

ANTECEDENTS OF EMPLOYEE WORK ENGAGEMENT IN MALAYSIA IN LIGHT OF JOB DEMANDS-RESOURCES THEORY

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Received March 2024; accepted May 2024

Abstract

The employee engagement rate was 80% in 2022, which has decreased to 67% in 2023 and the cost of disengaged employees was approximately RM 26.097 billion in 2020 in Malaysia. It indicates the unequal presence level of demands and resources among employees according to JD-R theory. The main objective of this study is to investigate the effect of demands and resources on work engagement among non-government full-time employees in Malaysia. Hypotheses were developed based on JD-R theory, with the attachment of workaholism as a personal demand to fill the gap of previous studies. A total of 400 data was collected online using a self-administered questionnaire cross-sectionally from the full-time employees who worked in non-government organizations in Klang Valley, Malaysia. PLS-SEM was used to analyse the collected data and test the hypotheses. The finding reveals that job demands (role ambiguity, role conflict, role overload, and mental health challenges) and personal demands (workaholism) have significant negative effects on work engagement. Job resources (autonomy, performance feedback, support of supervisor, social support, learning and development opportunity) and personal resources (self-efficacy, hope, optimism, resilience, employee religiosity) significantly and positively influence work engagement. Job resources decrease the effect of demands (job and personal) on work engagement by playing a moderating role. Similarly, personal resources decrease the impact of demands (job and personal) on work engagement by its moderating effect among full-time non-government employees in Malaysia. The interaction effect between resources (job and personal) and demands (job and personal) on employee work engagement in this study will assist managers and human resources practitioners in making insightful decisions for increasing employee work engagement, which will decrease the disengagement cost of the employees.

Research Paper

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

Reference to this paper should be made as follows: Hossan, D., Mansor Z.D., Jaharuddin N.S., & Rahman M.M. (2024). Antecedents of Employee Work Engagement in Malaysia in Light of Job Demands-Resources Theory. *Journal of Entrepreneurship, Business and Economics*, 12(1), 36–65.

Introduction

Job Demands-Resources (JD-R) theory describes how Job Demands and Personal Demands (JDPD) and Job Resources and Personal Resources (JRPR) interact to affect Work Engagement (WE), motivation, and well-being in the workplace (Bakker et al., 2023; Demerouti & Bakker, 2023). The success and well-being of the workplace heavily depend on engaged employees (Forbes, 2023). Most of the organizational behaviour theories originated in Western countries. As a result, there is a continuing need for study, both from a practical and academic perspective, to ensure that organizational behaviours theories are valid in non-Western cultures (Leung, 2009; Gelfand et al., 2008). Health impairment and motivational processes affect employee WE through demands and resources, and resources and demands affect motivation and strain, which reflects employee job performance (Bakker & Demerouti, 2017).

According to the research by the Public Services Department, excessive levels of stress are a long-term problem for Malaysian employees, whether they work for the government or the private sector, and stress, therefore, should be avoided at all costs (Rasli et al., 2017). The overall trend for employee WE is drawn in Figure 1. Around 33% of employees were not engaged in their work in 2023, and the engagement rate was similar to that in 2020. Something is expected to be done to increase employee WE because studies have confirmed that a more engaged workforce produces a healthier and happier work environment and is more productive. The data represented in the graph indicates that Malaysia has the potential for a higher score on the Employee Engagement Index, as the highest engagement rate was 80% in

