Does meaningful work encompass support towards supervisory, worker and engagement relationship?

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Abstract

Purpose – This study aimed at examining the influence of two important elements of social supports, namely supervisor support and coworker support, on work engagement among employees in the university setting. The study also further examined the mediating potentials of meaningful work on the relationships between the former and the latter.

Design/methodology/approach – The sample study comprised academic and managerial staff members from a public-sector university in Malaysia. Out of the 420 distributed questionnaires, 216 were received back from which 177 were found useable and hence were taken further for final data analysis. Statistical software of SPSS and Smart PLS 2.0 M3 were used to perform data analysis.

Findings – Supervisor support and coworker support were found to be significant predictors of work engagement. Further, meaningful work was found mediating these relationships.

Originality/value – The findings enrich literature of social support, work engagement, and meaningful work. The study is one of the foremost empirical works examining the mediating potential of meaningful work on the relationships between two social resources (supervisor support and coworker support) and work engagement. The issue of work engagement is evident in several mainstream work sectors alongside the education sector. Hence, the research findings are worthy to help understand work engagement issues and how to tackle it in the education setting.

Keywords Social support, Supervisor support, Coworker support, Meaningful work, Work engagement **Paper type** Research paper

1. Introduction

Workers are a distinguished resource incomparable to others within the dogma of resource tangibility; first and foremost, workers are human who have concern for their well-being, psychological need, career expectation. In fact, attention to such difference in terms of the impact on individual well-being and optimal functioning is evident in empirical works

Informed consent: The participants were informed about the purpose of our study and that they would be required to respond to our survey. Participants were also informed that they had a right to decline to participate in survey. They also had a right to withdraw from our survey at any time point. The participants were also informed that their personal data would be kept confidential hence this survey does not pose any potential harm to their reputation professionally or personally.

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trending on the focus of positive psychology (Csikszentmihalyi and Seligman, 2000), hence psychological resourcefulness. This psychological resourcefulness is popularly known as "work engagement" (Bakker and Bal, 2010; Salanova *et al.*, 2005; Shimazu *et al.*, 2012).

Work engagement is a positive psychological mindset that enables an individual to showcase high energy, immersion and focus toward the job (Schaufeli *et al.*, 2002). It is a healthy work state that puts an individual to perform with zeal, zest and resilience (Maslach and Leiter, 2008). Work engagement is crucial for organizations aiming to improve employees' job performance (Bakker and Bal, 2010). Such researchers as Schaufeli *et al.* (2010) had highlighted the prominence of work-engaged employees for businesses in the 21st century, as they could give their best toward achieving the organizational goals. Work-engaged people are high in job performance (Ten, Brummelhuis and Bakker, 2012; Bakker and Demerouti, 2008), customer satisfaction (Bellon *et al.*, 2010), and citizenship behavior (Rurkkhum and Bartlett, 2012; Saks, 2006). Such individuals, on an average, are 20% high in customer ratings, satisfaction, and profitability for their respective companies. Conversely, work disengaged employees can result in poor performance, passive behaviors, and more customer complaints.

Several notable recent surveys provide an indication on the significance and equally emphasize on the issue of employee work engagement for organizational performance. The global-scale Gallup Incorporation's engagement survey reported that, on average, 87% of the employees globally were found not engaged at work, leaving behind only 13% who were engaged. This survey involved 1.4 million employees from 142 countries (Crabtree, 2013; Sorenson, 2013). Likewise, the survey pertinent to the global condition of engagement carried out by Deloitte (2015) had revealed that as high as 87% of organizations around the globe were indeed facing the issue of lack of work engagement among employees.

As much and as often as organizations are confronted by the fast-changing external operating environment, workers are also pushed to a greater ceiling limit. In the fast-changing world today, the psychological pressure and work burden workers experience are conceivably growing, as commitment and expectations from them are stretched over ever more demanding and evolving work conditions. As such, manifestations such as loss of interest in continuous service and lower job commitment, and diminished job engagement are some evidence of performance challenges confronting organizations. Thus, work engagement has become increasingly important, as studies over time demonstrated its prominence and that majority of employees-related issues these days were found associated with employees' inability in bringing that needed energy and dedication at work (Salanova *et al.*, 2005). This phenomenon happens in a variety of sectors, no exception to any.

The current study brings to the attention that the above situation is not far from what is happening among the academic employees in the institutions of higher learning (IHLs). Past studies presented evidence that lecturers in IHLs of Malaysia expressed the increasingly stressful working environment (Basarudin *et al.*, 2016). The phenomenon is not complex to comprehend given the increased competition and drive of universities for higher institutional ranking locally and internationally. Consequently, lecturers are tasked with greater workloads and goals related to fulfilling their corresponding key performance indicators (KPI). It is noticeable that the role of lecturers has been reportedly extended from lecturing to a variety of other responsibilities. In fact, it was also found that the workloads are being disproportionate with the benefit received (Basarudin *et al.*, 2016). The prevalence of stress among lecturers in the Malaysian universities are real. A study in Malaysia has reported the prevalence of stress among academic staff to be 22.1% (Ismail and Noor, 2016).

As stress at work can significantly disrupt the emotional stability of the affected individual which then induces a state of disorganization in personality and behavior (Ofoegbu and Nwadiani, 2006), it is critical to look into this matter. When lecturers are overloaded and stressed out, they tend to be unable to stay focus and engaged. Notably, such

a situation does not only affect the lecturers, but its impact also goes on to affect the students. Further, work engagement is also positively associated with employee productivity (Hanaysha, 2016). Further, a recent study by Abdul Hamid *et al.* (2018) has also called for more studies related to such work-related stress issue among IHL lecturers in Malaysia. The researchers asserted that despite the extensive change in IHLs of Malaysia regarding lecturers' workload and the resultant stress, there are only handful of studies that had looked into the effect of such stress on lecturers' well-being.

While it is, at best, hopeful that lecturers are able to carry the renewed responsibilities of the university, it is also deeply concerned that they would not become stressful due to the workloads. As much as stress is a psychological element, the current study is interested in finding whether some sort of psychological fine-tuning process could mediate the impact of the phenomenon, such that stress would not jeopardize lecturers' work engagement and productivity. Hence, the formation of meaningful work. The current study believes that if lecturers feel that all those additional workloads are meaningful to them, it could be potentially hypothetical to remove or at least reduce the stress factor.

Given the above rationalization, the current study was interested in examining work engagement and the mediating effect of meaningful work in the context of universities in Malaysia. In the view of enhancing work engagement among workers, the literature study had informed two potential job resources that address workers' psychological needs, namely support from supervisor and support from coworker. According to researchers such as Bakker and Bal (2010), and Crawford *et al.* (2010), job resources in the form of the psychological tenet like support from supervisor and support from coworker are valuable for constructive development of work engagement, as they were found to foster energy, dedication and vigor within employees.

Specifically, the examination of meaningful work as the mediating variable between psychological support (from supervisor and coworkers) and work engagement is different from the previous line of conventional studies which mostly focuses on employee commitment and or satisfaction (Geldenhuys *et al.*, 2014; Kuvaas, 2008). This study calls for scrutiny into variable which is of closer relevance to psychological appeal of workers, namely meaningful work. Meaningful work is judgment of an individual about their work being purposeful and important (Rosso *et al.*, 2010). Meaningful work bridged the gap between workers' psychological longing for appreciation and the organization's well-being. Employees are likely to perceive work as meaningful when they can clearly understand their work and see how their personal abilities could be matched to accomplish valuable contributions for their organization and their psychological need.

