

## Mediation Effects of Work Engagement among Arab Faculty Members on the Relationship between Job Demands, Organizational Commitment, and Job Strain

Ahmed Ramadan Khtere

Fared Jdaitawi Turki

Fayoum University, College of  
Education, Egypt

Northern Border University,  
Saudi Arabia

### Abstract

The recent changes in teaching professional activity have undergone a significant increase in the occupational stress of faculty. The present study is an extension of prior studies in investigating Job Demand Resource (JD-R) model by examining two hypothesized mediation effects of work engagement on the relationship between job demands, organizational commitment, and job strain. Job demands variable has been included through three factors namely workload, work ambiguity, and work conflict. The sample includes 177 faculty from several disciplines at an Arab university. Regression analysis was used to test the suggested mediating effects of study variables. The findings designated that work engagement partially mediated between role ambiguity and psychological strain, but this effect has not been reported in the relationship between role conflict and psychological strain. Similarly, partial mediation effects were concluded between role conflict and organizational commitment. The study contributed to analyzing the stressors among academics and how the role of these factors to develop the decision-making processes in higher education institutions.

**Keywords:** JD-R model, work engagement, organizational commitment, job demands.

## ملخص الدراسة

فرضت التغييرات الراهنة في الأنشطة الأكاديمية زيادة مطردة فيما يواجه أعضاء هيئة التدريس من ضغوط مهنية خلال القيام بأدوارهم التدريسية، البحثية، والإدارية. تمثل الدراسة الحالية امتداداً لدراسات قامت بتحليل نموذج JD-R أو نموذج متطلبات ومواد العمل Job Demand Resource كأحد النماذج التي تدرس العلاقة المتبادلة بين بعض المتغيرات الوظيفية لهيئة التدريس بالجامعات وأدوارهم الأكاديمية ومتطلبات تلك الأدوار. ووفقاً لذلك هدفت الدراسة من خلال فرضيتين أساسيتين إلى تحليل تأثير الانخراط في العمل Work Engagement كمتغير وسيط للعلاقة بين متطلبات العمل لهيئة التدريس الجامعي والضغط المهنية من جهة، وبين متطلبات العمل والالتزام التنظيمي من جهة أخرى. حيث تم تضمين متغير متطلبات العمل job demands ليشتمل على ثلاثة عوامل: العبء الوظيفي، غموض الدور، وصراع العمل. ميدانياً، تضمنت عينة الدراسة ١٧٧ من أعضاء هيئة التدريس بتخصصات أكاديمية متنوعة بإحدى الجامعات العربية، حيث تم استخدام تحليل الانحدار لاختبار التأثيرات الوسيطة لمتغيرات الدراسة وفقاً لفرضياتها. وتشير النتائج إلى أن الانخراط في العمل أثر جزئياً كمتغير وسيط في العلاقة بين غموض الدور الأكاديمي والضغط المهنية النفسية التي تواجه هيئة التدريس، مع عدم وجود ذلك التأثير فيما يتعلق صراع العمل والإجهاد النفسي الذي يتزامن مع العمل الأكاديمي. كما خلصت الدراسة إلى وجود تأثير جزئي لإنخراط هيئة التدريس في العمل كمتغير وسيط للعلاقة بين صراع أدوارهم الأكاديمية ومدى التزامهم التنظيمي تجاه المؤسسة. وبذلك ساهمت الدراسة في فهم وتحليل متغيرات الضغوط الوظيفية بين الأكاديميين وما قد يسهمه ذلك التحليل في تطوير عمليات صنع القرار بمؤسسات التعليم العالي.

الكلمات المفتاحية: نموذج JD-R، الانخراط في العمل، الالتزام التنظيمي، متطلبات العمل

## Introduction

In many studies devoted to business administration and academics' performance, work engagement has been attracting increasing interest among scholars. They concluded by different perspectives that employees who align the demands of their work to their job skills and commitment are more likely to experience high work engagement and that engaged employees that display energy, enthusiasm, happiness, and pride in their work are more likely to be consistent in their work (Wasilowski, 2018; Steenkamp & Wessels, 2014). Consequently, Workplace psychological and health factors may have preventive impacts on the employees' health and abilities. In this regard, Caesens et al. (2016) argued that work engagement is a positive, enriching, mind state in the workplace that is distinguished through dedication, vigor, and absorption. As such, an employee's health may be maintained through the engagement in suitable coping behaviors, which minimizes the effects coming from psychological and somatic stress. Additionally, those who are engaged in their workplace have a higher likelihood to have a good life quality and coping behaviors compared to their counterparts (Schaufeli & Bakker, 2004).