2022. Companies need to treat their employees better; there is much to gain if they value them.

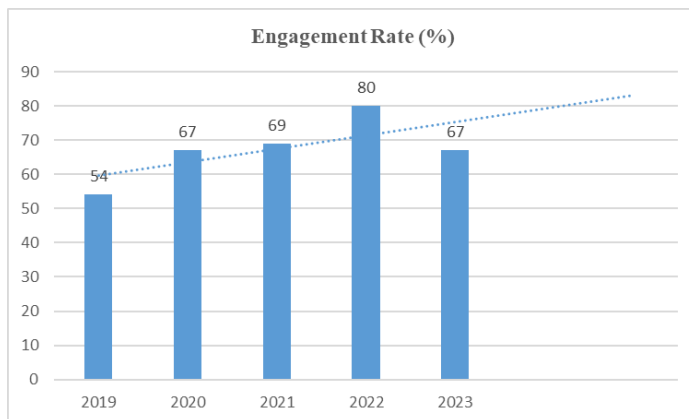


Figure 1. Employee Engagement in Malaysia (Source: Laotian Times, 2021; Qualtrics, 2020, 2022, 2023, 2024)

According to Gallup (2022), low engagement costs the world economy USD 7.8 trillion, or 11% of GDP. Disengaged workers had 37% greater absenteeism, 18% poorer productivity, and 15% worse profitability, according to Gallup (Forbes, 2019). Gallup also revealed that each actively disengaged employee wastes roughly one-third (34 percent) of his or her salary (Errera, 2022; Forbes, 2019; Harter, 2020). Aon (2018) stated that employee engagement in Malaysia is 63%. Therefore, employee disengagement was 37% in 2018, and those disengaged employees' cost was approximately RM 30.661 billion in 2018. According to Qualtrics (2020), 46% of employees had disengaged in Malaysia in 2019, and the disengaged employees' cost was approximately RM 42.165 billion in 2019 (see Figure 2). Laotian Times (2021) revealed that 33% of employees had disengaged in Malaysia in 2020, and the disengaged employees' cost was approximately RM 26.097 billion in 2020 (Figure 2).

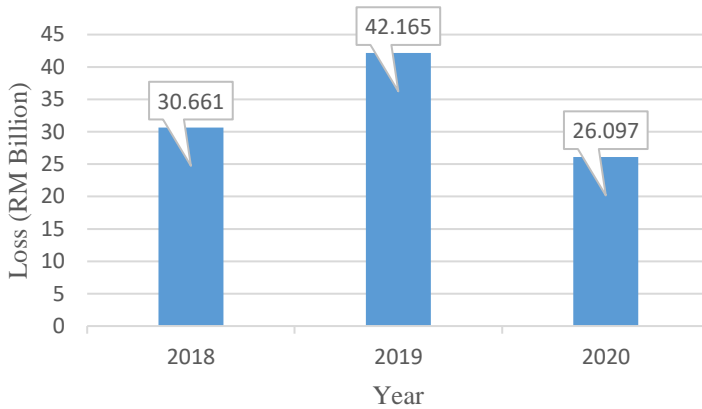


Figure 2. Approximately loss for employee work disengagement in Malaysia

Radey and Wilke (2023), Lee and Cho (2020), and Moeller et al. (2018) studied Personal Resources (PR), Job Demands (JD), and Job Resources (JR). Personal demands (PD) (Schaufeli & Taris, 2014) were attached to the JD-R theory; however, they have yet to be included to date intensively. Employee religiosity, mental health challenges, and workaholism have been considered in very few studies linked with WE (Abualigah et al., 2021; Brokmeier et al., 2022; Guglielmi et al., 2012; Langseth-Eide, 2019; Lau, 2020). By providing a theoretically grounded conceptualization of PD, PR, JD, and JR, as well as reviewing their evident place within the JD-R theory, this research introduces employee religiosity as PR (Abualigah et al., 2021), mental health challenges (Brokmeier et al., 2022; Lau, 2020) as JD, and workaholism as PD (Guglielmi et al., 2012; Langseth-Eide, 2019) along with the other indicators of JD, JR, and PR (proposed by JD-R theory, Schaufeli & Taris, 2014) into JD-R theory in Malaysian context.