Given the alluded, the current study was set out to establish empirical understandings as to how meaningful work could mediate the relationship between psychological supports (supervisor and coworker supports) and work engagement outcome in the context of Malaysian HLIs.

2. Literature review and hypotheses development

2.1 Work engagement

Engagement is a psychological component, primarily intrinsic in nature as it related to the inner self of a person (Kahn, 1990). Work engagement was first conceptualized by Kahn (1990), as harnessing and nurturing of organizational employees' selves so that they contribute physically, cognitively and emotionally towards their work roles. Work engagement is a positive psychological mindset that enables an individual to showcase high energy, immersion, and focus towards the job (Schaufeli *et al.*, 2002). Another prominent conceptualization of work engagement comes from Maslach and Leiter (2008), according to whom engagement is an energetic state of involvement with personally fulfilling activities

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that enhances one's sense of professional efficacy. In parallel, building upon Kahn (1990) definition of engagement, Rich *et al.* (2010) asserted engagement as individuals investing their hands, head, and hearts in their performance. Likewise, Christian *et al.* (2011) have defined engagement as the holistic involvement and investment of an individual self in terms of cognitive, emotional, and physical energies.

Essentially, work engagement is a healthy work state that puts an individual to perform with zeal, zest and resilience (Maslach and Leiter, 2008). In this view, work engaged employees were high in resilience, energy and absorption, hence giving their best towards the work.

2.2 Supervisor support and work engagement

Relevant to workplace and work engagement, supervisor support and coworker support are two variables recognized as important social support factors. Studies have reported concerning the significance of job resources that principally are psychological work features that could make an effective contribution in fostering work outputs while reducing the negative impact of the stressing work aspects to effectively achieve the work and task goals (Demerouti *et al.*, 2001). Job resources typically include social support from supervisor and coworkers and have been empirically concluded to predict work engagement (Albrecht *et al.*, 2015; Swanberg *et al.*, 2011; Saks, 2006). The coming proceeding sessions discuss supervisor support and coworker support in-depth alongside their empirical relationship with work engagement.

Past studies showed that support and facilitation prospects help people to find a higher purpose in their work (Arnold *et al.*, 2007; Sparks and Schenk, 2001). Social support has been highlighted as featuring facilitation offering, problem resolution, recognition, and cooperation from supervisor and coworkers, bringing about positive attitude and behavioral changes, whereby an individual feels valued and encouraged (Staw *et al.*, 1994). Social support is also found related to satisfaction with job (Cummins, 1989; Ducharme and Martin, 2000), reducing stress (Viswesvaran *et al.*, 1999), and make-compatible to perform the assigned tasks (Byrne and Hochwarter, 2006; Walumbwa *et al.*, 2011).

Specifically, supervisor support "refers to the general opinion and belief that one's supervisor cares about their well-being and appreciates their contribution" (Rhoades and Eisenberger, 2002). Studies in the domain of work engagement found supervisor support as the core influencer of work well-being (Saks, 2006; Rich et al., 2010). These studies concluded that perception about supervisory support significantly enhanced work engagement. This indicates that employees' perceiving positive about their immediate supervisor's support, and recognition feel more energetic, equipped, and engaged at work. Further, other empirical investigations conducted in different occupational settings and work sectors had also provided credence to support the importance of supervisor support in boosting employees' work well-being hence, predicting work engagement (Bakker et al., 2006; Caesens et al., 2014; James et al., 2011; Swanberg et al., 2011). These studies have agreed that regardless of the job nature and sector, supervisor support is of critical significance for everyone. Supervisor's support brings balance in work and family life which helps them to work with more engagement (Swanberg et al., 2011). In view of this, it can be asserted that the way supervisor coach, recognize and acknowledge helps employees to boost well-being at work (Caesens et al., 2014).

Past studies have also demonstrated evidence of supervisory support as a noteworthy predictor of work engagement (Barkhuizen *et al.*, 2014; Swanberg *et al.*, 2011; Xanthopoulou *et al.*, 2007; Mauno *et al.*, 2007; Saks, 2006; Hakanen *et al.*, 2006). For instance, Swanberg *et al.*'s (2011) study on greater supervisory support reported high level of work engagement among workers in the retail sector.

In the sense that supervisor support is crucial for smoothening a subordinate's work and job roles through facilitation, problem-solving, and recognition which further facilitate them to work with high connectivity, energy, and psychological resourcefulness, the following hypothesis is indicated. Meaningful work

H1. There is a positive relationship between supervisor support and work engagement.

2.3 Coworker support and work engagement

Coworker support denotes the amount of support an employee perceives at work from colleagues (Van Dierendonck *et al.*, 1998). Coworker support plays a vital role in facilitating employees in enabling them to perform well at work through boosting psychological well-being (Cho *et al.*, 2018). Workplaces where employees receive adequate support from their coworkers, may encourage workers to express their energy and dedication towards their work and perform their tasks with full immersion (Karatepe *et al.*, 2010).

Further, support from coworkers develops a sense of belonging amongst the peers and active support in job-related problems in a friendly manner, which significantly boosts work well-being (Anitha, 2014). Therein, studies have also empirically asserted that support resources, particularly during complex work situations, can significantly boost energy and work immersion (e.g. Caesens *et al.*, 2014; Bakker *et al.*, 2007; Schaufeli and Bakker, 2004). These studies have generally agreed that coworkers can actively keep each other engaged at work through supporting, acknowledging, and facilitating. This leads towards comprehending that since coworker support is an immediate, firsthand social support prospect, its importance and significance in the workplace is indispensable to bring the best of people efforts at work.

In fact, studies across various sectors and geographical settings have also provided evidence of the promising role of coworker support in nurturing work engagement (Caesens *et al.*, 2014; Hakanen *et al.*, 2005; Tiapale *et al.*, 2011; Xanthopoulou *et al.*, 2009; Mauno *et al.*, 2007). For instance, the study of Caesens *et al.* (2014) examined the association between coworker support and work engagement amongst 425 doctoral scholars and found a significant empirical link between these two. Indeed, some of the studies also found coworkers support as highly significant for boosting work engagement, compared to other job resources (Xanthopoulou *et al.*, 2008). The above discussion solidifies that constructive coworker would give rise to the psychological well-being of employees, such that the support would enable them to perform at higher levels of immersion, energy, and absorption. Therefore, the following hypothesis was forwarded.

H2. There is a positive relationship between coworker support and work engagement.

2.4 The mediating potential of meaningful work

Given a situation whereby employees receive considerable help and support from their supervisors and coworkers, it is likely that the work would start making more sense and meaning. Theoretical arguments can be traced back to those outlining different work prospects inducing meaningful ness of work (cf. Hackman and Oldham, 1980). There is empirical evidence available specifically suggesting a strong impact of supervisory authorities such as leaders towards developing meaningfulness of work (e.g. Arnold *et al.*, 2007). Accordingly, scholars have also described that meaningfulness of work is at times the most important prospect for people and drives individuals to considerably enhance their work engagement (Geldenhuys *et al.*, 2014). In fact, some scholarly evidence also refers to supervisory and coworker support as the key ingredients for meaningful work (e.g. Fairlie, 2011). This principally comes from the psychological well-being domain where authors have indicated driving meaning as the key human objective (Britt *et al.*, 2001).

