

Investigating the predictors of Employee Work Engagement during COVID-19 Pandemic

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Abstract

The COVID-19 Pandemic has revealed organizations' vulnerability and increased the need to ensure employee work engagement (WKE). Utilizing the conservation of resources theory (COR), this study investigates the influence of friends and family supports (FFS), employee resilience (ERS), self-efficacy (SFE), and supervisors' supports (SST) on employees' work engagement. Data was collected from 259 knowledge workers in Malaysia and analyzed using Smart PLS-SEM 3. The findings revealed that ERS, SFE, and SST significantly influence WKE. However, FFS does not have a significant influence on WKE. The results of this study contribute to the COR theory and have practical implications.

Keywords

Friends and family support, employee resilience, self-efficacy, supervisors' supports, work engagement

1. Introduction

Navigating the global crisis brought about by the novel coronavirus (COVID-19) outbreak has been of huge concern to governments, businesses, and individuals. Many organizations have expressed concerns about their employees' general well-being and engagement. The employees are the primary enabler of organizations' business continuity and recovery; thus, their safety and abilities to stay committed and positive are core to the survival of the organizations (Britt et al., 2016). To this end, several practitioner-focused publications have emerged proffering insights on building organizations' adaptability to the global crisis. While these publications have discussed the issues of enterprise resilience and the role of leadership, the factors of employees' job engagement have yet to be fully clarified.

Nevertheless, recent scholarly attention on work engagement amid COVID19 has explored the psychological factors; the need for further empirical studies on the social, job, and personal resources associated with work engagement cannot be overemphasized (Monje Amor et al., 2021; Ojo et al., 2021). Work engagement is pivotal to employees' well-being and a key enabler of positive firm outcomes like performance and productivity (Bakker, 2011).

According to Schaufeli et al. (2002, p. 74), work engagement can be denoted as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption.”

Further to the existing literature emphasis on the job (e.g., autonomy, feedback) and personal (e.g., resilience) resources, the role of social resources like friends and family support is essential in clarifying work engagement amid the uncertainty associated with the COVID-19 Pandemic (Cao and Chen, 2019; Cooke et al., 2019). In curtailing the spread of COVID-19, many organizations have adopted the work from home arrangement. Also, several countries have introduced lockdown orders and mandated social distancing by maintaining space between people not from the same household (ILO, 2020; Ojo et al., 2021). Thus, having people around to share the lonely moments of working from home could positively influence one’s well-being and job involvement. Against this backdrop, social support from friends and family has become a critical resource to enhance employees’ well-being and engagement. Hence, in line with the conservation of resources (COR) theory, we posit that personal (resilience, self-efficacy), job (supervisor support), and social resources (friend and family support) can influence employees’ work engagement.

In subsequent sections of this manuscript, we examined the pertinent literature in developing the hypotheses; afterwards, the methods and results of data analyses were presented. Lastly, the discussion, conclusion, and direction of future research were considered.

1.1 Objectives

Investigating the relationship between Friends and family support, employee resilience, self-efficacy, supervisors’ support, and work engagement

2. Literature Review

Theoretical Foundation and Hypotheses Development

COR theory is predicated on the premise that people are motivated to obtain, safeguard, and promote acquiring the resources they value (Hobfoll, 1998). Recently, scholars have applied the COR theory to the study of work engagement (Decuyper and Schaufeli, 2019; Wu and Lee, 2020). The COR theory recognizes that certain situations that may threaten or deplete resources are objectively distressing and affect an individual’s motivation (Hobfoll, 1989; Holmgreen et al., 2017). Thus, one may argue that a global pandemic such as COVID-19 can cause some people to consider their mortality, which will naturally result in increased stress and decreased engagement at work. Personal and job-related resources (i.e., self-efficacy, family and friend support, resilience, optimism, and the social job resource of social support) have been shown in previous research to stimulate work engagement (Hu et al., 2019; Schaufeli et al., 2019).

