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Balancing Demands and Resources to Enhance Employee Work Engagement in Kuala Lumpur, Malaysia

Dalowar Hossan[1,2*], Zuraina Dato' Mansor[1], Mahmoud Abdelrehim[1]
*Corresponding Author

[1] School of Business and Economics, Universiti Putra Malaysia, Serdang, Malaysia
[2] SBS Swiss Business School, University of Applied Sciences Institute, Kloten-Zurich, Switzerland

d.hossan@research.sbs.edu, dalowarhossan.bd@gmail.com, aina_m@upm.edu.my, mahmoudmohamed@putrabs.edu.my
Tel: +8801715973589

Abstract
This study aims to identify the factors influencing work engagement among employees in Kuala Lumpur, using the Job Demands-Resources (JD-R) theory and incorporating workaholism as a personal demand. Data from 146 respondents were collected through an online, self-administered, cross-sectional questionnaire. The data were analyzed using Smart-PLS and SPSS. The results indicate that job and personal demands significantly diminish work engagement, whereas job and personal resources substantially enhance it. Additionally, the interaction between resources and demands from both job and personal domains influences work engagement. Future research could focus on the organizational and home domains.

Keywords: JD-R theory, job and personal demands, job and personal resources, work engagement

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1.0 Introduction

The Job Demands-Resources (JD-R) theory explains the interaction between Job Demands (JD) and Job Resources (JR) in influencing employee Work Engagement (WE), motivation, and overall well-being within the workplace. To ensure the applicability of organizational behavior theories developed in Western contexts to non-Western samples, ongoing collaboration remains essential from both practical and academic perspectives (Leung, 2009).

According to Mercer's Engagement Index, 26% of workers in Malaysia report a lack of engagement or interest in their jobs, one of the highest rates in the Asia-Pacific region. This presents a significant challenge to both business growth and the broader economy. As illustrated in Figure 1, the Aon Hewitt report on WE highlights broader trends in employee engagement. Given that research consistently demonstrates that an engaged workforce fosters a healthier, happier, and more productive work environment, it is imperative to address these engagement deficits. The data suggests that Malaysia has the potential to improve its Employee Engagement Index score. This improvement could be achieved by companies prioritizing the well-being and value of their employees, which would result in substantial organizational and economic benefits.

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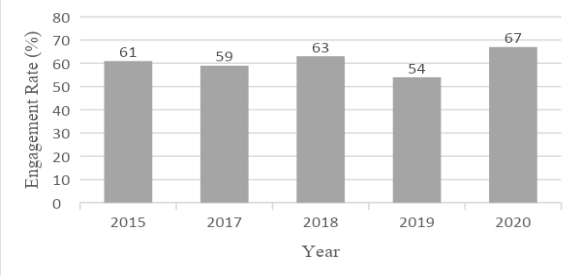


Figure 1: Employee engagement in Malaysia (source, Aon Hewitt)

As organizations expand globally, it is crucial to understand the factors that drive workforce engagement in various international locations. Low employee engagement has significant economic repercussions, costing the global economy approximately USD 7.8 trillion, or 11% of global GDP (Gallup, 2022). Gallup reports that disengaged employees exhibit 37% higher absenteeism, 18% lower productivity, and 15% lower profitability (Forbes, 2019). Furthermore, each actively disengaged employee wastes roughly 34% of their salary (Errera, 2022).

In Malaysia, the employee engagement rate was reported at 63% in 2018 by Aon, leaving 37% of employees disengaged, which resulted in an estimated economic loss of approximately RM 30.661 billion in that year. This trend worsened in 2019, with 46% of Malaysian employees disengaged, leading to an estimated cost of RM 42.165 billion (Choo, 2020; see Figure 1). However, by 2020, the disengagement rate had decreased to 33%, with the corresponding economic impact reducing to approximately RM 26.097 billion (Qualtrics, 2021; see Figure 2).

