

Influences of Job Demands, Job Resources, Personal Resources, and Coworkers Support on Work Engagement and Creativity

Thuy Van Thi TRUONG¹, Hoang Vinh NGUYEN², My Ca Thi PHAN³

Received: October 01, 2020 Revised: December 06, 2020 Accepted: December 14, 2020

Abstract

Employee engagement plays an important role in the development as well as the success of a company. The manner in which employees are committed to their work and be more innovative seems to drive people's curiosity. This study aims to analyze the impacts of job demands-resources, personal resources, and coworker support on work engagement. Also, whether there is a relationship between work engagement and creativity of employees is tested through this research. The data served for the research was collected in the context of Vietnamese small- and medium-sized enterprises (SMEs). The authors used structural equation modeling (SEM) (software Smart PLS), to test the proposed hypotheses by using the data of 602 employees. Results of the study point out that proposed antecedents influence work engagement and creativity. Such findings have shed light on both theory and practice implications. In theory, it supports the social exchange theory and the job demands and resources model. In practice, leaders should assist subordinates in various aspects and build and promote a corporate culture where employees help others with great enthusiasm to increase the level of work engagement and spirit of innovation of employees.

Keywords: Job Demands, Job Resources, Personal Resources, Coworker Support, Work Engagement

JEL Classification Code: M10, M12, M54

1. Introduction

Work performance as well as employee engagement with the company is considered to be affected by one of the very important factors - work engagement. Numerous researches on this factor have been conducted to study the prefixes affecting it. Dai et al. (2019) worked together to study how work engagement can be influenced by resilience. More and more research regarding work engagement had been conducted. social capital (Strömngren et al., 2016); the impact of the quality of work (Kanten & Sadullah, 2012); the effect of 2 prefixes: co-worker and supervisor support (Poulsen et al., 2016). Besides, how work engagement relates to other

suffixes has also raised researchers' concerns. Chaudhary and Akhouri (2016) studied the effects of work engagement on creativity. Öge et al. (2018) studied the effects of work engagement on two suffixes: workplace loneliness and family-work conflict. In the same year, another researcher, Cheng et al. (2018) studied the impact of work engagement on service behavior. Thus, it can be seen that work engagement is an attractive factor, appealing to many researchers. However, in the era of technological revolution 4.0, it would be a mistake not to mention the employees' creativity- the factor that is of great importance to organizational success. It is essential to understand that the more innovative employees are, the more responsive the companies are to market's needs. Based on these aforementioned reasons, this study aims to analyze the influences of job demands-resources, personal resources, coworker support on work engagement and creativity.

2. Literature Review

2.1. Theoretical Framework

2.1.1. Social Exchange Theory

Since the 1950s, social exchange theory was built as a psychological theory and it served well explanation for

¹First Author and Corresponding Author. Lecturer, Faculty of Business Administration, University of Finance - Marketing, Ho Chi Minh City, Vietnam [Postal Address: 2/4 Tran Xuan Soan, District 7, Ho Chi Minh City, 72208, Vietnam] Email: truongvan@ufm.edu.vn

²Department of Academic Affairs, University of Finance - Marketing, Ho Chi Minh City, VietNam. Email: hoangvinh@ufm.edu.vn

³Department of Academic Affairs, University of Finance - Marketing, Ho Chi Minh City, VietNam. Email: myca@ufm.edu.vn

human's economic activities. At first sight, this theory was used for the clarification of human behaviors (Homans, 1958), then organizational behaviors (Blau, 1964; Emerson, 1962). According to this theory, when people work in a group, they accept the rule of reciprocity (Cropanzano & Mitchell, 2005). As a result, other behaviors are attributed to their behaviors (Cropanzano & Mitchell, 2005). If one person provides a benefit, the receiver will think that he/she needs to offer a benefit too. The benefit may be originated from social benefit (such as emotion, social impact) or economic benefit (money, goods, information) (Muthusamy & White, 2005). As a result, employees' mindset toward the organization would be more positive. It would come as no surprise that the level of employees' commitment will be increased as long as they have the perceptions that their contributions are well-recognized and the organizations take care them.

