

Predicting Individual Work Performance Based on Work Engagement and Work Stress among Employees in Malaysia

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Abstract

This research aimed to predict individual work performance using work engagement and work stress among employees in Malaysia. Data was collected through an online survey distributed via social networking applications and websites. A total of 204 employees participated in the study. They were mainly Malay males aged $M = 30.10$ ($SD = 9.30$) from various sectors and work experience levels. Their levels of work engagement, work stress, and individual work performance were measured using the Utrecht Work Engagement Scale (UWES-9), the General Work Stress Scale (GWSS-9), and the Individual Work Performance Questionnaire (IWPQ-18) respectively. Descriptive analyses revealed that the participants had a moderate level of work engagement, work stress, and individual work performance. Multiple regression analysis showed that work engagement and work stress significantly predicted individual work performance among Malaysian employees, $R^2 = .26$, $F_{(2, 201)} = 34.62$, $p = .001$. The study highlights the importance for employers to help improve their employees' work engagement and to effectively manage their work stress as those factors could affect the individual work performance, hence the organizations' performance.

Keyword: Work, Performance, Engagement, Stress, Employees

Abstrak

Penyelidikan ini bertujuan untuk meramal prestasi kerja individu dengan menggunakan data penglibatan kerja dan tekanan kerja dalam kalangan pekerja di Malaysia. Data dikumpul melalui soal selidik dalam talian yang diedarkan menerusi aplikasi dan laman sesawang jaringan sosial. Seramai 204 orang kakitangan telah menyertai kajian ini. Kebanyakan mereka ialah lelaki Melayu berumur $M = 30.10$ ($SD = 9.30$) dari pelbagai sektor dan tahap pengalaman kerja. Tahap penglibatan kerja, tekanan kerja, dan prestasi kerja individu mereka masing-masing diukur dengan menggunakan *Utrecht Work Engagement Scale* (UWES-9), *General*

Work Stress Scale (GWSS-9), dan *Individual Work Performance Questionnaire* (IW PQ-18). Analisis deskriptif menunjukkan bahawa responden mempunyai tahap penglibatan kerja, tekanan kerja, dan prestasi kerja individu yang sederhana. Analisis regresi berganda menunjukkan bahawa penglibatan kerja dan tekanan kerja secara signifikannya meramal prestasi kerja individu dalam kalangan pekerja Malaysia, $R^2 = .26$, $F(2, 201) = 34.62$, $p = .001$. Kajian ini menekankan kepentingan bagi majikan untuk membantu meningkatkan penglibatan kerja pekerja mereka dan menguruskan tekanan kerja mereka dengan berkesan kerana faktor-faktor tersebut boleh menjejaskan prestasi kerja individu, dan juga prestasi organisasi.

Katakunci: Kerja, Prestasi, Penglibatan, Tekanan, Pekerja

Introduction

Individual work performance is often being studied and discussed in many but not limited to the setting of industrial and organizational psychology, business management, and human behavior. Individual work performance is an essential component of both organizations and individuals Widyastuti & Hidayat (2018) which deals with the core tasks that comprise the job itself, the nature of the worker toward their work, and the traits of the worker in conflict with the company (Putri & Hendarman, 2023). The management of an organization most definitely seeks to have such employees who are competent or highly capable of optimizing their performance (Rana et al., 2019). Thus, employees who manage their performance on prescribed standards will also support organizations to attain their objectives with optimization.

Latest findings by Financial Data and Economic Indicators (CEIC Data) (2023) noted that Malaysia Labour Productivity dropped by 2.41% year-over-year in March 2023, compared with a growth of 3.75% in the previous quarter where the data is updated quarterly, available from March 2001 to March 2023, averaging at 2.46%. The data reached an all-time high of 13.72 % in June 2021 and a record low of -15.84 % in June 2020. To make the scenario worse, a study conducted by Choo (2020) for Qualtrics XM showed that Malaysia's employee engagement score was 54%, surpassing the global average of 53%. Nevertheless, Malaysia lags countries like India (79%), Thailand (72%), and Hong Kong (63%) in terms of employee engagement. Generally, work engagement which encourages workers to become more productive, passionate, and engaged with their work, may eventually lead to better individual work performance as well as the success of organizations (Mustaffa et al., 2022). In other words, work engagement is beneficial for workers' individual work performance and, hence, for organizations.