The findings of exploring the factors of leave intention, low productivity, and high rates of turnover addressed that job strain is an important predictor of positive outcomes including enhanced life quality, health, and successes in the organization (Keegel et al., 2009; Idris, 2011; Wasilowski, 2018). According to Martins et al. (2000), the occurrence of job strain is more likely to appear in an environment that is deemed by the individual as a threat, characterized by personal and professional demands that are way beyond his/her ability to cope with. Indeed, job demands are considered to adversely impact the psychological health and well-being of the employee (Idris, 2011). Thus, the popularity of the job demand concept and the relevant models is justified in research circles.

Consequently, employees handle job demands, in the form of workload, relationships with workmates, and workability by presenting different indicators of stress through several levels of burnout, health challenges to disappointment, lack of concentration, loss of work sense, and depression (Van der Doef & Maes, 2016; Trépanier et al., 2012). The preservation of optimal stress levels can be due to a higher level of work engagement of the staff. Bakker and Demerouti (2007) used JD-R model, which will be presented in this study, to examine work engagement, organizational commitment. Some finding argued the job demands and work engagement as the top predictors of positive/negative psychological outcomes and organizational commitment and leave intention (Borst et al., 2017; Schaufeli's, 2017)

Ultimately, it is evident that work engagement has not been extensively examined in the context of Arab culture. Literature lays stress on the need to clarify the antecedents, moderators, the reciprocity of role stress, work engagement, and ambiguity, along with other important variables in the literature in the field of academia. Few studies have been focused on the role of educators' stress and their outcomes, other studies (e.g., Bakker et al., 2012; Simon & Amarakoon, 2015) investigated the individual characteristics such as work engagement and tolerance of ambiguity. Thus, this study primarily aims to extend the JD-R model and work engagement to provide further insight into the positive/negative experiences of educators and their job attitudes.

The study also attempts to investigate the lowering of the level of stress and strain through the factors that positively or negatively influence the jobs of educators in universities. This will contribute to filling the gap in literature at the level of international and local contexts. Given its purposes, to analyze the impact of work engagement on the stress-strain relationship among educators in higher education institutions, the study extends prior studies that used JD-R model to investigate the moderating role of work engagement on the relationship between educators' stress and work outcomes.

## Background

Because the majority of psychological approaches assuming that human behaviors stem from the interaction of the personal-environmental factors, and as such, it becomes pertinent to integrate personal resources into the job demand resource model (JD-R) as suggested by Schaufeli and Bakker in 2004. JD-R model confirmed that every profession is characterized by certain factors related to job stress, and work burnout is mainly predicted by job demands and the shortages of resources in the workplace (Schaufeli & Bakker, 2004). In a series of studies, job demand and resources were addressed by physical, psychological, social, and organizational aspects that may cause stress or assist in achieving goals once work demands a high level of effort. Moreover, these factors could be mitigators to boost work motivation as well as personal development (Bakker & Demerouti, 2007; Schaufeli et al., 2006; Heuven et al., 2006).

Conceptually, job stress refers to a process arising in individuals have a loss of professional efficacy, mitigated commitment to the organization, and leave intention. Moreover, the psychological strain has been defined as the psychological outcomes appearing in response to encourage several challenges in their jobs primarily because of job overloaded, and the demands of the organization which manifests in stress form (Gilispie et al., 2001; Idris, 2011). With regards to organizational commitment, it is the relative strength of the identification of the staff with and involvement in a certain organization, higher strain levels are considered to play a role in mitigating the commitment of the employee to the organization (Netemeyer, et al., 1995; Idris, 2009). Both role overload and ambiguity predict psychological strain and role ambiguity. In addition, role conflict can result in stress symptoms development (Huda et al., 2004). Organizational commitment was stressed in literature dedicated to education, and it was referred to as happiness and enjoyment at work (Diener et al., 2009; Tummers et al., 2016).