2.1.2. Job Demands – Resources (JD-R) Model

According to this model, a job always has two sides: a positive side and a negative side (Demerouti et al., 2001). On the one hand, the requirements of the job (workload, time pressure) cause some troubles such as exhaustion. On the other hand, employees take advantage of job resources. Invaluable resources may be autonomy, performance feedback, role clarity, participative decision-making, supervisory support, supportive work environment (Bakker & Demerouti, 2007).

2.2. The Conceptualization of Key Variables and Hypotheses

2.2.1. Job Resources

Bakker and Demerouti (2008) and Bakker et al. (2007) constructed the job demands-resources model (JD-R model). The model puts working conditions into two categories – job demands and job resources. Job demands are the physical or emotional stressors in your role. These include time pressures, a heavy workload, a stressful working environment, role ambiguity, emotional labor, and poor relationships (Bakker & Demerouti, 2008; Bakker et al., 2004, 2007). Job resources (job positives) are the physical, social, or organizational factors that help you achieve goals, and reduce stress. They include autonomy, strong work relationships, opportunities for advancement, coaching and mentoring, and learning and development (Demerouti et al., 2001).

According to the JD-R model, job resources are assumed to have motivational potential, which results in high performance through low cynicism and high engagement (Bakker & Demerouti, 2007). Since the job resources foster learning and personal growth (which are instrumental in

achieving tasks), they may play both an extrinsic and an intrinsic motivational role. Depending on the definition, individuals who are committed to working are expected to express high levels of energy, to be enthusiastic about their work, and to be fully immersed in their job so that their time flies (Macey & Schneider, 2008; May et al., 2004).

H1: *Job resources are positively related to work engagement.*

2.2.2. Job Demands

Schaufeli and Bakker (2004) refer to job demands as those physical, psychological, social, or organizational aspects of the job that require sustained physical and psychological effort in parallel with the incurrence of certain physiological and psychological costs. Quantitative job demands can be expressed as the amount of work required and the available time frame, while qualitative workload involves employees' affective reactions to their jobs. The acquisition of those demands requires high effort and relatively high cost which can elicit negative responses such as depression, anxiety, or burnout though those are not necessarily seen as negative. Work overload or high demands may also occur when one does not possess the necessary skills, abilities, and support to meet these demands. According to Schaufeli et al. (1993), the employee withdraws mentally when they make every effort to put up with the exhaustion arising from the fact that employees' energy is worn out by job demands. When the employee withdraws mentally, his/her work engagement levels will decrease.

H2: *Job demands are negatively related to work engagement.*

2.2.3. Personal Resources

Personal resources are included and considered as important antecedents of work engagement of the JDR model in further development (Demerouti & Bakker, 2011). Personal resources refer to some aspects of the individuals which are often followed and associated with resilience and represent the personal perceptions of the ability to control and affect their environment (Demerouti & Bakker, 2011).

Personal resources have a direct positive effect on work engagement and creativity. For example, employees who are self-efficacy feel competent, confident, and motivated. As a result, they will expose a strong inclination of work engagement towards their work and eventually perform better (Sopiah et al., 2020; Nguyen et al., 2019). Personal resources will be built and influenced through job resources (e.g., support, autonomy), which in turn will have a direct favorable impact on work engagement and creativity. This process was observed in a study by Xanthopoulou et al.

(2008), which showed that self-efficacy is strengthened with support enhancement which consequently increased work engagement. Therefore, we hypothesize a positive relationship between personal resources and work engagement.

H3: *Personal resources have a positive effect on work engagement.*

2.2.4. Coworker Support

Social support in the context of the working environment is defined as the social climate involving the relationship between supervisor and co-workers (Karasek & Theorell, 1990). It involves both socio-emotional and instrumental support. The first refers to the extent to which co-workers and supervisors are integrated in terms of social and emotional criteria, whereas the latter refers to the collaboration between co-workers and supervisors to carry out work tasks. Several studies have reported relationships between the perception of social support on work quality, professional performance, and job satisfaction of employees (Hamaideh, 2011; Kwak et al., 2010; Pohl & Galletta, 2016).