Resilience and Work Engagement

According to Malik and Garg (2018), employee resilience (ERS) is defined as “an individual’s capability to handle difficult circumstances and everyday stress at work while remaining healthy, to recuperate and learn from unforeseen setbacks fully, and to plan for potential complexities proactively, demonstrating increased expertise, professional growth, and capable of handling future workplace challenges.” During the COVID-19 outbreak, scholars focused on ERS (Barzilay et al., 2020; Panzeri et al., 2021). Panzeri et al. (2021) established that ERS helps to alleviate nervousness and traumatic stress related to COVID. Existing research demonstrates that ERS is a strong predictor of work engagement (Malik and Garg, 2018; Ojo et al., 2021).

Similarly, research involving 422 employees at a large information technology (IT) firm in China discovered that employee engagement is positively associated with ERS and transformative leadership (Wang et al., 2017). According to Ojo et al. (2021), a resilient individual possesses the positive emotions, confidence, and optimism necessary to continue working productively in the face of potentially stressful environmental conditions. As a result, we suggest the following hypothesis.

H1: Resilience has a significant effect on work engagement

Supervisor Support and Work Engagement

Supervisor support (SST) reflects workers’ views of the strength of the supervisor-employee relationship (Stinglhamber and Vandenberghe, 2003). Previous studies have confirmed the pivotal role of supervisors in mitigating the level of uncertainty that employees face in an organization (Blanco-Donoso et al., 2019; Skiba and Wildman, 2019). In the same vein, SST is also essential for minimizing employees’ uncertainty during the COVID-19 Pandemic (Charoensukmongkol and Phungsoonthorn, 2020).

Previous investigations have established that SST is a significant determinant of employee work engagement (Heyns et al., 2021; Pattnaik and Panda, 2020). For example, Holland et al. (2016) discovered that SST was positively associated with work engagement in a sample of 1,039 Australian nurses. Additionally, Heyns et al. (2021) found a comparable finding in 253 South African mining organization personnel studies. According to these debates, it is indicated that employees who feel a high degree of SST are more likely to experience pleasant job-related emotions, which can eventually increase their level of engagement at work. Hence, we hypothesize that:

H2: Supervisor support has a significant effect on work engagement

Friends and Family Support and Work Engagement

Social support refers to the sharing of resources between at least two individuals that are considered by either the provider or the recipient as meant to improve the recipient's well-being (Shumaker and Brownell, 1984). Social support can come from the community and social relations (Taylor, 2011), leaders (Vroom and Jago, 2007), colleagues (Chiaburu and Harrison, 2008), friends, and families (Nguyen et al., 2016). Furthermore, research has demonstrated that different types of social support can have varying effects on stress reduction (Shumaker et al., 2017). During the COVID-19 Pandemic, family and friends support people in feeling sustained and sharing their feelings and concerns with family members and others (Zhang and Ma, 2020).

According to Kiema-Junes et al. (2020), social support from spouses, families, and friends was significantly connected with work engagement. Similarly, Erum et al. (2021) indicated that familial support positively impacts work engagement. Shimmin (2019) correlational findings demonstrated a significant positive association between workplace friendships and work engagement. Regarding the preceding discussion, it is reasonable to conclude that employees capable of receiving adequate assistance from friends and family members regarding job-related concerns can potentially achieve higher levels of work engagement. Therefore, below is our hypothesis:

H3: Friends and family support has a significant effect on work engagement

Self-efficacy and Work Engagement

Self-efficacy (SFE) is a broad concept that refers to an individual's belief in their capacity to carry out tasks and achieve the desired goal (Bandura, 1997). Vagni et al. (2020) found that individual efficacy in resolving negative feelings and thoughts is a protective strategy against stress and secondary trauma among healthcare and emergency personnel treating COVID-19 in Italy. SFE is associated with a variety of significant concepts, including self-control (G. Zhang et al., 2019), well-being (Kodden, 2020), and work engagement (Burić and Macuka, 2018).