Closely related to this context, according to Schmidt (2007) and Siu (2002), staff that are highly committed showed lower stress and burnout levels. Consequently, Job demands and resources were

reported as factors of positive work engagement and it can mitigate the adverse job demands effects while assisting in reaching work goals and stimulating personal or professional growth (Xanthopoulou et al., 2007; Bakker & Demerouti, 2007). Work experiences, which include procedural justice and supervisors' support, were found to have a significant relationship with affective commitment. Organizational support theory concluded that employees will be supported when the organization's activities were discretionary with feelings of duty to support the organization, fulfillment of socioemotional requirements, and performance-reward expectancies (Rhoades & Eisenberger, 2002). In a related study, Hakanen et al. (2006) addressed that JD-R was found to have a significant positive impact on organizational commitment via work engagement.

At the level of higher education institutions, role overload of faculty was found as one of the forecasters of psychological strain, correspondingly Job strain can occur as a result of role conflict of academics with a combination of factors, including higher teaching loads, limited resources, and higher stakeholders' demands (Idris, 2009; 2011). In a research of 349 professional staff from 17 American higher education institutions, Curran and Prottas (2017) concluded that role ambiguity had the strongest relationship with work engagement, organizational citizenship, and in-role behavior.

Likewise, the majority of academicians were found to have a higher inclination to quit higher education or to regret opting for an academic career, Kinman (2001) revealed that most academicians perceive that they would be better off leaving higher education and that they regret opting to follow an academic career. Some prior studies exposed that role stressors have a significant influence on both individual and organizational outcomes. Besides, role overload was reported as a predictor of occupational stress at work with a lack of support, poor leadership, loss of control, and communication problems between staff (Gillespie et al., 2001; Sun et al., 2011). while other studies evidenced that the stress sources include lack of research finance, lack of support, task overload, ineffective leadership, job insecurity, loss of control, and communication issues (Tytherleight, et al., 2005)

Many studies have indeed evidenced the relationship between role stressors, strain, and professional commitment among faculty members. Challenges are often faced in the allocated positions because of task overload and due to lack of clarity, ambiguities. This may arise on how to tackle teaching activities and services for academic success (Gilispie et al., 2001; Idris, 2009). Therefore, researchers opined that role overload, conflict, and ambiguity have a direct relationship to job strain (Idris, 2009; Posig & Kickul, 2003). Conversely, others still call for the examination of the academic circles considering the relationships especially the overlap between the concepts of organizational commitment and work engagement. Therefore, work engagement and work-related outcomes (professional commitment) were combined with the JD-R model by Bakker and Demerouti (2007), with the intention to leave considered by Stone & Gershon (2006) as the dependent variable to working conditions.

### **Work Engagement as a Mediator**

Work engagement leads to positive work-related outcomes with a strong relationship between job, personal resources, job satisfaction, affective commitment. Work engagement was found to be a mediator between job and personal resources, which has an impact on employees' work attitudes (Priyadarshi & Raina, 2014). Moreover, it was reported to be an indicator of positive or negative for both psychological and organizational outcomes. Hakanen and Schaufeli's (2012) argued that work engagement negatively affected depressive indications and affected positively the satisfaction of the employee. Likewise, Schaufeli and Bakker (2004) related that staff who are motivated in their work are highly devoted to the organization and their inclination towards quitting it is quite low. To exemplify, the employee who is engaged in this work trusts his relationship with the organization, as a result of which, such an employee will harbor a positive attitude towards his work.

Some studies examined how can individuals experience their inclination towards self-investing personal energies on showing a high level of work performance. The engaged employees have a high commitment towards to the organization owing to the organization's

provision of job resources that facilitate their achievement of work goals and opens up opportunities for them, in light of learning, growth, and development (Macey & Schneider, 2008; Houkes et al., 2001).

Literature has its share of studies that explored job demands and job resources as significant factors of work engagement, with job demands reported contributing to the positive psychological well-being of employees, particularly academicians (e.g., Tadic et al., 2015; Bakker et al., 2014). Such demands pose challenges and resourcefulness that are work-related, JD-R model encapsulates factors including role overload, role ambiguity, role conflict, support and feedback, and task significance (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004; Bakker & Demerouti, 2008). Breevaart and Bakker (2018) illustrated the similarities of the attributes with the required knowledge traits, which means, JD-R is significant as an antecedent of work engagement.