Generally, it is taken for granted that people who work in an organization context, help or receive assistance from colleagues and supervisors. Both co-worker and supervisor support are associated with high self-perceptions of job satisfaction and work-related rewards in Scottish radiation and medical oncology centers (Jones et al., 2013). The critical path to social support includes the creation of a culture wherein safe (i.e. confidential) and trustworthy relationships are no longer a problem to get concerns to be shared. In their study, Turner et al. (2011) pointed out that when employees have the perception of having low satisfaction with social support from supervisor or having poor team engagement, there stands a high chance that the staff well-being will be affected, including burnout and disengagement. Therefore, it can be concluded that:

H4: *Coworker support has a positive effect on work engagement*

2.2.5. Work Engagement

Work engagement has been considered as a crucial predictor of employee performance, attitudes, and behaviors (Karatepe & Oluglade, 2016). It has been defined as a positive, fulfilling, work-related state of mind characterized by absorption, dedication, and vigor (Schaufeli et al., 2002). There is no point in separating oneself from work while having “Absorption”- which refers to happiness, full concentration, and obsession in one’s work whereby time flies fast (Salanova et al., 2005). The sense of significance, inspiration, enthusiasm, pride, and challenge at work can be defined as dedication (Salanova et al., 2005). Vigor

refers to the willingness to invest effort in one’s work, high levels of energy and mental resilience while working, and perseverance even in the face of obstacles (Salanova et al., 2005). Work engagement has gained a wide variety of research attention on account of its impact on various positive outcomes, such as organizational commitment, job satisfaction, job performance, contextual performance, turnover, and business unit performance (Christian et al., 2011; Karatepe, 2013; Leiter & Bakker, 2010; Lu, 2016).

As per the componential theory of creativity (Amabile, 1997), creative performance is out of the question without intrinsic motivation. As energetic and absorbed as they are, people are expected to come up with creativity in their performance at work. Engaged employees use their creative skills to perform excellently with enthusiasm (Demerouti & Cropanzano, 2010; Lee, 2018). Creativity is thought to be exposed through work engagement since engaged employees are not only willing to experience but they are also intrinsically motivated to pursue their goals (Demerouti & Cropanzano, 2010). Additionally, engaged employees often experience positive emotions which widen their momentary thought-action repertoire process and generate personal resources (Fredrickson, 2001). These positive emotions facilitate creative behavior by fostering the thirst for exploring and assimilating new information. Amabile et al. (2005) in a longitudinal diary study found that positive affect constitutes a positive relationship with creativity. Though work engagement has been suggested as an antecedent of creativity, it has received very little empirical attention in the literature. Only a few studies have been conducted in an attempt to test how work engagement and creativity are related. Bakker and Xanthopoulou (2013) in a study among school principals and teachers had reported a significant mediating influence of work engagement on job resources and creative relationships. Demerouti et al. (2015) found a positive linkage between work engagement and supervisor-rated creativity in a study among employees of various sectors in the Netherlands. Further, in a study among eldercare nurses in Japan, Toyama and Mauno (2017) demonstrated that work engagement mediates between the relationship of emotional intelligence and creativity. Based on the above arguments, we hypothesize a positive relationship between work engagement and creativity.

H5: *Work engagement relates positively to employee creativity.*

2.2.6. Creativity

To flourish and take the lead in this tough competition, the business environment of the organizations must be innovated in response to this dynamic and globally competitive era. Innovation, especially creativity in thinking and action can offer a key differential edge. Creativity involves the creation of novel and valuable ideas about products, services, methods, and processes (Amabile, 1988; Zhou & Shalley, 2008).