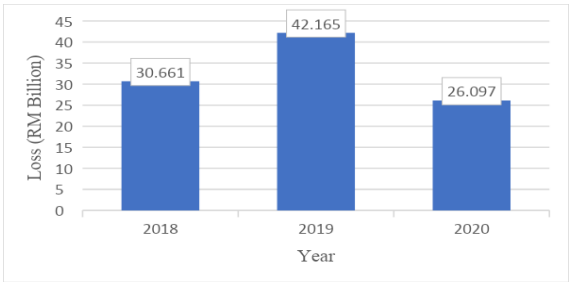


Figure 2: Estimated economic impact of employee disengagement in Malaysia

Hence, it is crucial to assess how the JD-R theory, which was developed by Western employees with their cultural perspectives, applies to non-Western employees, particularly those working in Asian countries like Malaysia, where social attitudes play a significant role in the workplace. This study explores the factors influencing employee WE in Malaysia through the lens of the JD-R theory, with the inclusion of workaholism as a PD.

2.0 Literature Review

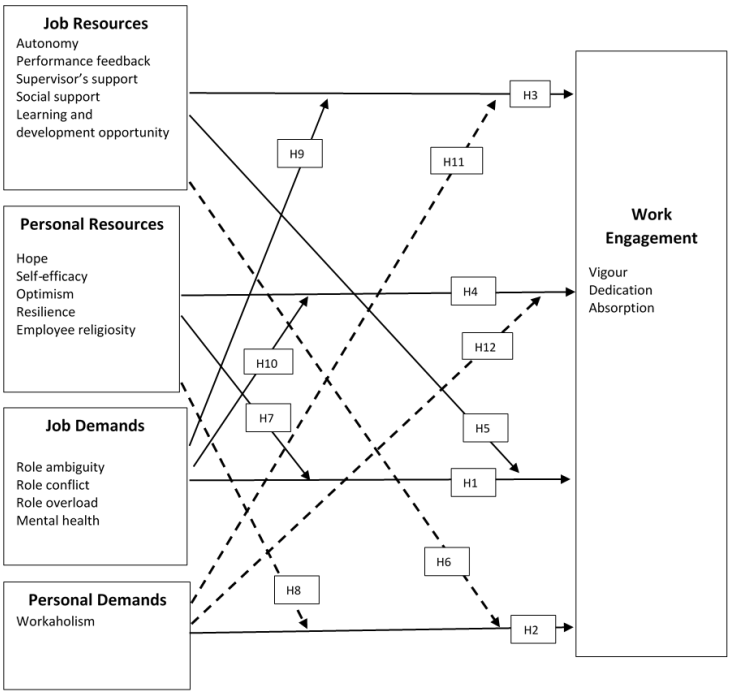
Schaufeli and Bakker (2004) incorporated positive aspects and psychological elements into the JD-R theory. The goal of this revised JD-R theory was to explain both burnout, which is a negative experience, and WE, which is a positive one. WE is defined as being in a good mental state while working, characterized by high energy, mental resilience, a sense of significance, enthusiasm, and enjoyment in the work.

Motivation is enhanced when ample JR are available. The updated JD-R theory emphasizes the motivational role of JR. According to the effort-recovery theory, abundant resources in the work environment motivate employees to invest their best efforts and skills. JR motivate employees by reducing job pressure and aiding goal achievement, thereby fulfilling basic human needs for autonomy, relatedness, and competence (Van den Broeck et al., 2008). For instance, feedback helps improve job performance and autonomy and supports meeting the needs for independence and connection. These resources lead to happiness and engagement at work, either through goal accomplishment or need fulfilment, resulting in positive organizational outcomes like loyalty and high performance. Hence, engagement is seen as a link between JR and organizational outcomes.

Bakker and Demerouti (2008) explored JD as moderator between JR and WE. In another study focusing on WE, JD were included as a mediator between personal and professional resources and WE. Personal Resources (PR), which relate to resilience and the ability to manage one's environment, are accounted for as positive self-evaluations. These resources benefit physical and mental health, extending beyond stress reduction. Individuals perceive and adapt to their environment differently based on their resources, which are influenced by their surroundings. PR can act as a moderator or mediator between organizational outcomes and environmental factors, shaping how individuals perceive, interpret, and respond to their environment.