Overall, employee WE was 80% in 2022 (Qualtrics, 2023) and decreased to 67% in 2023 (Qualtrics, 2024). As a result, it was found by calcu-

lation that the approximate loss is RM 19.681 billion in 2022 due to disengaged workers in various organizational contexts. If these disengaged employees can be provided with enough JRPR to reduce JD, they will get engaged in their respective jobs. In this way, organizations in Malaysia can reduce the loss of employee disengagement. Therefore, it is essential to determine how the JD-R theory developed by Western employees based on their cultures applies to non-Western employees, specifically those who work in Asian countries like Malaysia, where social attitudes are significant in the workplace. This study reveals the effect of the antecedents on WE among full-time employees in non-government organizations in Malaysia in the light of JD-R theory with the attachment of workaholism as PD, employee religiosity as PR, mental health challenges as JD along with the other indicators of JR, PR, and JD. Previous studies primarily concentrated on JD (Mayerl et al., 2017; Mauno & Minkkinen, 2020; Jenull & Wiedermann, 2015; Dana et al., 2022) and JR (Mäkikangas et al., 2016) or both but did not consider PR (Gameiro et al., 2020; De Spiegelaere et al., 2017; Biétry & Creusier, 2017; Fan et al., 2019). PD, PR, JD, and JR are anticipated to influence job outcomes. However, there is a lack of research that includes PR, as well as JD and JR (Radey & Wilke, 2023; Moeller et al., 2018; Batrancea et al., 2019, 2022; Lee & Cho, 2020), and no study includes PD (Pulido-Martos et al., 2023).

In addition, workaholism (PD) has been found to tap into multiple kinds of excessive WE (Mazzetti et al., 2018), and both (workaholism and work engagement) are related to the level of work involvement. However, the association between both constructs remains less explored (Tóth-Király et al., 2021). Since the effect of JD and JR interaction fosters WE (Bailey et al.,

2017), Bakker and Demerouti (2017) suggested testing the JD and PR interaction. Therefore, this study concentrates on the moderating effect of JRPR in the relationship between JDPD and WE based on the JD-R theory to fill the gap of previous studies.

Theoretical underpinning and hypotheses development based on literature

Schaufeli and Bakker (2004) integrated a positive aspect and a psychological element into the JD-R theory. The purpose of developing the revised JD-R theory was to provide an understanding of both burnout, a negative feeling, and work engagement, a positive feeling. WE means being in a good state of mind while working. This state of mind is characterized by having lots of energy and being mentally strong, feeling a sense of importance and excitement about what individuals do, and being fully focused and enjoying the work. A process to stay motivated is activated when plenty of resources are available for the job.

Bakker and Demerouti (2014), Bakker et al. (2023), and Demerouti and Bakker (2023) proposed that the process of health impairment: JD and PD obligations cause personnel to exert more effort, which depletes their psychological, physical, and cognitive resources that have a negative impact on their level of WE.

Role ambiguity (Pasquarella et al., 2022; Martínez-Díaz et al., 2021; Lee et al., 2023), role conflict (Torp & Bergheim, 2023; Moura et al., 2014), role overload (Zhang et al., 2022; Altinay et al., 2019), mental health challenges (Innstrand et al., 2012; Lau, 2020; Shafira, 2023; Teng et al., 2021) have significant and negative effect on WE.

H₁: *JD (role conflict, ambiguity, mental health challenges, role overload) has a significant negative influence on WE.*

Workaholism is associated with higher turnover intention and burnout Jung et al. (2023). Yilmaz et al. (2021) found a negative effect of workaholism on employee well-being.

H₂: *PD (workaholism) has a significant negative influence on WE.*

Bakker and Demerouti (2014), Bakker et al. (2023), and Demerouti and Bakker (2023) proposed that the process of motivation, workplace, and individual resources address fundamental emotional requirements and encourage workplace involvement.