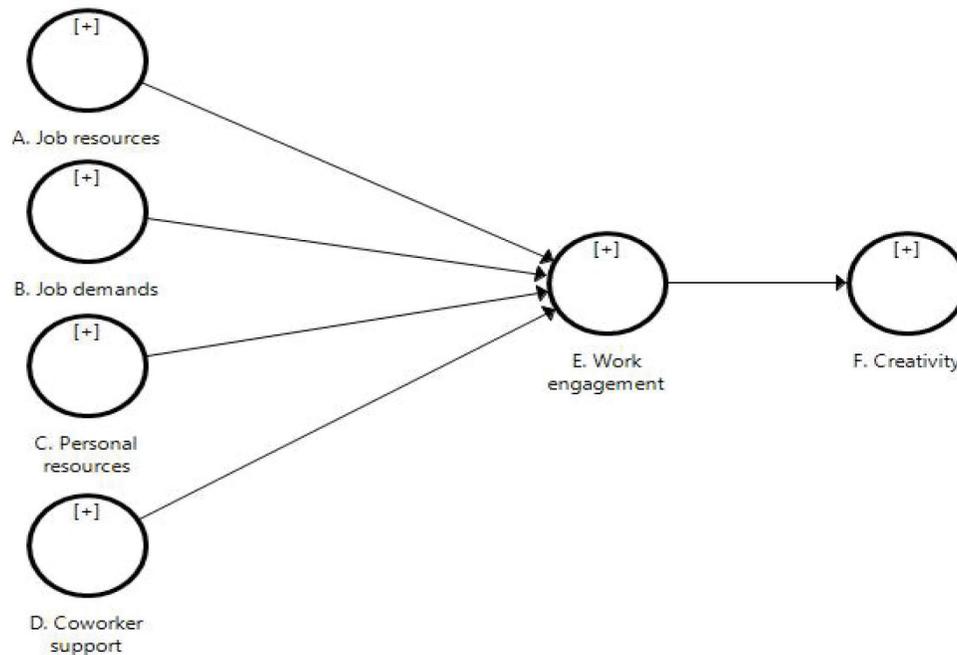


Figure 1: The proposed research model

3. Methodology

To evaluate the proposed relationships between variables, a quantitative approach was employed by using cross-sectional data. Four items of job demands, job resources, personal resources, coworker support were adopted from Rothmann & Joubert (2007). Four items of work engagement were adopted from Schaufeli et al. (2002). Furthermore, to measure the items, a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree) was employed. Accordingly, a survey questionnaire was developed to collect primary data from employees in small and medium enterprises (SME) in Vietnam. The authors decided to use an online survey. Thanks to the relationship with managers at SME, the link of the survey was sent to employees at SME. A total of 602 questionnaires were received for data analysis.

Partial least structural equation modeling (PLS-SEM) was used by using SmartPLS version 3.2.8. PLS-SEM is advantageous over co-variance-based SEM, particularly once there is a complex model to evaluate and the research framework is exploratory in nature (Hair et al., 2017). The conceptual framework of this study was complex as shown in Fig. 1. Hence, PLS-SEM was preferred for data analysis in this study. PLS-SEM separately evaluates measurement and structural model.

4. Results

The majority of the respondents were female (67%), aged less than 35 (80%), were having a bachelor's degree (80%). Nearly 40% of reviewees earned less than 300 USD/month and 80% of respondents were having monthly income less than 700 USD/month.

4.1. Assessment of the Measurement Model

The indicator reliability, internal consistency, convergent validity, and discriminant validity will be tested. First, the indicator reliability needs to be evaluated. Bagozzi et al. (1991), Hair et al. (2011) point out that indicators with low outer loading below 0.4 should be removed from the constructs while others higher than 0.7 should be kept from the constructs. Besides, indicators with outer loadings between 0.4 and 0.7 should be dropped only when dropping those leads to the improvement in the composite reliability (CR) or the average variance extracted (AVE). Second, the assessment of the internal consistency will depend on CR and Cronbach's alpha. With a CR value higher than 0.7 and Cronbach's alpha value higher than 0.7, all constructs achieve internal consistency (Hair et al., 2017). Then, the convergent validity is tested with the AVE value. AVE value higher than 0.5 concludes that all variables have convergent validity (Hair et al., 2017).

Table 1: Variables Information

Variables	Outer loading	CR	Cronbach's alpha	AVE	Outer weight
Creativity (CR)		0.869	0.774	0.689	
CR1	*				
CR2	0.861				0.421
CR3	0.836				0.395
CR4	0.791				0.389
Coworker support (CS)		0.889	0.833	0.667	
CS1	0.747				0.277
CS2	0.816				0.278
CS3	0.841				0.313
CS4	0.857				0.353
Job demands (JD)		0.889	0.840	0.667	
JD1	0.805				0.243
JD2	0.784				0.225
JD3	0.876				0.383
JD4	0.800				0.366
Job resources (JR)		0.869	0.799	0.624	
JR1	0.722				0.242
JR2	0.849				0.356
JR3	0.748				0.340
JR4	0.834				0.322
Personal resources (PR)		0.823	0.712	0.538	
PR1	0.784				0.334
PR2	0.729				0.346
PR3	0.745				0.335
PR4	0.672				0.352
Work engagement (WE)		0.859	0.780	0.603	
WE1	0.830				0.338
WE2	0.790				0.318
WE3	0.744				0.336
WE4	0.739				0.296