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The term meaning brings a sense of "*life meaning, purpose and coherence*" (Ryff, 2000, p. 132). According to Oldham *et al.* (1976), meaningful work denotes to employee perception about the job being generally significant, valuable, and worthwhile. Meaningful work is basically judgment of an individual about their work being purposeful and important (Rosso *et al.*, 2010). In the views of Shuck and Rose (2013), meaningful work is the significance of work personally perceived by the individual. Meaningful work is when employees believe that the work is significant and serves a vital purpose (Ahmed *et al.*, 2019). An employee is likely to experience work as meaningful when he/she clearly understands the work, their personal abilities, and how efforts made by them can make a valuable contribution towards the organization and social life.

How meaningful work can be associated with work engagement in the capacity that engenders mediating effect can be empirically contended in several ways. First, there has been a positive relationship found between social support and meaningful work. Scholarly evidence indicates the prominence of support at work from supervisors and colleagues in fostering work meaningfulness. For instance, Tummers and Knies (2013) examined the leader-member exchange relationship where they tested how employees felt when their immediate supervisors understood their needs and helped them solve their problems. The study reported a positive impact, which hence highlighted the role of notable contribution from support at work. Equally, the study by Paterson et al. (2014) landed support for the impact of support climate at work towards what they referred to as thriving at work, making the work vital and contributory. Thus, the significance of support prospects at work, including supervisors and coworkers, towards boosting the sense of significance and purposefulness of their work is empirically established. In fact, the Meaningful Work Inventory (MWI) developed by Fairlie (2011) has reportedly included supervisor and coworker support as one of the most important pillars to boost employee outcomes, including work meaningfulness.

In addition to the above positive association, the qualitative values of meaningful work are also suggestive. Past studies contended that perceiving work to be meaningful is very important for people at work (Fairlie, 2011b; Jung and Yoon, 2016). Thus, employees should ideally be more connected and immersed with the work that they find meaningful. Other researchers had also asserted the element of meaningfulness as highly relevant to several work outcomes such as motivation, health and happiness (Grant *et al.*, 2007). In addition, a recent meta-analysis also found meaningful work to be related with various work outcomes such as job satisfaction, organizational commitment, efficacy, performance and overall life satisfaction (cf. Hu and Hirsh, 2017).

Also supporting the mediating potential of meaningful work are past scholarly works which demonstrated significant positive association between meaningful work and work engagement; or in other words, meaningful work was found significantly predicting work engagement (Arnold *et al.*, 2007; Britt *et al.*, 2001; Fairlie, 2011a, b; Olivier and Rothmann, 2007; Steger *et al.*, 2013). For instance, such scholars as Fairlie (2011a, b) concluded that employees' perceptions of work being meaningful boost psychological work well-being, thus predicting work engagement. Similarly, Arnold *et al.* (2007) examined employees of a long-term care facility in Canada. The researchers highlighted that job that brings meaning to an employee also plays a critical role in fostering work well-being. Likewise, in the sense that, work being meaningful provides a real purpose for doing the job, Steger *et al.*'s (2013) study found meaningful work to significantly predict work engagement among employees in a major Western research university.

In addition, meaningful work was also found as a notable mediator in past studies pertinent to performance and individual psychological work well-being prospects. For example, the study by Arnold *et al.* (2007), investigated the healthcare sector and reported mediation of meaningful work in the relationship between transformational leadership and psychological well-being. Such evidence helps establish that supportive prospects at work like transformational leaders who are popular for their supportive traits (Kark and Shamir, 2002) can help enhance work well-being In fact, empirical evidence in past studies had also demonstrated the theoretical possibility of the importance of incorporating a mediating variable in enriching explanation for framework of work engagement. For instance, service climate was found to mediate the relationship between job resources and work engagement (Salanova *et al.*, 2005). Similarly, self-efficacy was revealed a significant mediator for the relationship between transformational leadership and work engagement (Salanova *et al.*, 2011).

Above all, the mediating effect of meaningful work on the relationship between work support (supervisory and support) and work engagement is also in congruence with Kahn's (1990) understanding with regards to Conservation of Resources Theory (COR) (Hobfoll, 1989). COR theory asserts that accretion and accumulation of resources is critical for nurturing individual behaviors. The crux of COR theory outlines that people as individuals are driven towards acquiring, securing and fostering resources, and these resources help them to avoid negative consequences. In line with this, it can be theoretically implied that employees who can garner support from coworkers or supervisors would tend to persist on positive work behaviors and avoid the related negative consequences are easily extensible to future complexities and have ruinous implications on the psychological shaping of meaning at works. Such implication is also specified by COR theory, in that value and capitalization of resources are expectedly rising particularly when the stressors at work are high (Hobfoll, 2002).

For instance, the acquisition, retaining and protection of supervisor support, coworker support will be more positively influential when job demands like workload and emotional demands are high. The resources may vary across jobs, personal or organizational levels. It is also notable that the JD-R model of work engagement is also primarily based on the premise of COR theory (Demerouti *et al.*, 2001). Likewise, the COR theory has also been the underpinning theory used in numerous empirical studies which examined work engagement (Caesens *et al.*, 2014; Llorens *et al.*, 2007; Schaufeli *et al.*, 2009; Xanthopoulou *et al.*, 2009; Hakanen *et al.*, 2006, 2008).

Building upon the empirical and theoretical bases discussed above, the current study attempted to test the potential mediating role of meaningful work on the relationship between both social supports (supervisor support and coworker support) and work engagement. Hence, the following hypotheses were forwarded.

- *H3.* Meaningful work mediates the relationship between supervisor support and work engagement.
- *H4.* Meaningful work mediates the relationship between coworker support and work engagement.

3. Methodology

3.1 Procedures and sample

Data for the present study was gathered from among academic and managerial staffs in Universiti Utara Malaysia, Kedah. Using the simple random sampling approach, a total of 420 sets of questionnaires were distributed. The survey yielded 216 returned questionnaires, out of which 177 were found useable. This number represented a response rate of 51.4%. Of the 177 respondents, 113 were female, and 44 were male workers. They were composed of 116 lecturers, 6 administrative officers, and 38 heads of management.

All hypothesized relationships were tested using Partial Least Squares structural equation modeling. Specifically, SmartPLS 2.0 software was used for data analysis

(Ringle *et al.*, 2005). Bootstrapping procedures was used to assess the significance of the formulated path coefficients. Following the recommendations for two-stage analytical procedures (Anderson and Gerbing, 1988), measurement model assessment was performed to assess the reliability and validity of the constructs followed the assessment of structural model for hypotheses testing.

3.2 Measurement

Work engagement was measured using the nine-item Utrecht university scale, also popularly known as Utrecht Work Engagement Scale (UWES). The scale has been extensively employed in scholarly studies of work engagement (Seppala *et al.*, 2009; Schaufeli *et al.*, 2002). The reliability evidence for the UWES scale was provided by a more recent study which reported a Cronbach's alpha value of 0.86 (Breevaart *et al.*, 2016).

Supervisor support was gauged through an eight-item PSOS scale of Rhoades *et al.* (2001). The scale has also recorded a Cronbach's alpha value of 0.87 in a more recent study (Pati and Kumar, 2010).

Coworker Support was measured using the nine-item scale of Van Veldhoven and Meijman (1994). The scale contains items pertaining to relations with the coworkers, availability of help, appreciation, and conflicts (if any) with the coworkers. A Cronbach's alpha value of 0.81 was reported in a study by Schaufeli and Bakker (2004).

Meaningful work was captured using the 7-item scale by Ashmos and Duchon (2000). The scale reported a Cronbach's alpha value of 0.85. The scale comprises positive worded questions, inquiring about experience of joy, connection, meaning, and significance of workers' work towards their lives and broader life goals.