Particularly, work engagement is a positive, enriching, mind state that is related to work signified by energy, commitment, and absorption (Schaufeli et al., 2002). It is a measure that gauges the psychological state of the individual, as notable among the knowledge workers as demonstrated by Bakker et al. (2010). According to other studies, employees who are engaged in their work have better physical health, are more satisfied when it comes to their psychological needs, and are more committed compared to their counterparts who are not engaged in their work (Barrett-Cheatham et al., 2016). Thus, work engagement is a crucial component in this research field. Nevertheless, authors that applied JD-R model combined with work engagement failed to consider certain circumstances of occupations and contexts (e.g., Bickerton et al., 2015; Bakker, et al., 2014).

From the above explanation, it is evident that a resource job and personal induced investment of self is represented by engagement and ultimately, heightened work performance, making work engagement play a mediating role. Hence, work engagement may have a mediating effect on the relationship between JD-R and job outputs

(Schaufeli, 2015; Rich et al., 2010). The mediating role of work engagement between job, personal resources, and work-related outcomes has its basis on the premise that individual and organizational factors affect the employees' psychological work experience and such experience is what directs behavior at work (Schaufeli & Bakker, 2004; Sonnentag, 2003).

General stream of studies primarily aimed to understand the role of work engagement in relation to factors like strain, organizational commitment, and job outcomes (Borst et al., 2017; Hakanen et al., 2006), while the present study aims to test its mediating effect in the university context. In a recent study by Breevaart and Bakker (2018) work engagement was evidenced to be significantly related to employees' job demands. Similarly, the findings reported by Barrett-Cheetham et al. (2016) concluded that work-engaged employees were physically healthier, more satisfied, and more committed in comparison to their lower work-engaged counterparts. The motivation model of engagement was proposed by Schaufeli and Bakker (2010) addresses the mediating role of work engagement on the relationship between antecedents namely job demands, and resources, and organizational commitment and strain.

In the present study, work engagement is proposed to mediate the relationship between job demands and strain outcomes, and affective professional commitment. The mediating role of work engagement between job demands and strain and professional commitment has largely been left untouched in the academic field. Work engagement is a state of mind and it is a reflection of the satisfaction of the psychological needs (physical, cognitive, and emotional) and thus, it may well lead to positive results like affective commitment and low-stress levels and thus, this study proposes the following hypotheses for testing;

- *Hypothesis 1: Work engagement fully mediates the relationship between job demands and strain.*
- *Hypothesis 2: Work engagement fully mediates the relationship between job demands and organizational commitment.*

## Research Methods

### Study Design

This study adopted a cross-sectional data questionnaire, with questionnaire copies numbering 177 distributed to the teaching staff members of a Saudi public university. The teaching staff members were full-time instructors from different colleges, and they were divided by gender into 128 male instructors and 49 female instructors. The study data collection procedure was carried out over two months. The authors forwarded a written informed consent to conduct the study targeting the teaching staff members at one of the Arab universities in KSA. The variables in the self-administered questionnaires were measured through a multi-item scale, each adopted from prior studies. Each scale's reliability and validity were established using several steps.

The job demand variable was utilized to assess three work demands namely, workload, work ambiguity, and work conflict. The workload was measured by the Quantitative Workload Inventory (QWI) which was developed by Spector and Jex (1998), with responses measured on a 6-point Likert scale that ranged from 1 (never) to 6 (all the time). Examples of items from this scale are "my job requires me to work very fast", and "my job requires me to work very hard". The Cronbach's alpha for this scale was 0.80. Moving on to role ambiguity, this study assessed the variable using Bowling et al. (2017) 6 items, gauged on a 6-point Likert scale, which ranged from 1 (never) to 6 (all the time). Some sample items include, "my job has clear, planned goals and objectives", and "I feel certain about how much authority I have". The Cronbach's alpha of this scale was 0.85. For role conflict, 6 items from Rizzo et al. (1970) were adopted for its measurement, gauged on a 6-point Likert scale that ranged from 1 (never) to 6 (all the time). Some sample items include, "I receive an assignment without adequate resources" and "I work on unnecessary things", with a Cronbach's alpha of 0.68.

With regards to the construct of psychological strain, 12 items were adopted by Goldberg (1978) general health questionnaire, gauged on a 6-point Likert scale that ranged from 1 (never) to 6 (all

the time). Some of the items include, “been able to concentrate on what you are doing” and “been feeling unhappy or depressed”, with a Cronbach’s alpha of 0.74. Moving on to work engagement, 17 items proposed by Schaufeli et al. (2006) were adopted and gauged on a 6-point Likert scale, which ranged from 1 (never) to 6 (all the time). It had a Cronbach’s alpha of 0.78. Lastly, organizational commitment items numbered 7, and they were adopted from Allen and Meyer's (1996) study with Cronbach’s alpha of 0.81.