*: Items are removed from the constructs

Table 2: HTMT ratio

Variables	CS	CR	JD	JR	PR	WE
Coworker support						
Creativity	0.541					
Job demands	0.204	0.259				
Job resources	0.545	0.582	0.358			
Personal resources	0.759	0.714	0.266	0.829		
Work engagement	0.789	0.859	0.410	0.803	0.766	

Table 3: Inner VIF values

Variables	CS	CR	JD	JR	PR	WE
Coworker support						1.565
Creativity						
Job demands						1.102
Job resources						1.807
Personal resources						2.092
Work engagement		2.379				

Table 4: Path coefficients and p-value

Hypothesis	Content	Coefficient	P Values	Conclusion
H4	CS -> WE	0.400	0%	Supported
H2	JD -> WE	-0.140	0%	Supported
H1	JR -> WE	0.380	0%	Supported
H3	PR -> WE	0.059	22%	Rejected
H5	WE -> CR	0.608	0%	Supported

Finally, the author uses the HTMT ratio to evaluate the discriminant validity. All HTMT ratios are below 0.90, therefore, discriminant validity is satisfied (Henseler et al., 2014).

4.2. Assessment of the Structural Model

The assessment of the structural model includes six issues: collinearity issues, the significance and relevance of the structural model relationships, the level of R^2 , the f^2 effect size, the predictive relevance Q^2 and the effect size q^2 .

All inner VIF values which are less than 5 mean the model doesn't have collinearity issues (Hair et al., 2017).

The results in Table 4 show that job resources, job demands, personal resources, coworker support have significant impacts on work engagement while these antecedents do not influence creativity. Therefore, the hypotheses H1a, H2a, H3a, H4a are supported while the hypotheses H1b, H2b, H3b, H4b are rejected. Moreover,

work engagement has a significant and positive impact on creativity. Hence, the hypothesis H5 is supported.

The R^2 value ranges from 0 to 1, with higher levels indicating higher levels of predictive accuracy. R^2 values of 0.75, 0.50, or 0.25 for endogenous latent variables can, as a rule of thumb, be respectively described as substantial, moderate, or weak (Hair et al., 2011; Henseler et al., 2009). However, it is essential to understand that it is not easy to provide rules of thumb for acceptable R^2 values as this depends on the model complexity and the research discipline.

Q^2 value is another criteria to assess predictive accuracy introduced by Geisser (1974) and Stone (1974). This measure is an indicator of the model's out-of-sample predictive power or predictive relevance. Q^2 value larger than zero for a specific endogenous latent variable indicates the path model's predictive relevance for that particular dependent construct.

Table 5: R-square and Q-square values

	R Square	Level of predictive accuracy	Q Square	Predictive relevance
Creativity	0.491	Moderate	0.325	Significant
Work engagement	0.580	Moderate	0.336	Significant

Table 6: f-square and q-square values

	Work engagement				Creativity			
	f2	Level of effects	q2	Predictive relevance	f2	Level of effects	q2	Predictive relevance
Coworker support	0.244	Medium	0.090	Small				
Job demands	0.042	Weak	0.017	Small				
Job resources	0.190	Medium	0.069	Small				
Personal resources	0.004	Weak	0.002	No effect				
Work engagement					0.305	Large	0.138	Medium

In addition to evaluating the R^2 values of all endogenous constructs, the change in the R^2 value when a specified exogenous construct is omitted from the model must be evaluated to know whether the omitted construct has a substantive impact on the endogenous constructs. This measure is referred to as the f^2 effect size and is increasingly encouraged by journal editors and reviewers. Guidelines for assessing f^2 are values - 0.02, 0.15, and 0.35 respectively, representing small, medium, and large effects (Cohen, 1988) of the exogenous latent variable. Effect size values of less than 0.02 indicate that there is no effect.

Similar to the f^2 effect size approach for assessing R^2 values, the relative impact of predictive relevance can be compared using the measure of the q^2 effect size. As a relative measure of predictive relevance, values of 0.02, 0.15, and 0.35 indicate that an exogenous construct has a small, medium, or large predictive relevance respectively, for a certain endogenous construct.