Job autonomy (Karim & Rahman, 2022; Mazzetti et al., 2023; van Dorssen-Boog et al., 2020), social support (Crawford et al., 2013; Fu et al., 2022; Mazzetti et al., 2023; Zulhakim et al., 2022), supervisor support (Ahmed et al., 2022; Kakkar et al., 2023), and performance feedback (Al Mamari & Groves, 2023; Hakanen et al., 2021; Karim & Rahman, 2022; Paramba et al., 2023) have significant positive influence on WE. Kuvaas (2008) discovered a significant negative relationship between HR development practices (with training opportunities) and intention to leave.

H₃: *There is a significant positive influence of JR (Job autonomy, social support, supervisor support, performance feedback, Learning and development opportunity) on WE.*

Self-efficacy (Edokpolor et al., 2022; Ginbeto et al., 2023; Wang & Pan, 2023; Hosseini et al., 2022, 2024), resilience (García-Rivera et al., 2022; Ojo et al., 2021; Wang & Pan, 2023), optimism (Mikus & Teoh, 2022; Nieto et al., 2022; Saleem et al., 2022; Toth et al., 2023), employee religiosity (Arifin et al., 2021; Donaldson-Feilder et al., 2013; Jamshed et al., 2017; Tennakoon & Lasanthika, 2018), and hope (Mikus & Teoh, 2022; Saleem et al., 2022; Toth et al., 2023) has positive relationship with WE.

***H4:** There is a significant positive influence of PR (Self-efficacy, resilience, optimism, employee religiosity, hope) on WE*

Bakker and Demerouti (2014), Bakker et al. (2023), and Demerouti and Bakker (2023) proposed that JR mitigates the impact of JD and PD on WE, as well as the impact of JD and PD on WE are weakened by PR. It, therefore, has been hypothesized that:

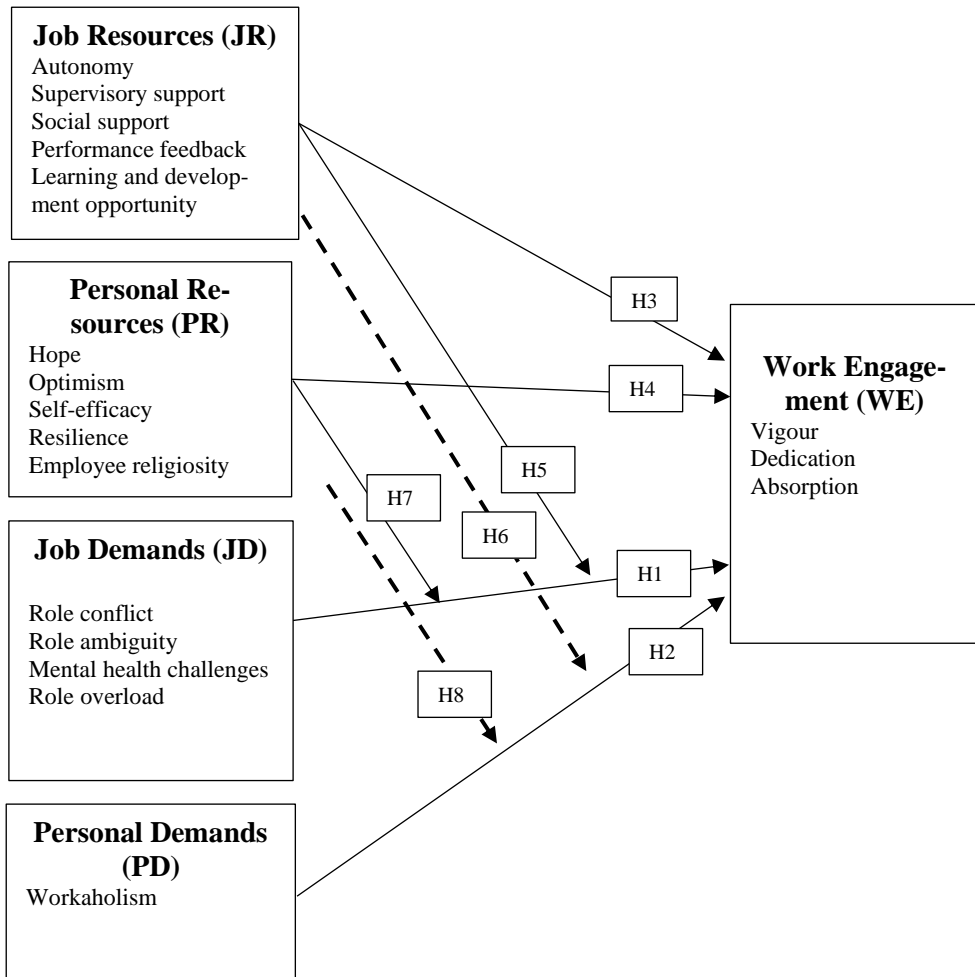
***H5:** JR moderates the association between JD and WE.*