Yakin and Erdil (2012) discovered that employee SFE considerably affects work engagement. Their findings are congruent with those of Dagher et al. (2015). They examined the effect of SFE on three aspects of employee engagement (vigor, devotion, and absorption) using a sample of 426 respondents from Lebanon's service industry. SFE was found to significantly affect the three dimensions of employee engagement in that study. Furthermore, Burić and Macuka (2018) found that teachers with higher perceived SFE are more involved in their profession, experience more joy, pride, and love, and experience less anger, exhaustion, and hopelessness toward their students. Additionally, Chan et al. (2020) confirmed that SFE positively affected work engagement. Thus, we propose the following hypothesis:

H4: Self-efficacy has a significant effect on work engagement

Figure 1 displays this study's research framework based on the above hypotheses development, depicting four independent variables and one dependent variable.

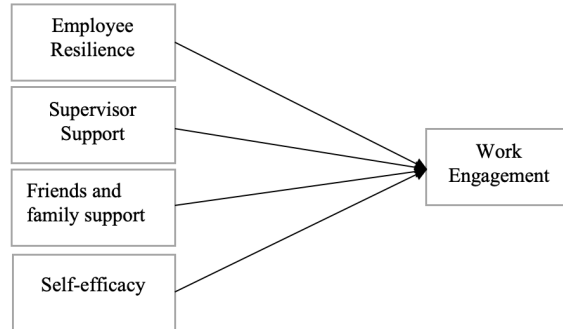


Figure 1: Theoretical Framework

3. Methods

3.1 Participants and Procedure

An online cross-sectional survey was conducted during the COVID-19 movement control order (MCO phase in Malaysia (i.e., from April 1 2020 to May 30 2020). So, we decided to distribute the questionnaire via the internet (i.e., Google Form). Due to the lack of a sampling frame, we selected possible respondents from knowledge-based sectors such as higher education, IT, and engineering services. The COVID-19 epidemic has accelerated the trend toward telecommuting, and many knowledge occupations can adapt to the new normal.

Online questionnaires were sent to workers in the knowledge-based sectors. The email includes a cover letter that describes the study's purpose and requests for volunteer participation while guaranteeing anonymity. We also asked responders to recruit co-workers. 15 out of 274 initial responders were eliminated due to missing values. Thus, the data analysis encompassed 259 samples. There were 152 male and 107 female respondents. Most respondents (66.8%) were between 36 and 45, 21.6% were between 25 and 35, 23.6% were between 46 and 55, and 9.7% were beyond 55. 80.3% were married, 16.6% single, and 3.1 divorced or widowed. Ninety-three percent of those polled had a PhD, and 52.9% had a masters. 43.2 percent of respondents were in middle management, while 22.8 percent were in lower management. 72% of respondents worked in higher education, 20% in IT, and 8% in engineering services.

3.2 Measurements

ERS was measured using the brief resilience scale consisting of six items adapted from Smith et al. (2008). Using the seven-point Likert scale (1 = strongly disagree to 7 = strongly agree), respondents were asked to indicate the extent to which they agree or disagree with the statements on ERS. Examples of these statements include "I tend to bounce back quickly after hard times", and "I have a hard time making it through stressful events". The Cronbach's alpha for this scale is 0.701.

Next, we adopted eight items from the perceived social support scale (Zimet et al., 1988) to measure support for family and friends. Respondents' perceptions of the extent of social support received from family (4 items) and friends (4 items) were assessed. The items were marked using a seven-point Likert scale (1 = strongly disagree to 7 = strongly agree). Sample items include "I get the emotional help and support I need from my family" and "I can count on my friends when things go wrong". We obtained a Cronbach's alpha of 0.903.

SST, four items from Rhoades et al. (2001) were used in assessing respondents' perceived support from their supervisors. The measurement was based on a seven-point Likert scale (1 = strongly disagree to 7 = strongly agree). Some of the sample items are "My work supervisor really cares about my well-being" and "My supervisor strongly considers my goals and values". The Cronbach's alpha was 0.949.