5. Conclusions and Implications

5.1. Theoretical Implications

This study is conducted to test the influences of prefixes: job demands, job resources, personal resources, and coworker support on work engagement and creativity. The results showed that while these antecedents influence work engagement, there is no similarity (of influence) on creativity. Moreover, work engagement relates positively to creativity. With these supported hypotheses, the research has vital theoretical contributions.

5.2. Practical Implications

It is clear that job resources, personal resources, and coworker support have positive influences on work engagement. However, of all those three, coworker support has the strongest impact (see Table 5). Therefore, to maximize work engagement, organizations should build an organizational culture where employees help others at will. Based on the value of outer weight (see Table 2), employees prefer managers' support. As a result, it is highly recommended that leaders should take care of subordinates to help them to work and contribute more to the organization.

For job resources, employees are assured of using technology effectively in the workplace. They also think that they can have colleagues' help if necessary.

For personal resources, respondents emphasize that they can easily follow the goal and accomplish the goal. This idea is very important because when people perceive well their target in an organization, they will engage more with their organization.

In contrast, job demands reduce the work engagement of employees. Workers reckon that they have to deal with power struggles with people from all walks of life. Once again, the cooperation within an organization is highly appreciated. Managers should build a comfortable and believable work environment for employees.

Finally, work engagement has significant and positive impacts on creativity. Respondents think that they have plenty of energy at work. It is noticeable that 80% of respondents are under 35 years.

5.3. Limitations and Further Research

Like other research, this study also has certain limitations. First, only four antecedents of work engagement and creativity are analyzed. In fact, other factors that can influence work engagement and creativity are either forgotten or neglected. Second, the study did not analyze the influence of demographic elements on work engagement and creativity. Moreover, this study was cross-sectional in nature. Future research may consider a longitudinal approach to further authenticate the results of this study. Finally, the framework of this study was tested in SMEs. Therefore, it is necessary to repeat this study in different industries, in different cultures to compare and contrast the findings.

References

- Amabile, T. M. (1988). A model of creativity and innovation in organizations. In: B. M. Staw & L. L. Cummings (Eds.), *Research in Organizational Behavior* (pp. 123–167). London: JAI.
- Amabile, T. M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. *California Management Review*, 40(1), 39–58. <https://doi.org/10.2307/41165921>
- Amabile, T. M., Barsade, S. G., Mueller, J. S., & Staw, B. M. (2005). Affect and creativity at work. *Administrative Science Quarterly*, 50(3), 367–403. <https://doi.org/10.2189/asqu.2005.50.3.367>
- Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly*, 36(3), 421–458. <https://doi.org/10.2307/2393203>
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *The Career Development International*, 13(3), 209–223. <https://doi.org/10.1108/13620430810870476>
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 43(1), 83–104. <https://doi.org/10.1002/hrm.20004>
- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274–284. <https://doi.org/10.1037/0022-0663.99.2.274>
- Bakker, A. B., & Xanthopoulou, D. (2013). Creativity and charisma among female leaders: the role of resources and work engagement. *The International Journal of Human Resource Management*, 24(14), 2760–2779. <https://doi.org/10.1080/09585192.2012.751438>
- Blau, P. M. (1964). *Exchange and power in social life*. New York, NY: Wiley.
- Chaudhary, R., & Akhouri, A. (2018). Linking corporate social responsibility attributions and creativity: Modeling work engagement as a mediator. *Journal of Cleaner Production*, 190, 809–821. <https://doi.org/https://doi.org/10.1016/j.jclepro.2018.04.187>
- Cheng, T. M., Hong, C. Y., & Yang, B. C. (2018). Examining the moderating effects of service climate on psychological capital, work engagement, and service behavior among flight attendants. *Journal of Air Transport Management*, 67, 94–102. <https://doi.org/https://doi.org/10.1016/j.jairtraman.2017.11.009>
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64(1), 89–136. <https://doi.org/10.1111/j.1744-6570.2010.01203.x>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874–900. <https://doi.org/10.1177/0149206305279602>
- Dai, Y. D., Zhuang, W. L., & Huan, T. C. (2019). Engage or quit? The moderating role of abusive supervision between resilience, intention to leave, and work engagement. *Tourism Management*, 70, 69–77. <https://doi.org/https://doi.org/10.1016/j.tourman.2018.07.014>
- Demerouti, E., & Cropanzano, R. (2010). From thought to action: Employee work engagement and job performance. In: A. B. Bakker & M. P. Leiter (Eds), *Work engagement: a handbook of essential theory and research* (pp. 147–163). Hove: Psychology Press.
- Demerouti, E., & Bakker, A. B. (2011). The job demands-resources model: Challenges for future research. *SA Journal of Industrial Psychology*, 37(2). <https://doi.org/10.4102/sajip.v37i2.974>
- Demerouti, E., Bakker, A. B., & Gevers, J. M. P. (2015). Job crafting and extra-role behavior: The role of work engagement and flourishing. *Journal of Vocational Behavior*, 91, 87–96. <https://doi.org/https://doi.org/10.1016/j.jvb.2015.09.001>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. <https://doi.org/10.1037/0021-9010.86.3.499>
- Emerson, R. M. (1962). Power-dependence relations. *American Sociological Review*, 27(1), 31–41. <https://doi.org/10.2307/2089716>
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology. The broaden-and-build theory of positive emotions. *The American Psychologist*, 56(3), 218–226. <https://doi.org/10.1037/0003-066X.56.3.218>
- Geisser, S. (1974). A predictive approach to the random effect model. *Biometrika*, 61(1), 101–107. <https://doi.org/10.2307/2334290>

- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. <https://doi.org/10.2753/MTP1069-6679190202>
- Hamaideh, S. H. (2011). Burnout, social support, and job satisfaction among Jordanian mental health nurses. *Issues in Mental Health Nursing*, 32(4), 234–242. <https://doi.org/10.3109/01612840.2010.546494>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Henseler, J., Ringle, C., & R. Sinkovics, R. (2009). The use of partial least squares path modeling in international marketing. In: *Advances in International Marketing*, 20, 277–319. [https://doi.org/10.1108/S1474-7979\(2009\)0000020014](https://doi.org/10.1108/S1474-7979(2009)0000020014)
- Homans, G. C. (1958). Social behavior as an exchange. *American Journal of Sociology*, 63(6), 597–606. <https://doi.org/10.1086/222355>
- Jones, M. C., Wells, M., Gao, C., Cassidy, B., & Davie, J. (2013). Work stress and well-being in oncology settings: A multidisciplinary study of health care professionals. *Psycho-Oncology*, 22(1), 46–53. <https://doi.org/10.1002/pon.2055>
- Kanten, S., & Sadullah, O. (2012). Empirical research on relationship quality of work-life and work engagement. *Procedia - Social and Behavioral Sciences*, 62, 360–366. <https://doi.org/https://doi.org/10.1016/j.sbspro.2012.09.057>
- Karasek, R., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York, NY: Basic Books.
- Karatepe, O. M. (2013). Perceptions of organizational politics and hotel employee outcomes. *International Journal of Contemporary Hospitality Management*, 25(1), 82–104. <https://doi.org/10.1108/09596111311290237>
- Karatepe, O. M., & Oluglade, O. A. (2016). The mediating role of work engagement in the relationship between high-performance work practices and job outcomes of employees in Nigeria. *International Journal of Contemporary Hospitality Management*, 28(10), 2350–2371. <https://doi.org/10.1108/IJCHM-03-2015-0145>
- Kwak, C., Chung, B. Y., Xu, Y., & Eun-Jung, C. (2010). Relationship of job satisfaction with perceived organizational support and quality of care among South Korean nurses: A questionnaire survey. *International Journal of Nursing Studies*, 47(10), 1292–1298. <https://doi.org/https://doi.org/10.1016/j.ijnurstu.2010.02.014>
- Lee, J. Y. (2018). The effects of job characteristics on the team creativity of distribution companies: Moderating effects of transformational leadership. *The Journal of Asian Finance, Economics, and Business*, 5(4), 161–172. <https://doi.org/http://doi.org/10.13106/jafeb.2018.vol5.no4.161>
- Leiter, M. P., & Bakker, A. B. (2010). *Work engagement: A handbook of essential theory and research*. Halifax, Canada: Psychology Press.
- Lu, L. (2016). Work engagement, job satisfaction, and turnover intentions. *International Journal of Contemporary Hospitality Management*, 28(4), 737–761. <https://doi.org/10.1108/IJCHM-07-2014-0360>
- Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1(1), 3–30. <https://doi.org/10.1111/j.1754-9434.2007.0002.x>
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety, and availability, and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77(1), 11–37. <https://doi.org/10.1348/096317904322915892>
- Muthusamy, S. K., & White, M. A. (2005). Learning and knowledge transfer in strategic alliances: A social exchange view. *Organization Studies*, 26(3), 415–441. <https://doi.org/10.1177/0170840605050874>
- Nguyen, H. M., Nguyen, C., Ngo, T. T., & Nguyen, L. V. (2019). The Effects of Job Crafting on Work Engagement and Work Performance: A Study of Vietnamese Commercial Banks. *The Journal of Asian Finance, Economics, and Business*, 6(2), 189–201. <https://doi.org/https://doi.org/10.13106/jafeb.2019.vol6.no2.189>
- Öge, E., Çetin, M., & Top, S. (2018). The effects of paternalistic leadership on workplace loneliness, work-family conflict, and work engagement among air traffic controllers in Turkey. *Journal of Air Transport Management*, 66(February 2017), 25–35. <https://doi.org/10.1016/j.jairtraman.2017.10.003>
- Pohl, S., & Galletta, M. (2016). The role of supervisor emotional support on individual job satisfaction: A multilevel analysis. *Applied Nursing Research*, 33, 61–66. <https://doi.org/10.1016/j.apnr.2016.10.004>
- Poulsen, M. G., Khan, A., Poulsen, E. E., Khan, S. R., & Poulsen, A. A. (2016). Work engagement in cancer care: The power of co-worker and supervisor support. *European Journal of Oncology Nursing*, 21, 134–138. <https://doi.org/https://doi.org/10.1016/j.ejon.2015.09.003>
- Rothmann, S., & Joubert, J. (2007). Job demands, job resources, burnout, and work engagement of managers at a platinum mine in the North West Province. *South African Journal of Business Management*, 38(3), 588–612. <https://doi.org/10.4102/sajbm.v38i3.588>
- Salanova, M., Agut, S., & 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*, 90(6), 1217–1227. <https://doi.org/10.1037/0021-9010.90.6.1217>