The study included the demographic variables of gender, age, teaching experience, and income level. The variables are divided into categories (male and female for gender; 25-30 years old, 31-40 years old, 41-50 years old, and 50 and above for ages; 1-5 years, 6-10 years, 11-15 years, and over 15 years for years of experience).

## Results

### Preliminary Analysis

This study used SPSS to analyze the collected data, more specifically using internal consistency, descriptive statistics, correlation, and regression analysis of the variables. Table 1 contains all the correlation analysis results of the variables. From the table, it is clear that role overload, role conflict and role ambiguity ( $r = .739$ ,  $p < .05$ ;  $r = .535$ ,  $p < .05$ ;  $r = .244$ ,  $p < .05$  respectively) all had positive and significant relationship with psychological strain, which indicates support for hypothesis 1.

**Table 1 Summary of Correlation between Variables**

Measure	1	2	3	4	5	6
1 Role Overload	----					
2 Role Ambiguity	-.090	----				
3 Role Conflict	.108	.198*	----			
4 Job Strain	.739*	.535*	.244*	----		
5 Work Commitment	.029	.089	.702*	.079	----	
6 Work Engagement	.040	.562*	.823*	.409*	.615*	----

Note: \* $p < .05$

In addition, role overload, role conflict and role ambiguity ( $r = .029, p >.05$ ;  $r = .089, p. >05$ ;  $r = .702, p <.05$  respectively) had a partial positive relationship with organization commitment, which didn't indicate support hypothesis 2. Moreover, work engagement has a positively related to role overload, role conflict and role ambiguity ( $r = .040, p >.05$ ;  $r = .562, p <.05$ ;  $r = .823, p <.05$  respectively).

### Regression Analysis

This study used regression analysis to test the effects of job demands on strain and organization commitment and how work engagement mediates the relation between these variables. The results are displayed in Table 2 that appears job demands managed to explain a considerable amount of variance in psychological strain ( $R = .952, R^2 = .908, F = .641.698, P = <.0$ ). Further investigation was carried out to confirm the independent variables that had the highest effect on psychological strain and the results indicated that role overload ( $B = .468, t = 35.842, p <.05$ ) and role ambiguity ( $B = .474, t = 26.773, p <.05$ ) significantly impacted psychological strain but role conflict ( $B = .029, t = 1.728, p >.05$ ) has not the same impact.

**Table 2 Regression Analysis: Predictors of Psychological Strain**

R	R-square	Adjusted R-square	F	Sig.
.952	.908	.906	641.698	.000*
Variables	B	t	Std. Error	Sig
Role Overload	.468	34.941	.014	.000*
Role Ambiguity	.474	26.773	.018	.000*
Role Conflict	.029	1.728	.020	.086

Note: \* $p <.05$

From the results are shown in Table 3, it is also evident that role overload explained a significant amount of variance in organization commitment ( $R = .706, R^2 = .498, F = 57.171, p = <.05$ ). The same held true for which independent variables had the highest effect on psychological strain and based on the results, role overload ( $B = -.044, t = -.973, p >.05$ ) and role ambiguity ( $B = -.062, t = -1.056,$

$p > .05$ ) had insignificant effects on strain but role conflict had a significant effect on the same ( $B = .872, t = 12.972, p < .05$ ).

**Table 3 Regression Analysis: Predictors of Organization Commitment**

R	R-square	Adjusted R-square	F	Sig.
.706	.498	.489	57.171	.000*
Variables	B	t	Std. Error	Sig
Role Overload	-.044	-.973	.046	.332
Role Ambiguity	-.062	-1.056	.059	.292
Role Conflict	.872	12.972	.067	.000*

Note: \* $p = < .05$

In order to confirm mediating effects, three required criteria were established to test the hypothesis of mediating effects. The first criterion is that the independent variable should be related to the mediating variable. Secondly, is that the mediating variable should be related to the dependent variables. The last criterion is that the significant relationship between the independent and dependent variables will be decreased with the introduction of the mediating variable, in which case the mediating effect is partial or the relationship will no longer remain significant when the mediator is controlled. All three criteria were partially met for this study's hypotheses, mediating models were used to test the mediating role of work engagement between psychological strain from a side; and role conflict, role ambiguity, role overload from another side.