4. Analyses and findings

4.1 Assessment of measurement model

Prior to hypotheses testing, all the constructs were subject to examination of construct reliability and validity (convergent validity and discriminant validity). Table 1 demonstrates the scores of standardized loadings, average variance extracted (AVE), and composite reliability retrieved from the measurement model analysis. According to Chin (1998), individual item loadings should be 0.5 or above. On this basis, four and one items of coworker support and meaningful work were deleted, respectively. Further, composite reliability scores of above 0.70 were also observed in all constructs understudied, ranging from 0.918 to 0.968. These scores were consistent with the threshold recommended by of Hair *et al.* (2014). The analysis also revealed evidence of convergent validity, given that AVE values of all constructs were well above the acceptable threshold of 0.50 (Bagozzi and Yi, 1988). For the purpose of discriminant validity assessment, recommendations Fornell and Larker (1981) were employed. Accordingly, the square root values of AVE should be greater than the correlation coefficient between the constructs of the model. As reported in Table 2, this criterion was met.

4.2 Structural model assessment

Depicted in Figures 1 and 2 are the structural models run for two direct associations and two mediating effects, respectively.

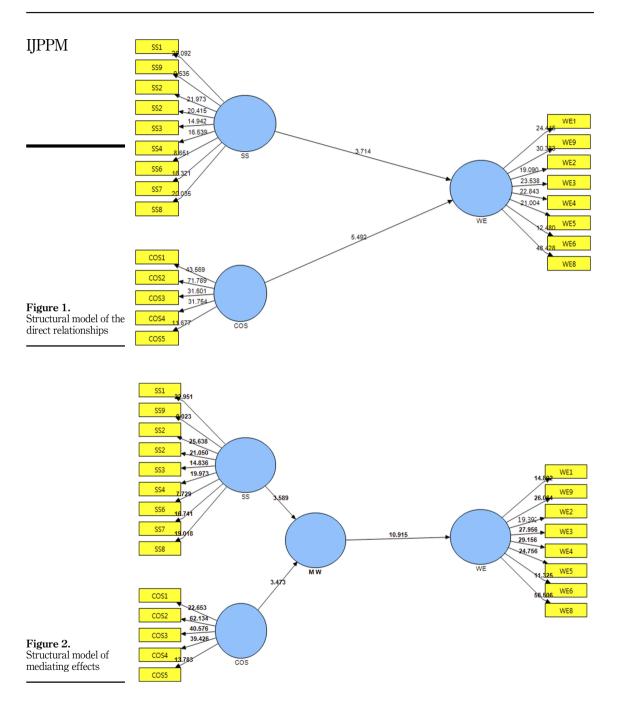
Figure 1 revealed statistical evidence for supporting Hypotheses 1 and 2. As was hypothesized, supervisor support was found to have a significant strong influence on work engagement. ($\beta = 0.306$, t = 3.714, p = 0.00). Similarly, assessment of the path coefficients ($\beta = 0.398$) and the significance level (*t*-value = 5.492, p < 0.000) in Figure 1 also indicated a rather strong significant relationship between coworker support and work engagement.

To test the mediating hypotheses, the study followed the bootstrapping procedures recommended by Preacher and Hayes (2008). As depicted in Figure 2, Hypothesis 3 which

Work engagement 0.692 0.947 0.279 WE2 0.757 WE3 0.879 WE3 0.879 WE5 0.839 WE6 0.756 WE9 0.908 WE9 0.890 0.791 0.968 0.408 WE9 0.924 WE9 0.928 0.408 MW2 0.929 MW4 0.778 MW5 0.930 MW4 0.778 MW5 0.930 MW6 0.928 Supervisor support SS1 0.836 0.565 0.920 Supervisor support SS1 0.836 SS3 0.751 SS4 0.770 SS8 0.565 0.920 SS6 0.555 SS7 0.799 SS8 0.692 0.918 Coso COS1 0.849 COS2 0.908 COS2 0.565 CoS2 0.908 COS4 0.692 0.918 Table 1 Note(s): CR denotes composite reliability Measurement mode <t< th=""><th>Constructs</th><th>Items</th><th>Standardized loading</th><th>gs AVE</th><th>E</th><th>CR</th><th>R-square</th><th>Meaningful work</th></t<>	Constructs	Items	Standardized loading	gs AVE	E	CR	R-square	Meaningful work
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tested the mediating potential of meaningful work on the relationship between supervisor support and work engagement, was found significant. The bootstrapping procedure revealed an indirect effect with a rather strong significance ($\beta = 0.171$ [0.324*0.528], *t*-value = 5.459). Further, the significant indirect effect was also supported by the results of the 95% bootstrapping confidence interval [LL = 0.110, UL = 0.232], which did not straddle zero.

Likewise, statistical significance was also evident for Hypothesis 4. Hypothesis 4 was put forth to test the mediating effect of meaningful work on the association between coworker support and work engagement. The mediated path was found significant at the *t*-value of



4.299 ($\beta = 0.183$ [0.347*0.528]), with the 95% bootstrapping confidence interval not straddling zero [LL = 0.100, UL = 0.267]. The results of all hypotheses testing are summarized in Tables 3 and 4

5. Discussion and implications

The study was aimed at examining the influence of two important elements of social supports, namely supervisor support and coworker support, on work engagement (Hypothesis H1 and Hypothesis H2). The study further examined the mediating potentials of meaningful work on these relationships (Hypotheses H3 and H4).

First and foremost, the study found significant statistical support for Hypotheses H1 and H2, and that supervisor support and coworker support were found to assert significant influence on work engagement. These findings corroborated past studies of positive effects of both, supervisor and coworker support on work engagement. Generally, the findings upheld that support at work was indeed valuable, and that facilitation features from supervisor and coworker were able to provide psychological booster that would move employees to deliver their best in the assigned roles and responsibilities, and hence high engagement in their work (Taipale *et al.*, 2011; Xanthopoulou *et al.*, 2009).

Specifically, the finding of significant positive impact of supervisor support on work engagement is in agreement with past studies which heightened the contribution of healthy supervisor support towards fostering employees' psychological capabilities, such that they were able to bring energy, dedication, and immersion in their work (Bakker *et al.*, 2006; Caesens *et al.*, 2014; James *et al.*, 2011; Swanberg *et al.*, 2011). Likewise, the significant influence of coworker support on work engagement found in this study can also be traced back to previous scholarly works (Demerouti *et al.*, 2001; Hakanen *et al.*, 2008; Taipale *et al.*, 2011; Xanthopoulou *et al.*, 2008, 2009). Both the significant positive influences were indeed consistent with the explanation of Conservation of Resources Theory (Hobfoll, 1989), which asserts the positive influence of resources at work on employee behaviors. According to Conservation of Resources Theory, *people tend to obtain, retain and protect resources which they view to be* vital to enhance their work behaviors and outcomes.