***H6:** JR moderates the association between PD and WE.*

***H7:** PR moderates the association between JD and WE.*

***H8:** PR moderates the association between PD and WE.*

The research framework, based on the literature review and JD-R theory, has been developed, as shown in Figure 3.



(Note: Solid lines denote already established/well-tested relationships, while, dashed lines signify new/very few tested relationships).

Figure 3. Research framework

Methodology

Sample and sampling technique

Based on JD-R theory, the study was conducted using a deductive and quantitative approach, where the respondents were full-time employees who worked in non-government organizations in Malaysia. Data was collected

online (via Google Forms and Jotform) from 400 respondents, who distributed closed-ended and self-administered questionnaires following a purposive sampling technique. The data was collected from the employees working in non-government organizations in Klang Valley under the supervision of a manager for a minimum of one year in the same organization. Klang Valley was chosen for data collection because it is an urban accumulation in Malaysia that is centred in the federal territories of Kuala Lumpur and Putrajaya and comprises its attached metropolises and municipalities in the state of Selangor, which are the most populated areas, and where offices of most of the business organizations situated. Employees with a minimum of one year of working experience in the same organization were chosen for data collection because these employees know about the supervisors, organizational environment, and culture well, which are essential for the study related to demands and resources. To test the core processes of JD-R theory (strain and motivation process) with JDPD and JRPR, this study was directed cross-sectional to test the hypotheses.

Respondents' profile

Most respondents (76%) were female, 24% were male, 66.3% were married, and 43.7% were single (unmarried/divorced/ others). Regarding their age, 26.6% were 41-50 years old, 34%, 6.2%, 18.7%, and 14.5% were 31-40, below 21, 21-30, and over 50 years old, respectively.

Measures of instrument

This study adapted the questionnaire from previous studies with the constructs of JR, PR, JD, PD, and WE. The researchers used five Likert scale

questions to collect data, including 1 for strongly disagreed, 5 for strongly agreed, and a neutral option that respondents could choose if they did not want to respond.

Table 1. Sources of questionnaire

Construct	Source	No of items	Reliability
Job Resources (JR)	Rothmann et al. (2006), and Tones and Pillay (2008)	19	0.883
Personal Resources (PR)	Luthans et al. (2007), and Plante and Boccaccini (1997)	19	0.719
Job Demands (JD)	Rizzo et al. (1970), Seashore et al. (1982), and Topp et al. (2015)	17	0.707
Personal Demands (PD)	Andreassen et al. (2012)	7	0.822
Work Engagement (WE)	Schaufeli et al. (2006)	9	0.765

Ethical issues

All the participants received the same instructions for filling out the questionnaire, and the researcher obtained ethical approval from the Ethics Committee for research involving human subjects (JKEUPM) before data collection.

Data analysis tools

Two data analysis tools were used in this study. SPSS (version 29) was used to check missing data, data outliers, and normality. Smart-PLS (version 4) was used to run partial least squares structural equation modelling to test the hypothesis based on the collected data.