Van den Broeck et al. (2013) suggested that Personal Demands (PD) could increase employees' workload and that the JD-R theory is a useful framework for investigating these effects on WE. This study is unique in considering PD alongside available resources. Prieto et al. (2008) emphasized the importance of considering individual needs, such as personality traits like perfectionism and emotional instability, and goal-setting and expectation levels, in future research. Guglielmi et al. (2012) identified workaholism as a PD. Schaufeli et al. (2009) found that workaholism is a personal risk factor for burnout and well-being, regardless of occupational context. Workaholism is defined as an intense interest in work, manifested as compulsive overworking (behavioral dimension) and obsessive thinking about work (cognitive dimension) (Schaufeli et al., 2008). Guglielmi et al. (2012) highlighted the significance of workaholism in the JD-R theory concerning burnout among school administrators. Essentially, workaholism can lead to burnout by depleting emotional resources, resulting in emotional exhaustion (Taris et al., 2005).

The research framework was established based on insights from the literature review and the JD-R theory.



(Solid lines in the research framework represent established and well-validated links, whereas dashed lines indicate new or less extensively established links).

Figure 3: Research framework

The hypotheses were developed based on the research framework.

Table 1: Hypothesis development

Proposition	Specification and Hypothesis
Proposition 1: Job and personal characteristics are four types; JD, JR, PR and PD	JD define psychological, physical, social and organizational components of a job that necessitate sustained mental, physical, and cognitive effort and are connected with physical and emotional costs. JR refer to the psychological, physical, social and organizational components that have the potential incentive for effectively attaining work goals, regulating the effect of JD, and stimulating personal development and learning. PD are described as the standards that people set for their own actions and performance, which motivates them to work harder and has physical and psychological consequences. PR are valued, actual, social, psychological, or symbolic possessions that could be utilized to improve performance in specific aspects.
Proposition 2: Demands (job and personal) and resources (job and personal) propose two procedures	Procedure for deteriorating health: job and PD compel employees to exert increased effort, leading to the depletion of their psychological, physical, and cognitive resources. This depletion negatively affects their level of WE. ***H1: JD have a significant influence on WE*** ***H2: PD have a significant influence on WE*** Process of motivation: the job and PR meet the fundamental psychological requirements and encourage workplace involvement ***H3: There is a significant influence of JR on WE***

	H4: PR have a substantial impact on WE
Proposition 3: Demands (job and personal) and resources (job and personal) have a multiplicative effect on WE	The effect of job and PD on engagement at work is lessened by JR ***H5: The association between JD and WE is moderated by JR*** ***H6: The association between PD and WE is moderated by JR*** PR weaken the effect of job and PD on WE ***H7: The association between JD and WE is moderated by PR*** ***H8: The association between PD and WE is moderated by PR*** JD decline the effect of personal and JR on WE ***H9: The association between JR and WE is moderated by JD*** ***H10: The association between PR and WE is moderated by JD*** PD decrease the influence of job and PR on WE ***H11: The association between JR and WE is moderated by PD*** ***H12: The association between PR and WE is moderated by PD***

3.0 Methodology

The respondents were full-time employees working in Kuala Lumpur, Malaysia. Closed-ended, self-administered online questionnaires were distributed among the employees. All participants were given uniform instructions for completing the questionnaire. To examine the core processes of the JD-R theory—namely, the strain and motivation processes—this study employed a cross-sectional design to test the hypotheses concerning job and personal demands, as well as job and personal resources. A total of 146 usable questionnaires were used for this study. The questionnaire included constructs related to JR, PR, JD, PD, and WE.