Further, the current study had also found significant mediation effects of meaningful work on both the direct effects: supervisor support-work engagement association and coworker support- work engagement, hence supporting hypotheses H3 and H4. The significant mediation was in line with COR theory (Hobfoll, 1989). As accretion and accumulation of resources is viewed as critical to nurture individual behaviors, individuals therefore are driven towards acquiring, securing, and fostering resources, and that these resources help them avoid negative consequences. In the context of workload and the

Hypothesis	Relationship]	Beta (β)	Standa	ard error	t-va	alue	Decision	Table 3.
H1 H2	$\begin{array}{l} \mathrm{SS} \rightarrow \mathrm{WE} \\ \mathrm{COS} \rightarrow \mathrm{WE} \end{array}$	0.398 0.306		0.072 0.082		5.492 3.714		Supported Supported	Hypotheses testing results of direct relationships
Hypotheses/ Relationship	Path a	Path b	Indirect effect	SE	<i>t</i> -values	conf	trapped idence erval 95% UL	Decision	
H3: SS \rightarrow MW \rightarrow W H4: COS \rightarrow MW \rightarrow V Note(s): SE denote	VE 0.347	0.528 0.528 ror	0.171 0.183	0.031 0.043	5.459 4.299	$\begin{array}{c} 0.110\\ 0.100\end{array}$	0.232 0.267	Supported Supported	Table 4. Results of mediating effect

consequential adverse emotions among lecturers in universities, it can be implied that, employees who can garner supports from coworkers or supervisor would tend to avoid the related negative consequences caused by the emotional triggers and workload, and hence are better able to persist on positive work behaviors. This has an important implication to the constructive formation of good psychological element like meaningfulness of work. Further, COR theory also specified that the value and capitalization of resources are expectedly rising particularly when the stressors at work are high (Hobfoll, 2002).

In addition, there is also empirical evidence demonstrating the theoretical potentials of meaningful work as a significant mediator in past studies which focused on individual performance and psychological work well-being prospects (Arnold *et al.*, 2007; Cai *et al.*, 2018; Soane *et al.*, 2013). In fact, it is also evidently suggestive in past studies about the importance of incorporating a mediating variable in studies of work engagement.

Besides, the significant mediating effect was also partly explicable by both significant indirect effects in this study. Statistical significances in these partial effects are also consistent with past scholarly works. Empirical indications exist in support of the positive relationship between social supports and meaningful work. For instance, Tummers and Knies (2013) examined the leader-member exchange relationship where they tested how employees felt when their immediate supervisors understood their needs and helped them solve their problems. The study revealed a positive impact, which highlighted the role of contribution from support at work. Likewise, significant positive association between meaningful work and work engagement is also evident (Arnold *et al.*, 2007; Britt *et al.*, 2001; Fairlie, 2011a, b; Olivier and Rothmann, 2007; Steger *et al.*, 2012).

In implication, social support features (supervisor support and coworker support) at work play a crucial role in improving employees' work engagement in the university setting. In order to promote employees' work engagement, university's staff upgrading, and enhancement efforts should focus on how healthy and constructive work relationship could be developed between employees with their supervisors and coworkers. Specifically, the university work community should seek creative approaches which promote efficient facilitation from supervisors to subordinates, good relations building between coworkers, inculcation of appreciative culture and friendly gestures, and etcetera. As a matter of fact, the significant influence of coworker support on an employee's psychological state of engagement in work could be comprehended rather straight forward. This is because in a work environment, there are countless chances where an employee is required to engage with other employees to accomplish official work tasks assigned. Along the way, employees establish reliance on their coworkers and build friendships through sharing.

However, universities must pay attention to ensure work meaningfulness in positions held by their employees if they aim to ensure the continuous influence of social supports on employees' work engagement. Enrichment of job tasks should be monitored such that employees would see their worthiness in the eyes of the employer and feel psychologically valued. Meaningfulness of work, while manifesting the intrinsic value and usefulness of oneself as an employee hired for a particular job, it also induces emotional attachment towards the job in employees themselves, which boosts their level of immersion into their job.

Further, to sustain the positive influence of social support on employees' work engagement, at a more specific level, the university work community should also strive to facilitate employees in developing their very own sense of meaningfulness with their work. Such an initiative may take various forms of development, such as those that would help employees see how their work can be aligned to their career goals, life plans, and general achievement aims (Ashmos and Duchon, 2000). In short, it was also fair to establish that employees who perceived meaningfulness in their work were indeed in a better psychological stance to see how social supports from supervisors and coworkers could be capitalized to help their working and engagement in their own job task.

6. Contributions of the study

6.1 Theoretical implications

The theoretical contributions of the study are multifold. At first, we examined the relationship between supervisor support, coworker support, and work engagement to further strengthen the available empirical shreds of evidence pertaining to these relationships. Notably, the study tested the mediation of meaningful work to unearth the potential "backend" it plays in giving rise to these relationships. The results have empirically signified the encouraging role of meaningful work as an (Cai et al., 2018), to predict positive behaviors and outcomes such as work engagement. Accordingly, the study attempted to examine these factors in the education sector of Malaysia whereby, no significant empirical attempts could be tracked from the prior studies. Equally, our findings have significantly contributed towards enriching theoretical understanding of positive work-based state by highlighting the back-end role of meaningful work towards nurturing supervisor support, coworker support and work engagement relationship. In parallel, the findings of the present study have also reinforced Conservation of Resources Theory (Hobfoll, 1989), explaining how resources at work can enhance individual work behaviors and outcomes. In addition, the significant mediation results in the study have brought to light the potential of meaningful work as a mechanism to explain the formation of positive impacts of both supervisor support and coworker support to predict work engagement. Notably, in some way, our findings have also responded to Ahmed et al. (2016), stressing on examining meaningful work and work engagement association. Thus, the study offers a new understanding and extends the application of support factors to bring meaning to work for enhanced employee behaviors and outcomes.

6.2 Practical implications

The positive results of the present study have re-energized the connection between supervisor support, coworker support, and work engagement thus, underlining interesting prospects for commercial practitioners towards understanding work engagement prediction. The study has highlighted how meaningful work may help organizations to address the grieving issue of work engagement. The findings outline that for businesses offering healthy supervisor and coworker support to employees to give their utmost towards the assigned job roles, efforts should also be made to make them view their work as meaningful.

More importantly, the significant results pertaining to meaningful work highlight new arena that practitioners may focus on helping address the work engagement crisis. Therein, the study encourages practitioners to outline and take responsive efforts to help employees view their work to be significant, contributory, and worthy for themselves and the organization at large. For this, organizational authorities may work on the design and implementation of prospects (i.e. coaching and mentoring) that will help employees understand and deepen the psychological association with the work by realizing the important and contributory nature of their work. Accordingly, organizational leaders may also consider re-thinking on the different job roles and working relationships to see how they could be reformed to not only satisfy employees' extrinsic desires but also the intrinsic prospects such as meaningful work. Equally, organizations may also try to see if they could provide additional features such as learning and career growth opportunities to help enhance work meaningfulness (Ahmed and Ismail, 2020) to boost work engagement.

6.2.1 Limitation and scope for future research. While there are worth-noting contributions, there are some limitations. Firstly, the study collected cross-sectional data to test the hypothesized relationships, limiting postulations of causal inferences. Hence, longitudinal studies on the model could be an avenue for future exploration. Secondly, despite the fact that

the present model was established based on theoretical and empirical bases, there could be other alternatives to consider. For example, testing meaningful work perception as the moderator on the relationship between supervisor support, coworker support, and work engagement. Accordingly, the data was collected through single source which raises the issue of monomethod bias. Though, this may not be a critical risk factor towards the present study results' validity, as there was no correlation between the variables of the study was found (Lindell and Whitney, 2001). Accordingly, the study has responded towards the calls, highlighting the acute significance of meaningful work. Notably, the findings have advanced our understanding of meaningful work and how it can interplay in between provided job resources at work for profound employee behaviors and outcomes.