Further, we adapted three items from Jones (1986) to measure employees' SFE. We asked respondents to indicate on a seven-point Likert scale (1 = strongly disagree to 7 = strongly agree) the extent to which they agree or disagree with the relevant statements. Sample items include "I am confident of my ability to do my job" and "I have mastered the skills necessary for my job". The Cronbach's alpha is 0.925.

Work engagement was measured using the nine items developed by Schaufeli et al. (2006). This questionnaire was rated on a seven-point Likert scale (0 = never to 6 = always). Sample items were: "At my job, I feel strong and vigorous," "I am enthusiastic about my job," and "I am immersed in my work". The Cronbach's alpha for this scale was 0.926.

3.3 Data Analysis

SPSS 25 and Smart PLS 3.3 were used to analyze the research model. The measurement model was examined, followed by structural model analysis (Hair, Hult, Ringle, and Sarstedt, 2016).

4. Results

4.1 Statistical analysis

The descriptive statistics of the constructs are as shown in Table 1. FFS is recorded with a mean value of 5.46 (on a 7-point Likert scale) and a standard deviation (SD) of 1.097. ERS has a mean of 4.27 (on a 7-point Likert scale), with SD of 1.185. SFE has a mean of 5.86 (on a 7-point Likert scale), with SD of 0.953. Supervisors' support has a mean of 4.77 (on a 7-point Likert scale), with SD of 1.026. Lastly, Work Engagement has a mean of 4.44 (on a 7-point Likert scale), with SD of 0.910.

Table 1. Descriptive statistics

Variables (N= 259)	Mean	Standard Deviation
Friends and Family support	5.46	1.097
Resilience	4.27	1.185
Self-efficacy	5.86	0.953
Supervisors support	4.77	1.026
Work Engagement	4.44	0.910

4.2 Measurement Model

The model's convergent validity is determined first, followed by its discriminant validity. According to Hair et al. (2017), convergent validity is assessed using factor loading, average variance extracted (AVE), and composite reliability (CR). Additionally, factor loadings of 0.4 to 0.7 have been stated as appropriate as long as the CR and AVE are good (Hair et al., 2014). As seen in Table 2, most of the factor loadings are greater than 0.7, except the ERS item, which has a factor loading of 0.556, and the work engagement items, with a factor loading of 0.650 and 0.658. Nonetheless, it is adequate if the AVE is greater than 0.5 and all the CR are greater than 0.7. The constructs' convergent validity is sufficient (Fornell and Larcker, 1981).

Table 2. The result of Construct Validity and Reliability

Construct	Items	Factor Loading	CR	AVE
FFS1		0.727	0.921	0.595
FSS2		0.802		
FSS3		0.788		
FSS4		0.783		
FSS5		0.782		
FSS6		0.758		
FSS7		0.789		
FSS8		0.738		
ERS1		0.773	0.817	0.533
ERS3		0.847		
ERS5		0.712		
ERS6		0.556		
SFE1		0.949	0.953	0.870
SFE2		0.959		
SFE3		0.889		
SST1		0.943	0.967	0.907
SST2		0.953		

SST3	0.961		
WKE1	0.650	0.939	0.632
WKE2	0.803		
WKE3	0.860		
WKE4	0.856		
WKE5	0.852		
WKE6	0.801		
WKE7	0.787		
WKE8	0.853		
WKE9	0.658		

Note: SST4, ERS 2, and ERS 4 were removed due to low factor loading.

Gholami et al. (2013) hypothesized that discriminant validity is achieved when a clear contrast between distinct notions exists. Additionally, how many indicators focus exclusively on a specific construct. It is critical to conduct a precise discriminant validity assessment to ensure that the constructs are statistically distinct and distinct from other constructs (Hair et al., 2019). As Henseler et al. (2015) proposed, the study will report it using the HTMT ratio at this point. If the HTMT value is larger than 0.85, it is hypothesized that there is a severe problem with discriminant validity (Franke and Sarstedt, 2019). As illustrated in Table 3, the HTMT criteria is less than 0.85, indicating that discriminant validity has been demonstrated.