The researchers used a five-point Likert scale to collect data, with responses ranging from 1 (strongly disagree) to 5 (strongly agree), and a neutral option for respondents who did not wish to respond. The nine-item measure of employee WE was adapted from Schaufeli et al. (2006). The JD questionnaire, which included 17 items related to role conflict, role ambiguity, role overload, and mental health, was adapted from Rizzo et al. (1970), Seashore et al. (1982), and Topp et al. (2015). The twenty-item measure of JR (social support, autonomy, learning and development opportunities, supervisor support, and performance feedback) was adapted from Rothmann et al. (2006) and Tones and Pillay (2008). The 19-item measure of PR (hope, self-efficacy, optimism, resilience, and employee religiosity) was adapted from Luthans et al. (2007) and Plante and Boccaccini (1997). The seven-item Bergen Work Addiction Scale, adapted from Andreassen et al. (2012), was used to measure PD (workaholism).

4.0 Results and Findings

The survey had a total of 146 respondents. Among them, 63 respondents (43%) were male and 83 respondents (57%) were female. In terms of marital status, 105 respondents (72%) were married, while 41 respondents (28%) were single, including those who were unmarried, divorced, or fell into other categories. The age distribution of the respondents was as follows: 14 respondents (9.3%) were between 18-30 years old, 59 respondents (40.1%) were between 31-40 years old, 56 respondents (38.6%) were between 41-50 years old, and 17 respondents (12%) were over 50 years old.

4.1 Construct Reliability-Validity and Discriminant Validity

The validity and reliability of the items were evaluated using Composite Reliability (CR) and Average Variance Extracted (AVE). Table 2 shows that the AVE for all the latent variables ranged from 0.538 to 0.841, which is above the recommended value of 0.5 (50%) and thus considered valid. The CR values ranged from 0.719 to 0.872, exceeding the suggested threshold of 0.70. The Heterotrait-Monotrait (HTMT) correlation ratio used as a method for assessing discriminant validity, should be below 0.90. According to Table 2, the highest HTMT value in the current study was 0.825, indicating that discriminant validity is achieved.

4.2 R square, f Square, and Multicollinearity

The R^2 value for WE was 0.733, as shown in Table 2, indicating that 73.3% of the variance in WE is accounted for by JD, JR, PD, and PR. The effect sizes, represented by the f^2 values, were as follows: JD = 0.536 (large), JR = 0.362 (large), PD = 0.251 (medium), and PR = 0.426 (large). Inner Variance Inflation Factor (VIF) value exceeding 10 or below 0.1 may suggest the presence of multicollinearity. In this study, Table 2 indicates that the highest VIF value was 3.49 and the lowest was 1.11, suggesting that multicollinearity among the constructs is not an issue.

Table 2: Measurement and structural model

Type of model	Measurement model						Structural model		
Construct	Convergent reliability & validity		Discriminant validity				f Square	R-square	Inner VIF
	Composite reliability	Average variance extracted (AVE)	Heterotrait-Monotrait ratio (HTMT)						
			Y1	Y2	Y3	Y4	Y5		Y5
Job demands (Y1)	0.872	0.739					0.536		1.113
Job resources (Y2)	0.738	0.682	0.635				0.362		3.491
Personal demands (Y3)	0.837	0.730	0.783	0.362			0.251		2.637
Personal resources (Y4)	0.719	0.841	0.741	0.736	0.537		0.426		3.147
Work engagement (Y5)	0.860	0.538	0.362	0.273	0.825	0.461		0.733	

4.3 Path-coefficient

To test the hypotheses, the study used a bootstrapping procedure with 5,000 subsamples to calculate path coefficients, t-values, and p-values. Relationships were considered statistically significant if t-values were above 1.96 and p-values were below 0.05, reflecting a significance level (alpha) of 5%.

The study investigates various hypotheses related to WE within the framework of the JD-R theory, using statistical analysis to determine the strength and significance of different relationships. Hypothesis H1 posits that JD negatively affects WE, with a significant negative effect observed (β = -0.336, p = 0.041). Similarly, H2 finds that PD has a significant negative effect on WE (β = -0.647, p = 0.050). On the positive side, H3 reveals that job resources positively influence WE (β = 0.213, p = 0.029), while H4 shows a significant positive effect of PR on WE (β = 0.473, p = 0.008).