Data analysis

Preliminary analysis

Composite Reliability (CR) and Average Variance Extracted (AVE) were applied to examine the reliability and validity of items. Cronbach's Alpha examined the uni-dimensionality of a multi-item scale's internal constancy (Cronbach, 1951). CR showed how well all the given items represented its constructs (Gotz et al., 2010; Fornell & Larcker, 1981). According to Table 2, CR ranged from 0.729 to 0.963, which was greater than the suggested value of 0.70 (Nunnally & Bernstein, 1994). AVE was used to assess the convergent validity of the current investigation (Tabachnick & Fidell, 2007; Henseler, 2009; Salamzadeh & Markovic, 2018; Tajpour et al., 2021; Salamzadeh et al., 2013, 2022). Table 2 shows that the AVE for all the latent variables was between 0.536 and 0.728, which were higher than the suggested value of 0.5 (50%), and were hence considered valid values. The findings show that, compared to the Fornell-Larcker method's percentage of 20.82% and the cross-loading method's 0%, the HTMT criteria have superior sensitivity and specificity rates of between 97 and 99%. Henseler et al. (2015) state that the HTMT values need to be less than 0.90. The upper threshold value for the current study was 0.874 (Table 2), which conforms with discriminant validity because the value is less than 0.90.

Table 2. Measurement and structural model

Type of model	Measurement model				Structural model			
	Convergent reliability & validity		Discriminant validity		f Square	R-square	Inner VIF	
Construct	Composite reliability	Average variance extracted (AVE)	Heterotrait-Monotrait ratio (HTMT)				Y5	Y5
			Y1	Y2	Y3	Y4		
Job demands (Y1)	0.743	0.634				0.473	3.411	
Job resources (Y2)	0.735	0.582	0.728			0.043	4.735	
Personal demands (Y3)	0.963	0.633	0.462	0.462		0.164	3.862	
Personal resources (Y4)	0.814	0.728	0.384	0.732	0.059	0.050	3.147	
Work engagement (Y5)	0.729	0.536	0.573	0.372	0.462	0.087	0.736	

Using the R Square statistics, researchers determine the proportion of the variance in the endogenous variable that can be clarified by the exogenous variable(s). Klarner et al. (2013) stated that the coefficient of determination (R square) is critical for evaluating the structural model. The R² value of WE was 0.736 (Table 2), which was over 25%, and Gaur and Gaur (2006) showed a significant ability to predict levels. Cohen (1998) detailed that the influence of exogenous on endogenous variables can be assessed using the f square. According to Sarstedt et al. (2021), a value below 0.15 designates a small effect, while a value from 0.15 to 0.35 specifies a medium impact, and a value over 0.35 means a significant effect. The effect of JD, JR, PD, and PR on

WE were 0.473 (large), 0.043 (small), 0.164 (medium), and 0.050 (small), respectively, in Table 2.

Multicollinearity refers to the presence of a substantial relationship among multiple independent variables. It is a problem if there are shared indicators across the different constructs (Yoo et al., 2014). Pallant (2007) suggests that the value of the Variance Inflation Factor (VIF) above 10 or below 0.1 signifies multicollinearity. In this study, Table 2 shows the VIF values ranged from 3.147 to 4.735, which means there is no multicollinearity among the exogenous constructs.

Inferential analysis

The impact of an independent variable (exogenous) on a dependent (endogenous) variable (without the effect of any other third variable) is defined as a direct effect. When a third variable affects the link between exogenous and endogenous, it is known as the moderating effect. This study contained four direct and four moderating effects (see Table 3). The bootstrapping procedure with 5000 subsamples was used to calculate the path coefficient and test the hypotheses based on t-value and p-value, while beta (b) indicates the effect's direction (negative or positive). The t values (>1.96) and p values (<0.05) are assumed to be significant at a significance level (Alpha) of 5%.