Table 3. Discriminant validity (HTMT)

	FFS	RE	SE	SS	WKE
FFS					
ERS	0.422				
SFE	0.420	0.667			
SST	0.502	0.282	0.329		
WKE	0.412	0.619	0.619	0.384	

Note: FFS= Friends and Family support; ERS = Resilience; SFE = Self efficacy; SST = Supervisors support; WKE = Work Engagement

4.3 Structural Model

Before hypothesis testing, it is vital to ensure the structural model is free of lateral collinearity concerns. According to Diamantopoulos and Sigauw (2006), the VIF used to determine collinearity must be less than 3.3. Table 4 shows that all VIF values are below the threshold set by Diamantopoulos and Sigauw (2006), showing that collinearity is not a concern. Accepting a hypothesis is determined by the t-value, p-value, and confidence interval bias-corrected using the bootstrapping process with 5000 samples.

The analysis supported three of the four hypotheses developed. The study found that FFS was not significantly related to WKE ($\beta = 0.095$, $t = 1.541$: LL = -0.010, UL = 0.193, $P > 0.05$), hence H1 is not supported. Further, ERS was positively related to WKE ($\beta = 0.202$, $t = 2.907$: LL = 0.079, UL = 0.308, $P < 0.05$), hence H2 was supported. Likewise, SFE was positively related to WKE ($\beta = 0.367$, $t = 4.843$: LL = 0.237, UL = 0.486, $P < 0.001$). Hence H3 is supported. Likewise, SST was positively related to WKE ($\beta = 0.146$, $t = 2.522$: LL = 0.058, UL = 0.247, $P < 0.05$). Hence H4 is supported.

Table 4. Hypothesis Testing

	Beta	SE	T Stat	P Values	LL	UL	Decision	VIF
FFS -> WKE	0.095	0.062	1.541	0.062	-0.010	0.193	NS	1.431
ERS-> WKE	0.202	0.070	2.907	0.002	0.079	0.308	Supported	1.820
SFE -> WKE	0.367	0.076	4.843	0.000	0.237	0.486	Supported	1.542

SST -> WKE	0.146	0.058	2.522	0.006	0.058	0.247	Supported	1.335
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Table 5 shows the calculation of the coefficient of determination (R^2), the effect size (f^2) and the predictive relevance (Q^2) of predictive variables on criterion variables of WKE. Based on Table 5 and Figure 2, the R^2 of 0.432 indicated that FFS, ERS, SFE and SST explain 43.2% of the overall variance of WKE. The study used the Q^2 by Geisser (1974) to analyze the predictive accuracy. A blindfolding procedure was conducted to assess the predictive power of the model. Analyzing the blindfolding procedure using a distance of 7, the Q^2 indicates the predictive significance for definite criterion variables if the Q^2 assessment is more than 0 (Fornell and Cha, 1994; Hair et al., 2017). The Q^2 of the criterion variables, WKE, is 0.266, indicating an acceptable predictive relevance. According to Cohen (1992), effect size, for effect size; 0.35, 0.15, and 0.02, is considered large, medium, and small effect sizes, respectively. The study found that FFS, ERS, SFE and SST has a Nil, small, medium, and small effect size on the WKE (0.011; 0.040; 0.153; 0.028), respectively.