References

- Ahmed, U. and Ismail, A.I. (2020), "Meaningful work and COVID-19: a way forward through LDW model", Annals of Contemporary Developments in Management and HR (ACDMHR), Vol. 2 No. 4, pp. 27-32.
- Ahmed, U., Majid, A., Al-Aali, L. and Mozammel, S. (2019), "Can meaningful work really moderate the relationship between supervisor support, coworker support and work engagement?", *Management Science Letters*, Vol. 9 No. 2, pp. 229-242.
- Ahmed, U., Majid, A.H.A. and Zin, M.L.M. (2016), "Meaningful work and work engagement: a relationship demanding urgent attention", *International Journal of Academic Research in Business and Social Sciences*, Vol. 6 No. 8, pp. 116-122.
- Albrecht, S.L., Bakker, A.B., Gruman, J.A., Macey, W.H. and Saks, A.M. (2015), "Employee engagement, human resource management practices and competitive advantage: an integrated approach", *Journal of Organizational Effectiveness: People and Performance*, Vol. 2 No. 1, pp. 7-35.
- Anderson, J.C. and Gerbing, D.W. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-423.
- Anitha, J. (2014), "Determinants of employee engagement and their impact on employee performance", International Journal of Productivity and Performance Management, Vol. 63 No. 3, pp. 308-323.
- Arnold, K.A., Turner, N., Barling, J., Kelloway, E.K. and McKee, M.C. (2007), "Transformational leadership and psychological well-being: the mediating role of meaningful work", *Journal of Occupational Health Psychology*, Vol. 12 No. 3, pp. 193-203.
- Ashmos, D.P. and Duchon, D. (2000), "Spirituality at work: a conceptualization and measure", *Journal* of Management Inquiry, Vol. 9 No. 2, pp. 134-145.
- Bagozzi, R.P. and Yi, Y. (1988), "On the evaluation of structural equation models", *Journal of the Academy of Marketing Science*, Vol. 16 No. 1, pp. 74-94.
- Bakker, A.B. and Bal, M.P. (2010), "Weekly work engagement and performance: a study among starting teachers", *Journal of Occupational and Organizational Psychology*, Vol. 83 No. 1, pp. 189-206.
- Bakker, A.B. and Demerouti, E. (2008), "Towards a model of work engagement", *Career Development International*, Vol. 13 No. 3, pp. 209-233.
- Bakker, A.B., Emmerik, H.V. and Euwema, M.C. (2006), "Crossover of burnout and engagement in work teams", Work and Occupations, Vol. 33 No. 4, pp. 464-489.
- Bakker, A.B., Hakanen, J.J., Demerouti, E. and Xanthopoulou, D. (2007), "Job resources boost work engagement, particularly when job demands are high", *Journal of Educational Psychology*, Vol. 99 No. 2, pp. 274-284.
- Barkhuizen, N., Rothmann, S. and Van de Vijver, F.J. (2014), "Burnout and work engagement of academics in higher education institutions: effects of dispositional optimism", *Stress and Health*, Vol. 30 No. 4, pp. 322-332.

- Basarudin, N.A., Yeon, A.L., Yaacob, N. and Yusof, R. (2016), "Faculty workload and employment benefits in public universities", *International Review of Management and Marketing*, Vol. 6 No. S7, pp. 73-82.
- Bellon, A.E.-C., Nancy, R., Roscoe, D., Samuel, L. and Eric, D. (2010), "Employee engagement and customer satisfaction", *Paper Presented at the Allied Academies International Conference*, Louisiana.
- Breevaart, K., Bakker, A.B., Demerouti, E. and Derks, D. (2016), "Who takes the lead? A multi-source diary study on leadership, work engagement, and job performance", *Journal of Organizational Behavior*, Vol. 37 No. 3, pp. 309-325.
- Britt, T.W., Adler, A.B. and Bartone, P.T. (2001), "Deriving benefits from stressful events: the role of engagement in meaningful work and hardiness", *Journal of Occupational Health Psychology*, Vol. 6 No. 1, pp. 53-63.
- Byrne, Z.S. and Hochwarter, W.A. (2006), "I get by with a little help from my friends: the interaction of chronic pain and organizational support on performance", *Journal of Occupational Health Psychology*, Vol. 11 No. 3, pp. 215-227.
- Caesens, G., Stinglhamber, F. and Luypaert, G. (2014), "The impact of work engagement and workaholism on wellbeing: the role of work-related social support", *Career Development International*, Vol. 19 No. 7, pp. 813-835.
- Cai, W., Lysova, E.I., Khapova, S.N. and Bossink, B.A. (2018), "Servant leadership and innovative work behavior in Chinese high-tech firms: a moderated mediation model of meaningful work and job autonomy", *Frontiers in Psychology*, Vol. 9, 1767.
- Chin, W.W. (1998), "The partial least squares approach to structural equation modeling", Modern Methods for Business Research, Vol. 295 No. 2, pp. 295-336.
- Cho, J., Yu, J. and Seo, K. (2018), "Influence of authentic leadership and coworker support on the psychological well-being of staff nurses", *Korean Journal of Occupational Health Nursing*, Vol. 27 No. 2, pp. 89-98.
- Christian, M.S., Garza, A.S. and Slaughter, J.E. (2011), "Work engagement: a quantitative review and test of its relations with task and contextual performance", *Personnel Psychology*, Vol. 64 No. 1, pp. 89-136.
- Crabtree, S. (2013), "Worldwide, 13% of employees are engaged at work, The Gallup Incorporation", available at: http://www.gallup.com/poll/165269/worldwide-employees-engaged-work.aspx (accessed 15 June 2016).
- Crawford, E.R., LePine, J.A. and Rich, B.L. (2010), "Linking job demands and resources to employee engagement and burnout: a theoretical extension and meta-analytic test", *Journal of Applied Psychology*, Vol. 95 No. 5, pp. 834-848.
- Csikszentmihalyi, M. and Seligman, M.E. (2000), "Positive psychology: an introduction", *American Psychologist*, Vol. 55, pp. 5-14.
- Cummins, R. (1989), "Locus of control and social support: clarifiers of the relationship between job stress and job satisfaction", *Journal of Applied Social Psychology*, Vol. 19 No. 9, pp. 772-787.
- Deloitte (2015), *Global Human Capital Trends: Leading in the New World of Work*, Deloitte, available at: http://www2.deloitte.com/content/dam/Deloitte/at/Documents/human-capital/hc-trends-2015. pdf (accessed 2 July 2016).
- Demerouti, E., Bakker, A.B., Nachreiner, F. and Schaufeli, W.B. (2001), "The job demands-resources model of burnout", *Journal of Applied Psychology*, Vol. 86 No. 3, pp. 499-512.
- Ducharme, L.J. and Martin, J.K. (2000), "Unrewarding work, coworker support, and job satisfaction a test of the buffering hypothesis", *Work and Occupations*, Vol. 27 No. 2, pp. 223-243.
- Fairlie, P. (2011a), "Meaningful work, employee engagement, and other key employee outcomes: implications for human resource development", Advances in Developing Human Resources, Vol. 13 No. 4, pp. 508-525.