Table 3. Result of data analysis

Hypothesis	Beta	t-value	p-value	Decision
H1	-0.417	7.648	0.000	Accepted
H2	-0.312	4.823	0.000	Accepted
H3	0.071	2.003	0.041	Accepted
H4	0.227	3.742	0.007	Accepted
H5	-0.183	2.643	0.021	Accepted
H6	-0.214	3.254	0.012	Accepted
H7	-0.284	4.873	0.003	Accepted
H8	-0.126	4.026	0.000	Accepted

Note: Hypothesis supported at the 5% statistical significance level if the associated p-value is less than 0.05.

The findings revealed that JD ($b = -0.417, t = 7.648, p = 0.000$) and PD ($b = -0.312, t = 4.823, p = 0.000$) significantly negatively affect WE. JR ($b = 0.071, t = 2.003, p = 0.041$) and PR ($b = 0.227, t = 3.742, p = 0.007$) significantly positively influence WE. Thus, hypotheses **H₁**, **H₂**, **H₃**, and **H₄** have been statistically accepted.

JR moderates the association between JD and WE ($t = 2.643, p = 0.021$). In the same way, JR moderates the link between PD and WE ($t = 3.254, p = 0.012$). Furthermore, PR can also affect the link between JD toward WE ($t = 4.873, p = 0.003$). Similarly, PR moderates the association between PD and WE ($t = 4.026, p = 0.000$). Thus, hypotheses **H₅**, **H₆**, **H₇**, and **H₈** have been statistically accepted.

Discussion

The present study, a significant contribution to the field, aimed to adjust and extend the well-known JD–R theory, with its broad scope and flexibility, to WE among non-government employees in Malaysia. Our findings, which support the basic assumptions of JD-R theory, reveal a positive relationship between JRPR and WE and a negative relationship between JDPD

and work engagement. These results, supporting hypotheses H₁, H₂, H₃, and H₄, underscore the significant negative effect of JD (role conflict, mental health challenges, role overload, and role ambiguity) and PD (workaholism) on work engagement, as well as significant positive influences of JR (autonomy, performance feedback, supervisor's support, social support, learning and development opportunity) and PR (hope, self-efficacy, optimism, resilience, employee religiosity) on WE among Malaysian non-government employees.

On the other hand, hypotheses H₅, H₆, H₇, and H₈ tested the effect of combining JDPD and JRPR on workplace engagement. High JD and PD make employees (full-time non-government) less focused in the workplace in Malaysia. JR decreases the effect of JD and PD on WE by playing a moderating role. Similarly, PR decreases the effect of JD and PD on WE by its moderating effect. Thus, hypothesis H₅, H₆, H₇ and H₈ were accepted. The findings of hypotheses H₅, H₆, H₇, and H₈ align with other research on the impact of JD and JR on employees' well-being in the workplace (Othman et al., 2017; Lesener et al., 2019). If non-government employees receive strong JR that allows work autonomy, performance feedback, supervisor's support, social support, and learning and development opportunities, at that point, they will encounter high levels of physical, mental, social, and organizational work conditions.

In turn, these encounters would lead to high levels of work engagement. When employees have a lot of JD (such as high level of role conflict, mental health challenges, role overload, and role ambiguity), without enough JR, full-time non-government employees can feel physically and mentally unwell, which affects WE negatively. That means JR is a significant predictor

of engagement (Mauno et al., 2007; Saks, 2006; see for a meta-analysis, Halbesleben, 2009), especially in situations of heavy JD (Bakker et al., 2007). Previous research has shown that numerous PR (self-efficacy and organization-based self-esteem) are associated with job engagement (Xanthopoulou et al., 2007; Mauno et al., 2007). Non-governmental employees are expected to appreciate lessened PD (workaholism) or raised PR (hope, self-efficacy, optimism, resilience, employee religiosity) in the workplace. As a result, they are more equipped to handle these resources at work. Based on the conservation of resources theory, this might encourage people to be more eager to exchange these resources for other resources they can obtain by working, which would raise their degree of work engagement.