- Schaufeli, W. B., Maslach, C., & Marek, T. (1993). *Professional burnout: Recent developments in theory and research*. Washington, DC: Taylor and Francis.
- Schaufeli, Wilmar B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293–315. <https://doi.org/10.1002/job.248>
- Schaufeli, W. B., Salanova, M., González-romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92. <https://doi.org/10.1023/A:1015630930326>
- Sopiah, S., Kurniawan, D. T., Nora, E., & Narmaditya, B. S. (2020). Does talent management affect employee performance? The moderating role of work engagement. *The Journal of Asian Finance, Economics, and Business*, 7(7), 335–341. <https://doi.org/https://doi.org/10.13106/jafeb.2020.vol7.no7.335>
- Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. *Journal of the Royal Statistical Society. Series B (Methodological)*, 36(2), 111–147. <http://www.jstor.org/stable/2984809>
- Strömberg, M., Eriksson, A., Bergman, D., & Dellve, L. (2016). Social capital among healthcare professionals: A prospective study of its importance for job satisfaction, work engagement, and engagement in clinical improvements. *International Journal of Nursing Studies*, 53, 116–125. <https://doi.org/10.1016/j.ijnurstu.2015.07.012>
- Toyama, H., & Mauno, S. (2017). Associations of trait emotional intelligence with social support, work engagement, and creativity in Japanese eldercare nurses. *Japanese Psychological Research*, 59(1), 14–25. <https://doi.org/10.1111/jpr.12139>
- Turner, J., Kelly, B., & Girgis, A. (2011). Supporting oncology health professionals: A review. *Psycho-Oncologie*, 5(2), 77–82. <https://doi.org/10.1007/s11839-011-0320-8>
- Xanthopoulou, D., Baker, A. B., Heuven, E., Demerouti, E., & Schaufeli, W. B. (2008). Working in the sky: A diary study on work engagement among flight attendants. *Journal of Occupational Health Psychology*, 13(4), 345–407. <https://doi.org/10.1037/1076-8998.13.4.345>
- Zhou, J., & Shalley, C. E. (2008). *Handbook of organizational creativity*. Mahwah, NJ: Lawrence Erlbaum Associates.