First, the mediating model was tested by the criteria mentioned above and the results of the regression analysis. It turned out that role overload was not related to work engagement and was therefore dropped from the analysis. Table 4 shows that the model had a cumulative variance explaining 0.554 of psychological strain. Role ambiguity explained reduced variance ( $B = .474, < .000$  to  $B = .386, < .000$ ) while role conflict explained increased variance ( $B = .029, > .086$  to  $B = .103, > .400$ ). Notably, work engagement partially mediated between role ambiguity and psychological strain but not role conflict and psychological strain

**Table 4 Regression Analysis Results: Work Engagement and Organization Commitment as Mediators**

	Psychological Strain		Organization Commitment	
	B(t)sig	B(t)	B(t)	B(t)
<b>Role Ambiguity</b>	.474* (26.773, .000)	.386* (5.28, .000)	---	---
<b>Role Conflict</b>	.029 (1.728, .086)	.103 (.84, .400)	.851* (13.03, .735*)	(6.39, .00)
R = .952, R2 = .908			R = .702, R2 = .468	
Adjusted R = .916			Adjusted R = .490	
F = 641.698			F = 169.811	
<b>Work-Engagement</b>				
R = .554, R2 = .307			R = .705, R2 = .497	
Adjusted R = .294			Adjusted R = .491	
F = 25.488			F = 85.913	

Note: \*p = <.05

In the second mediation model, the hypothesis of work engagement mediating role on the relationship between job demands constructs and organizational commitment was tested. The first criterion was verified, and it revealed that role overload was not related to organizational commitment. Secondly, it revealed that only role conflict was related to work engagement, which is the mediating variable. Thus, the mediating effects were tested for the relationship between role conflict and organizational commitment.

The model's cumulative variance that explained psychological strain was 0.554. The role conflict explained variance of organizational commitment decreased (B = .872, <.000 to B = .735, <.000), with the introduction of work engagement into the equation. Therefore, work engagement was found to have a partial mediating effect between role conflict and organization commitment. Role

overload contributed significantly to the explained variance ( $\Delta R^2 = .257$ ,  $F(21.311) = .000$ ,  $p < .05$ ), with role overload insignificant at ( $B = -.143$ ,  $t = -.351$ ,  $.726 > .05$ ). Moving on to role ambiguity, it significantly contributed to the explained variance ( $\Delta R^2 = .297$ ,  $F(25.835) = .000$ ,  $p < .05$ ), with role ambiguity insignificant at ( $B = -.166$ ,  $t = -.346$ ,  $.730 > .05$ ). Lastly, for role conflict, it significantly contributed to the explained variance ( $\Delta R^2 = .484$ ,  $F(56.072) = .000$ ,  $p < .05$ ), with role conflict insignificant at ( $B = .666$ ,  $t = 1.489$ ,  $.138 > .05$ ).

## Discussion and Implications

Regardless of the studies dedicated to examining the stress-strain among teaching staff members and the stress outcomes on the personal and organization, it is still important to shed light on the factors in order to expound on the reason why some lecturers appear to overcome difficulties without having negative outcomes, while others have a tendency to be dysfunctional. Hence, to answer this call, the present study contributes to the literature on job demands resource JD-R model brought forward by Schaufeli and Bakker (2004) as it determines the effects of factors in the context of lecturers.

The study found that job demands (role overload, role ambiguity, and role conflict) are partially related to psychological strain, with role overload positively related to the same. This result is aligned with the study of Mulholland et al. (2013) that found the difficult time that academics have in achieving their assigned tasks because of task overload involving tight time deadlines, limited times, and increased job responsibilities, which could all result in psychological strain. The insignificant result was also reported by Kebelo and Rao (2012) who revealed no significant relationship between role ambiguity and strain. Moreover, in Fako's (2010) study employees perceiving unambiguous responsibilities were not as likely to experience stress compared to their counterparts. With regards to role conflict, the findings of the present study are aligned with that of Idris's (2011) result that did not support the prediction of strain by role conflict, this may be attributed to the fact that the study sample was not provided

rules and their roles were unclear and hence, job demands are just potential stressors, which could lead to strain in some circumstances.