Table 3: Result of data analysis

Hypothesis	Beta	p-value
H1: JD have a significant effect on WE	-0.336	0.041
H2: PD have a significant effect on WE	-0.647	0.050
H3: There is a significant influence of job resources on WE	0.213	0.029
H4: There is a significant influence of PR on WE	0.473	0.008
H5: The association between JD and WE is moderated by JR	-0.465	0.020
H6: The association between PD and WE is moderated by JR	-0.741	0.038
H7: The association between JD and WE is moderated by PR	-0.375	0.018
H8: The association between PD and WE is moderated by PR	-0.245	0.041
H9: The association between JR and WE is moderated by JD	-0.465	0.020
H10: The association between PR and WE is moderated by JD	-0.375	0.018
H11: The association between JR and WE is moderated by PD	-0.741	0.038
H12: The association between PR and WE is moderated by PD	-0.245	0.041

The moderating role of job resources is evident in H5 and H6, which respectively demonstrate their significant moderation of the relationship between JD (β = -0.465, p = 0.020) and PD (β = -0.741, p = 0.038) on WE. Furthermore, H7 and H8 highlight that PR significantly moderate the relationships between JD (β = -0.375, p = 0.018) and PD (β = -0.245, p = 0.041) with WE. The study also finds significant moderating effects of JD on the relationships between job resources (β = 0.724, p = 0.000) and PR (β = 0.674, p = 0.043) with WE, as well as the moderating effects of PD on the relationships between job resources (β = 0.840, p = 0.001) and PR (β = 0.743, p = 0.049) with WE. These results underscore the complex interplay of job and personal factors in influencing WE.

5.0 Discussion

This research aims to investigate WE among employees in Kuala Lumpur using the widely recognized and adaptable JD-R theory. The findings affirm the core principles of the JD-R theory, demonstrating a positive relationship between both JR and PR and WE, and a negative relationship between both JD and PD and WE. The results confirm hypotheses H1, H2, H3, and H4, demonstrating that JD and PD significantly negatively affect WE. On the other hand, JR and PR have a notable positive impact on WE among the employees in Kuala Lumpur.

Hypotheses H5 through H12 were tested to examine the interaction between demands (both job and personal) and resources (both job and personal). The results indicate that job and PD have a significant negative impact on WE among Malaysian employees. However, job resources and PR play a moderating role by mitigating these negative effects. Specifically, job resources diminish the adverse impact of job and PD on WE, while PR similarly moderates the relationship between both types of demands and WE. Consequently, hypotheses H5, H6, H7, and H8 were supported. Bakker et al. (2023) suggest that job resources can attenuate the negative impact of JD on strain (the inverse of motivation), thereby weakening the detrimental effect of JD on WE. This study extends finding by demonstrating that PR also serve a similar moderating function, affecting both JD and PD in relation to WE. Conversely, given that both JR and PR positively influence WE, the study found that JD, as a moderator, reduces the positive effect of these resources on WE. Similarly, PD, when acting as a moderator, decrease the positive impact of both job and PR on WE. Thus, hypotheses H9, H10, H11, and H12 were also supported. While Bakker et al. (2023) hypothesize that JD enhance the influence of job resources on WE, our study provides contrary findings. It

shows that JD do not only diminishes the effect of both job and PR on WE but also that PD play a comparable role in reducing the impact of these resources on WE.

6.0 Conclusion & Recommendations

The demands and resources in both job and personal domains are interconnected, requiring individuals to constantly regulate them. Nowadays, work life increasingly interferes with personal life. PR and PD also help buffer the impact of job-related resources and demands. Demerouti and Bakker (2023) expanded the JD-R theory to be more applicable to crisis situations and beyond. They argued that the interplay between job and personal role characteristics could better explain how people react to demands, given that time and energy are finite resources. In Malaysia, JD or PD among employees decrease the effect of JR or PR on WE. Conversely, JR or PR diminish the influence of JD or PD on WE.

This study focused solely on job and personal domains. Future research could explore different domains, such as organizational and home, incorporating job crafting and self-undermining processes to test new propositions.

Paper Contribution to Related Field of Study

Good health and well-being (SDG 3), Decent work and economic growth (SDG 8).

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