According to Chen (2022), the negative effect of JD on WE is moderated by PR. Bakker et al. (2005) revealed that employees who experienced JR (performance feedback, autonomy, social and supervisory support) were less likely to experience high levels of burnout as a result of JD (role overload, physical and emotional demands, and work-home interference). A variety of psychological processes might have caused these interaction effects. Therefore, making their own decisions at work helped employees deal with JD while having a good relationship with their supervisor, and getting support from co-workers lessened the negative effects of job stress on their mental and emotional well-being. Feedback could have been useful because it gave employees the information they needed to keep doing well and stay healthy.

Theoretical and practical contributions

The moderating effect of JD on the relationship between JRPR and WE has been suggested by the previous studies of Bakker et al. (2023), Bakker and Demerouti (2017), and Bakker and Demerouti (2007). However, the moderating effect of JRPR on the relationship between JDPD and WE still needs to be studied. Consequently, testing this proposition (moderating effect of JRPR on the relationship between JDPD and WE) proposed by Demerouti and Bakker (2023) is one of the significant theoretical contributions of this study.

JD and PD have a significant negative effect on WE, and JR and PR have a significant positive effect on WE among full-time employees in Malaysian non-government organizations. Therefore, managers and human resources practitioners should focus on enhancing the JRPR and decreasing the JDPD.

Since JR moderates the association between JD and WE, and PD and WE negatively, similarly, since PR moderates the association between JD and WE, and PD and WE negatively, JRPR decreases the effect of JDPD on WE according to the study findings and JD-R theory (Bakker & Demerouti, 2014; Bakker et al., 2023). That means if JR is decreased among the employees, the negative effect of JD and PD on WE will increase; similarly, if PR is decreased, the negative effect of JD and PD on WE will increase among the employees. On the contrary, if JR is increased, the negative effect of JD and PD on WE will decrease; similarly, if PR is increased, the negative effect of JD and PD on WE will decrease among the employees in non-government

organizations in Malaysia. Hence, managers and human resources practitioners can make insightful decisions for employee WE according to the findings of this study.

Conclusion, limitations, and areas for future research

JD-R theory offers policy-makers and practitioners insightful information on the Malaysian non-government sector. The findings provided insight into the evolving JR and PR required to meet JD and PD of the workplace. At the time of providing motivational factors (JRPR as moderator) among Malaysian non-government employees who are disengaged at work (because of the presence of JDPD), this study offers significant consequences. The study is also highly pertinent to current governmental measures intended to provide fair working conditions for everyone. The current study has certain drawbacks. The methodology of this study was cross-sectional, even though it took into account employees' perspectives on employee WE, as well as JD, PD, JR, and PR. As a result, no rigorous causal conclusions can be inferred from the findings. A longitudinal approach is necessary to examine the causal relationships between comparable correlations between employees WE and JD, PD, JR, and PR. It is also necessary to monitor personal and work-related needs and resources more accurately and with more diversity. For instance, more research should be done on organizational demands and resources. It is also necessary to create a scale for evaluating resources and needs that considers rising fresh demands like diversity and digitalization. Additionally, it is possible that the findings were impacted by additional employee traits that were not looked at in the current study. For instance, the values employees

assign to their jobs, and the variations in these attributions across young, middle-aged, and older employees may also impact their engagement at work. These relationships should be looked into more thoroughly in future studies. While some resources are vital for maintaining a job over the long term, there may be times when they become highly crucial. Similar to how some demands may be more robust in certain work positions, this is an aspect to keep in mind while designing engagement. Because of this, it will be significant to evaluate the existing position of employees, their resources, and any pressures they could encounter in that particular position in future research.

JD-R theory merely explains that employees will simply get engaged by having ample resources in the office without explaining how and why it happens, which is one of the limitations of JD-R theory. Kahn's theory on psychological conditions of engagement suggests that employees will only get engaged (emotionally, cognitively, and physically at the time of role performance) if they have the feeling of 'psychological presence' at the workplace. Therefore, 'psychological presence' should be included as a driver in JD-R theory (JDPD and JRPR) towards WE, which might be conducted on a longitudinal basis.

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