Table 5. Coefficient of Determination (R^2) and Effect Size (f^2)

Construct	R2	Q2	F2	Decision
WKE	0.432	0.266		
FFS			0.011	Nil
ERS			0.040	Small
SFE			0.153	Medium
SST			0.028	Small

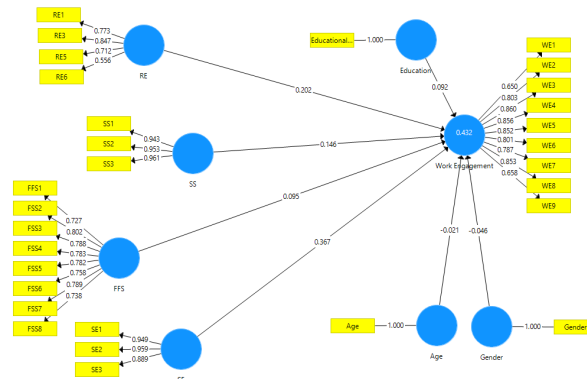


Figure 2: PLS-SEM Measurement Model.

5. Discussion

The findings of this study have been outstanding. It was discovered that the ERS significantly impacts WKE. This finding aligns with previous studies (Malik and Garg, 2018; Ojo et al., 2021), which narrated those personal resources such as ERS of employees to adjust even in tough times result in work engagement. Further, the finding showed that SFE significantly predicted WKE, consistent with previous results (Chan et al., 2020; Yakin and Erdil, 2012). Thus, indicating that highly confident employees experience greater WKE. When employees have the confidence to perform tasks, it will be easier to be engaged with their work. Finally, SST is shown to influence WKE significantly. This finding is in tandem with past research (Heyns et al., 2021; Pattnaik and Panda, 2020).

It is narrated that supervisors' support goes a long way in getting employees in line with their work. Employees feel good about themselves when they feel that they have the support of their supervisor, hence resulting in increased WKE. Nevertheless, this study indicates that FFS does not significantly influence WKE. This finding is in line with the outcome of Alcover et al.'s (2018) study. It revealed that social supports outside work could negatively affect employees' life (Alcover et al., 2018), including work engagement. It is understandable that when employees are stressed about their work and need some work-related encouragement, SST becomes very important instead of FFS.

5.1 Theoretical and Practical Contribution

This study contributes to the further understanding of the COR theory. The COR theory explains that people are driven to maintain their current resources and pursue new resources while avoiding resource depletion (Hobfoll, 2011). This study reveals that ERS, SFE, and SST are pivotal personal, social, and work resources that help employees retain their resources to engage in their work, even during a stressful time such as the COVID-19 Pandemic. Another exciting contribution from this study indicates that when employees need support, such employees might cherish the support of supervisors more than FFS. It shows that employees prefer work-related support for work issues; however, support for friends and family may be complimentary. This is a significant contribution to the body of knowledge for COR theory.

The practical implication of this study dictates that top management and supervisors have a significant role in encouraging WKE among employees, especially in a stressful period such as the COVID-19 Pandemic. Further, employees have a role in ensuring that they are mentally stable and physically fit. Top management may encourage the formulation of policies that seek to communicate the importance of employees in the organization and recognition and awards for work performance hence, giving employees the impression that they are “family members” of the organization. Also, the available support of employees in terms of work development and personal well-being will increase employee engagement.

Further, employees can increase their ERS by making time for their mental and physiological health. Employees may engage in frequent daily exercises such as walking, cycling, yoga, and meditation. Exercises are known to destress and rejuvenate employees’ minds and overall health (Mani and Mishra, 2020). Exercise can also help build confidence in employees (Mani and Mishra, 2020).

6. Limitations, Future studies, and Conclusion

This study investigates the relationship between FFS, ERS, SFE, SST, and WKE. It is revealed that the ability of employees to bounce back from a traumatic situation, the confidence that employees have about accomplishing their jobs effectively, and the support from supervisors all influence employee work engagement. It also indicated that FFS might not be necessary regarding employees WKE when SST is present.

This study has some limitations. It was carried out only in Malaysia; hence other studies may be done in other countries, especially in developed countries. Because of the cross-sectional nature of this study, there could be a need to carry out a longitudinal study about different ways to increase work engagement during the COVID-19 Pandemic. Future studies can investigate the role of proactive personality in influencing WKE. It is imperative to encourage employees WKE, especially during the COVID-19 Pandemic, to increase organizational performance and the ERS of the national economy as a whole.

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