On the basis of JD-R model, work demands and related work variables have a partial and sequential mediating and moderating effect on the stress-psychological strain relationship. This study contributed to the JD-R model and stress-strain relationship literature by including work engagement. Given its purposes, the study has several theoretical implications. The main implication of which is the extension of the stress-strain literature and the demonstration that work engagement does mediate job demands-psychological strain relationship. In prior literature, the focus is mainly laid on work-related variables moderating effect on the same, with the mediating effects of work engagement largely ignored (Noesgaard & Hansen, 2017; Priyadarshi & Raina, 2014; Yalabik et al., 2013; Sulea et al., 2012).

Following the JD-R model, the study conducted an analysis of the work engagement mediating role between stressors-strain factors to deepen the insight into the model and to respond to the call of past studies for the same (Noegsgaard & Hansen, 2017; Priyadarshi & Raina, 2014). The study also resolved the limitations of prior studies which were confined to the job-demands strain relationship (e.g., Idris, 2011; Fako, 2010; Sulea et al., 2012). The empirical findings of the present study indicated that work engagement has a mediating role in the relationship between job demands and psychological strain and they are consistent with the prior studies (Noegsgaard & Hansen, 2017), who reported the mediating role of work engagement on work-related factors and organizational outcomes (e.g., Ferrer & Morris, 2013; Priyadarshi & Raina, 2014; Yalabik et al., 2013). In this regard, past studies have examined this proposition but only a few have targeted university lecturers.

This means that the present study contributed to the understanding of the stressors-strain relationship and mediating and moderating variables among a specific context (lecturers in universities), and it adds to extant knowledge. Concerning the practical implications of this study, the findings confirmed that job demands are partially

related to psychological strain, which has also been confirmed in past studies. In relation to this, decision-makers should mitigate job demands and distribute job tasks among employees based on their skills and specialties or come up with novel strategies (creating opportunities for employees) relating to training and scheduling regular activities of leisure.

## Conclusion

The findings of the present study indicated that work engagement is associated with individual outcomes in many ways. Work engagement partially mediated the relationship between role ambiguity and psychological strain and that of role conflict and psychological strain, with partial indirect paths confirming the support for the two hypotheses. The hypothesized mediating role of work engagement has been found in this study is consistent with past studies. For this relationship, studies that examined the effect of work engagement on the stress-outcomes relationship have been few and far between, with several theoretical proposals made lacking empirical support (e.g., Noesgaard & Hansen, 2017; Priyadarshi & Raina, 2014; Yalabik et al., 2013; Schaufeli & Bakker, 2004).

This significant mediating role can be attributed to the fact that lecturers with low ambiguity levels are not as likely to experience strain in their workplace when they are going about university activities. Moreover, in Idris's (2009) study, job stressors and organization outcomes are indirectly related. In the present study, work engagement also partially mediated the independent-dependent relation, which can be attributed to the fact that because lecturers are familiar with their work roles and duties, their strain level is not high. The partial mediating effect of work engagement between stress and organizational commitment was also supported by Molholland et al. (2013), with the pathway from stress to strain dependent on the interaction and how the individual perceived and experienced job characteristics.

According to the JD-R model, role ambiguity and role conflict relationships with psychological strain and organizational commitment were partially mediated. The proposed moderating

hypotheses of the present study were partially supported and this is consistent with prior studies by Karatepe (2011), who found that resources such as, autonomy and organizational support moderate the relationship between emotional dissonance and symptoms of burnout. Hence, this study contributed to the call to examine the moderating effect of tolerance for ambiguity on the job demands relationship with other variables.

This study has some limitations, the first being that the study sample may not be considered as representative of the general population owing to the fact that it was chosen from only a single Saudi university. This could limit the demographical and geographical generalization but, on this basis, future studies are furnished with avenues for research. Future studies can adopt the same design and framework but include all Saudi universities. The second limitation of this study concerns the quantitative data collection method adopted via the self-report approach. Participants had ample chances to manipulate their answers based on several reasons; they may have become bored with the questionnaire so they chose answers that they think would satisfy the researcher and get over with the answering as quickly as possible. Therefore, the respondents to the survey may have (voluntarily/involuntarily) chosen answers that were not true to their experiences. Therefore, it is recommended that future authors make use of the qualitative approach to provide deeper insight into the perception of lecturers in universities.

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