- Fairlie, P. (2011b), "Meaningful work: a sleeping giant in the context of other work characteristics, work engagement, and other employee outcomes", *Paper Presented at The 119th Annual Convention of the American Psychological Association*, Washington, District of Columbia.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 2, pp. 39-50.
- Geldenhuys, M., Laba, K. and Venter, C.M. (2014), "Meaningful work, work engagement and organisational commitment", *SA Journal of Industrial Psychology*, Vol. 40 No. 1, pp. 1-10.
- Grant, A.M., Christianson, M.K. and Price, R.H. (2007), "Happiness, health, or relationships? Managerial practices and employee well-being tradeoffs", Academy of Management Perspectives, Vol. 21 No. 3, pp. 51-63.
- Hackman, J.R. and Oldham, G.R. (1980), Work Redesign, Addison-Wesley, Reading, Massachusetts.
- Hair, J., Jr, Sarstedt, M., Hopkins, L. and Kuppelwieser, G.V. (2014), "Partial least squares structural equation modeling (PLS-SEM) an emerging tool in business research", *European Business Review*, Vol. 26 No. 2, pp. 106-121.
- Hakanen, J.J., Bakker, A.B. and Demerouti, E. (2005), "How dentists cope with their job demands and stay engaged: the moderating role of job resources", *European Journal of Oral Sciences*, Vol. 113 No. 6, pp. 479-487.
- Hakanen, J.J., Bakker, A.B. and Schaufeli, W.B. (2006), "Burnout and work engagement among teachers", *Journal of School Psychology*, Vol. 43 No. 6, pp. 495-513.
- Hakanen, J.J., Schaufeli, W.B. and Ahola, K. (2008), "The job demands-resources model: a three-year cross-lagged study of burnout, depression, commitment, and work engagement", *Work and Stress*, Vol. 22 No. 3, pp. 224-241.
- Hamid, S.A., Manap, R., Ahmad, Z. and Shariff, S.F.M. (2018), "A review on occupational stress towards academician health and wellbeing", *Jurnal Sultan Alauddin Sulaiman Shahl (JSASS)*, Vol. 5 No. 2, pp. 302-308.
- Hanaysha, J. (2016), "Improving employee productivity through work engagement: evidence from higher education sector", *Management Science Letters*, Vol. 6 No. 1, pp. 61-70.
- Hobfoll, S.E. (1989), "Conservation of resources: a new attempt at conceptualizing stress", American Psychologist, Vol. 44 No. 3, pp. 513-524.
- Hobfoll, S.E. (2002), "Social and psychological resources and adaptation", *Review of General Psychology*, Vol. 6 No. 4, pp. 307-324.
- Hu, J. and Hirsh, J. (2017), "The benefits of meaningful work: a meta-analysis", in Academy of Management Proceedings, Academy of Management, Briarcliff Manor, New York, Vol. 2017 No. 1, 13866.
- Ismail, N.H. and Noor, A. (2016), "Occupational stress and its associated factors among academician in a research university, Malaysia", *Malaysian Journal of Public Health Medicine*, Vol. 16 No. 1, pp. 81-91.
- James, J.B., McKechnie, S. and Swanberg, J. (2011), "Predicting employee engagement in an age-diverse retail workforce", *Journal of Organizational Behavior*, Vol. 32 No. 2, pp. 173-196.
- Jung, H.S. and Yoon, H.H. (2016), "What does work meaning to hospitality employees? The effects of meaningful work on employees' organizational commitment: the mediating role of job engagement", *International Journal of Hospitality Management*, Vol. 53, pp. 59-68.
- Kahn, W.A. (1990), "Psychological conditions of personal engagement and disengagement at work", Academy of Management Journal, Vol. 33 No. 4, pp. 692-724.
- Karatepe, O.M., Keshavarz, S. and Nejati, S. (2010), "Do core self-evaluations mediate the effect of coworker support on work engagement? A study of hotel employees in Iran", *Journal of Hospitality and Tourism Management*, Vol. 17 No. 1, pp. 62-71.

- Kark, R. and Shamir, B. (2002), "The dual effect of transformational leadership: priming relational and collective selves and further effects on followers", *Transformational and Charismatic Leadership: The Road Ahead*, Vol. 2 No. 2, pp. 67-91.
- Kuvaas, B. (2008), "An exploration of how the employee–organization relationship affects the linkage between perception of developmental human resource practices and employee outcomes", *Journal of Management Studies*, Vol. 45 No. 1, pp. 1-25.
- Lindell, M.K. and Whitney, D.J. (2001), "Accounting for common method variance in cross-sectional research designs", *Journal of Applied Psychology*, Vol. 85 No. 1, pp. 114-121.
- Llorens, S., Schaufeli, W., Bakker, A. and Salanova, M. (2007), "Does a positive gain spiral of resources, efficacy beliefs and engagement exist?", *Computers in Human Behavior*, Vol. 23 No. 1, pp. 825-841.
- Maslach, C. and Leiter, M.P. (2008), "Early predictors of job burnout and engagement", *Journal of Applied Psychology*, Vol. 93 No. 3, pp. 498-512.
- Mauno, S., Kinnunen, U. and Ruokolainen, M. (2007), "Job demands and resources as antecedents of work engagement: a longitudinal study", *Journal of Vocational Behavior*, Vol. 70 No. 1, pp. 149-171.
- Ofoegbu, F. and Nwadiani, M. (2006), "Level of perceived stress among lectures in nigerian universities", *Journal of Instructional Psychology*, Vol. 33 No. 1, pp. 66-74.
- Oldham, G.R., Hackman, J.R. and Pearce, J.L. (1976), "Conditions under which employees respond positively to enriched work", *Journal of Applied Psychology*, Vol. 61 No. 4, pp. 395-403.
- Olivier, A. and Rothmann, S. (2007), "Antecedents of work engagement in a multinational company", SA Journal of Industrial Psychology, Vol. 33 No. 3, pp. 49-56.
- Paterson, T.A., Luthans, F. and Jeung, W. (2014), "Thriving at work: impact of psychological capital and supervisor support", *Journal of Organizational Behavior*, Vol. 35 No. 3, pp. 434-446.
- Pati, S.P. and Kumar, P. (2010), "Employee engagement: role of self-efficacy, organizational support and supervisor support", *Indian Journal of Industrial Relations*, Vol. 46 No. 1, pp. 126-137.
- Preacher, K.J. and Hayes, A.F. (2008), "Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models", *Behavior Research Methods*, Vol. 40 No. 3, pp. 879-891.
- Rhoades, L. and Eisenberger, R. (2002), "Perceived organizational support: a review of the literature", Journal of Applied Psychology, Vol. 87 No. 4, pp. 698-714.
- Rhoades, L., Eisenberger, R. and Armeli, S. (2001), "Affective commitment to the organization: the contribution of perceived organizational support", *Journal of Applied Psychology*, Vol. 86 No. 5, pp. 825-836.
- Rich, B.L., Lepine, J.A. and Crawford, E.R. (2010), "Job engagement: antecedents and effects on job performance", Academy of Management Journal, Vol. 53 No. 3, pp. 617-635.
- Ringle, C.M., Wende, S. and Will, S. (2005), SmartPLS 2.0 Beta, University of Hamburg, [Electronic version], available at: https://www.smartpls.com/#downloads.
- Rosso, B.D., Dekas, K.H. and Wrzesniewski, A. (2010), "On the meaning of work: a theoretical integration and review", *Research in Organizational Behavior*, Vol. 30, pp. 91-127.
- Rurkkhum, S. and Bartlett, K.R. (2012), "The relationship between employee engagement and organizational citizenship behaviour in Thailand", *Human Resource Development International*, Vol. 15 No. 2, pp. 157-174.
- Ryff, C.D. (2000), "Meaning of life", in Kazdin, A.E. (Ed.), *Encyclopedia of Psychology*, Oxford University Press, Oxford.
- Saks, A.M. (2006), "Antecedents and consequences of employee engagement", Journal of Managerial Psychology, Vol. 21 No. 7, pp. 600-619.

Salanova, M., Agut, S. and Peiró, J.M. (2005), "Linking organizational resources and work engagement
to employee performance and customer loyalty: the mediation of service climate", Journal of
Applied Psychology, Vol. 90 No. 6, pp. 1217-1227.

