the way the data are obtained. Watkins, Meiers, and Visser (2012) assert that the quality of the collected data is an essential factor in making accurate decisions based on data interpretation. In this study, the data were collected by using only a self-report questionnaire to identify relationships between variables. Even though the survey is one of the most popular methods of data collection, the results of the study might be not generalizable due to this choice of method. To get deep and comparable information, the interview method is a very effective one. The type of interaction between interviewer and interviewee can affect the quality of the information obtained, but this type of approach can help to get more accurate information than from self-report questionnaires. A self-report survey has its limitation (e.g., response bias and sampling bias), and the findings of the present study might be affected by using this method.

Third, this study includes a limited number of antecedent variables and consequence variables. However, this study can be easily extended by adding other potential variables, such as job demands and personal resources to obtain more information about the influence of work engagement as a mediating variable between antecedents and consequences. A further limitation of the present study is that the researcher did not follow up with the non-respondents. There is a possibility for response bias in the sample of those who did volunteer to participate in the study.

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