- Salanova, M., Lorente, L., Chambel, MJ. and Martínez, I.M. (2011), "Linking transformational leadership to nurses' extra-role performance: the mediating role of self-efficacy and work engagement", *Journal of Advanced Nursing*, Vol. 67 No. 10, pp. 2256-2266.
- Schaufeli, W.B. and Bakker, A.B. (2004), "Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study", *Journal of Organizational Behavior*, Vol. 25 No. 3, pp. 293-315.
- Schaufeli, W.B., Salanova, M., González-Romá, V. and Bakker, A.B. (2002), "The measurement of engagement and burnout: a two sample confirmatory factor analytic approach", *Journal of Happiness Studies*, Vol. 3 No. 1, pp. 71-92.
- Schaufeli, W.B., Bakker, A.B. and Van Rhenen, W. (2009), "How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism", *Journal of Organizational Behavior*, Vol. 30 No. 7, pp. 893-917.
- Schaufeli, W.B., Bakker, A.B., Bakker, A. and Leiter, M. (2010), Work Engagement: A Handbook of Essential Theory and Research, Psychology press, Hove, East Sussex.
- Seppälä, P., Mauno, S., Feldt, T., Hakanen, J., Kinnunen, U., Tolvanen, A. and Schaufeli, W. (2009), "The construct validity of the Utrecht work engagement scale: multisample and longitudinal evidence", *Journal of Happiness Studies*, Vol. 10 No. 4, pp. 459-481.
- Shimazu, A., Schaufeli, W.B., Kubota, K. and Kawakami, N. (2012), "Do workaholism and work engagement predict employee well-being and performance in opposite directions?", *Industrial Health*, Vol. 50 No. 4, pp. 316-321.
- Shuck, B. and Rose, K. (2013), "Reframing employee engagement within the context of meaning and purpose: implications for HRD", Advances in Developing Human Resources, Vol. 15 No. 4, pp. 341-355.
- Soane, E., Shantz, A., Alfes, K., Truss, C., Rees, C. and Gatenby, M. (2013), "The association of meaningfulness, well-being, and engagement with absenteeism: a moderated mediation model", *Human Resource Management*, Vol. 52 No. 3, pp. 441-456.
- Sorenson, S. (2013), "How employee engagement drives growth", Gallup Business Journal.
- Sparks, J.R. and Schenk, J.A. (2001), "Explaining the effects of transformational leadership: an investigation of the effects of higher-order motives in multilevel marketing organizations", *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, Vol. 22 No. 8, pp. 849-869.
- Staw, B.M., Sutton, R.I. and Pelled, L.H. (1994), "Employee positive emotion and favorable outcomes at the workplace", Organization Science, Vol. 5 No. 1, pp. 51-71.
- Steger, M.F., Dik, B.J. and Duffy, R.D. (2012), "Measuring meaningful work: the work and meaning inventory (WAMI)", *Journal of Career Assessment*, Vol. 20 No. 3, pp. 322-337.
- Steger, M.F., Littman-Ovadia, H., Miller, M., Menger, L. and Rothmann, S. (2013), "Engaging in work even when it is meaningless: positive affective disposition and meaningful work interact in relation to work engagement", *Journal of Career Assessment*, Vol. 21 No. 2, pp. 348-361.
- Swanberg, J.E., McKechnie, S.P., Ojha, M.U. and James, J.B. (2011), "Schedule control, supervisor support and work engagement: a winning combination for workers in hourly jobs?", *Journal of Vocational Behavior*, Vol. 79 No. 3, pp. 613-624.
- Taipale, S., Selander, K., Anttila, T. and Nätti, J. (2011), "Work engagement in eight European countries", *International Journal of Sociology and Social Policy*, Vol. 31 Nos 7/8, pp. 486-504.
- Ten Brummelhuis, L.L. and Bakker, A.B. (2012), "Staying engaged during the week: the effect of offjob activities on next day work engagement", *Journal of Occupational Health Psychology*, Vol. 17, pp. 445-455.

- Tummers, L.G. and Knies, E. (2013), "Leadership and meaningful work in the public sector", *Public Administration Review*, Vol. 73 No. 6, pp. 859-868.
- Van Dierendonck, D., Schaufeli, W.B. and Buunk, B.P. (1998), "The evaluation of an individual burnout intervention program: the role of inequity and social support", *Journal of Applied Psychology*, Vol. 88 No. 3, pp. 392-407.
- Van Veldhoven, M. and Meijman, T. (1994), The Measurement of Psychosocial Job Demands with a Questionnaire (VBBA), NIA, Amsterdam.
- Viswesvaran, C., Sanchez, J.I. and Fisher, J. (1999), "The role of social support in the process of work stress: a meta-analysis", *Journal of Vocational Behavior*, Vol. 54 No. 2, pp. 314-334.
- Walumbwa, F.O., Mayer, D.M., Wang, P., Wang, H., Workman, K. and Christensen, A.L. (2011), "Linking ethical leadership to employee performance: the roles of leader-member exchange, self-efficacy, and organizational identification", Organizational Behavior and Human Decision Processes, Vol. 115 No. 2, pp. 204-213.
- Xanthopoulou, D., Bakker, A.B., Demerouti, E. and Schaufeli, W.B. (2007), "The role of personal resources in the job demands-resources model", *International Journal of Stress Management*, Vol. 14 No. 2, pp. 121-141.
- Xanthopoulou, D., Baker, A.B., Heuven, E., Demerouti, E. and Schaufeli, W.B. (2008), "Working in the sky: a diary study on work engagement among flight attendants", *Journal of Occupational Health Psychology*, Vol. 13 No. 4, pp. 345-356.
- Xanthopoulou, D., Bakker, A.B., Demerouti, E. and Schaufeli, W.B. (2009), "Work engagement and financial returns: a diary study on the role of job and personal resources", *Journal of Occupational and Organizational Psychology*, Vol. 82 No. 1, pp. 183-200.

Further reading

- Ahmed, U., Isa, N.M., Majid, A.H.A., Zin, M.L.L. and Amin, B.M. (2017), "Towards understanding work engagement: can HR really buffer HR? Test of a moderated model", *International Journal of Economic Research*, Vol. 14 No. 19, pp. 85-859.
- Halbesleben, J.R., Harvey, J. and Bolino, M.C. (2009), "Too engaged? A conservation of resources view of the relationship between work engagement and work interference with family", *Journal of Applied Psychology*, Vol. 94 No. 6, pp. 1452-1465.
- Karatepe, O.M. and Ngeche, R.N. (2012), "Does job embeddedness mediate the effect of work engagement on job outcomes? A study of hotel employees in Cameroon", *Journal of Hospitality Marketing and Management*, Vol. 21 No. 4, pp. 440-461.
- Leiter, M.P. and Bakker, A.B. (2010), "Work engagement: introduction", in Work Engagement: A Handbook of Essential Theory and Research, Vols 1-9, Psychology Press, Sussex.
- Veldhoven, M.J.P.M. and Meijman, T.F. (1994), Het meten van psychosociale arbeidsbelasting met een vragenlijst: de vragenlijst beleving en beoordeling van de arbeid (VBBA): Nederlands Instituut voor Arbeidsomstandigheden NIA, available at: http://www.marcvanveldhoven.com/3013% 20ENG%20VBBA%20Uitgebr.pdf (accessed 16 June 2016).
- Zhu, W., Avolio, B.J. and Walumbwa, F.O. (2016), "Moderating role of follower characteristics with transformational leadership and follower work engagement", Corrigendum, *Journal of Organizational Behavior*, Vol. 37 No. 3, pp. 309-325.

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