The relationship between work engagement and individual work performance or job performance has been extensively studied in various contexts and industries, providing a comprehensive understanding of the relationship between work engagement and job performance. For instance, Bakertzis and Myloni (2020) focused on Greek healthcare professionals and found a significant impact of work engagement on job performance. Similar result was found among Japanese workers Eguchi et al (2020), IT/ITES/Telecom companies in the Delhi-NCR region Rana et al (2019), Indian IT industry Kapil & Rastogi (2017), Korean business organizations Kim (2016), and Uzbek workers in public organizations (Khusanova et al., 2021). However, Yao et al (2022) who explored industrial employees in Nanjing have found an inverted U-shaped relationship between work engagement and job performance. These

studies collectively emphasize the importance of work engagement in predicting job performance, while also highlighting the potential negative effects of excessively high levels of work engagement on performance.

Apart from work engagement, work stress is another factor which affects employees' performance but in an aversive manner as it occurs if there is a workload that exceeds capabilities (Sutrisno, 2022). A review by Pandey (2019) explains that other than job demands and job resources, job stressors are also important factors that can affect job performance. The relationship between work stress and individual work performance has also been well investigated. However, there are varying findings regarding this relationship. Rasool et al (2020) conducted a study involving 345 respondents from hospitals in Pakistan and found that occupational stress had a significant negative impact on work performance. Deng et al (2019) focused on healthcare workers in China and found that hindrance stress was negatively correlated with work performance, while challenge stress had a positive correlation. Wu et al. (2019) investigated the impact of role stress on job performance among building project managers in China and found that role ambiguity negatively affected work performance, while role conflict had no significant influence. Foy et al (2018) examined the relationship between work performance and workplace stress in Irish higher education institutions and found a negative relationship between work performance and workplace stress. Wang (2010) analyzed the impact of work stress and mental health on the work performance of university teachers in China and found that mental health was positively correlated with work performance, while work stress had a positive correlation with work performance. Lastly, Hourani et al (2006) focused on the relationship between work stress, mental health problems, and work performance among military personnel and found that high levels of work stress were associated with mental health issues and decreased work performance.

In summary, the relationship between work engagement and job performance has been thoroughly evaluated, with varying outcomes. While work engagement generally has a positive impact on job performance, excessively high levels of work engagement may have negative effects. On the other hand, the relationship between work stress and individual work performance is complex, with some studies showing a negative association and others showing a positive relationship. The specific dimensions of work stress also play a role in determining its impact on individual work performance. Additionally, occupational stress has been found to have a significant impact on work performance, with different dimensions of stress influencing performance differently. These studies collectively contribute to our understanding of the relationship between work engagement, work stress, and individual work performance.

Henceforth, the purpose of this study was to predict how work engagement and work stress affect the individual work performance of employees in Malaysia. The objectives of this study were

- a. to assess the level of work engagement.
- b. to evaluate the level of work stress.
- c. to measure the level of individual work performance.
- d. to investigate the impact of work engagement and work stress on individual work performance.

Pertaining to the fourth research objective, one hypothesis was tested in this study:

H₁: There is a significant contribution of work engagement and work stress to individual work performance among employees in Malaysia.

Research Methodology

Method

The present research employed an online survey administered through the Google Forms platform. By opting for online surveys, the researcher benefits from the ease of data collection, being quick to set up, relatively low in cost, and providing a high level of data security (Gill et al., 2013). The survey was structured in a manner that requires participants to answer questions in a predetermined order, preventing them from skipping ahead to subsequent sections before completing the previous ones. This approach minimizes survey bias and ensures a thorough examination of all questions (Evans & Mathur, 2005).

Participant

A total of 204 individuals willingly participated in this study, surpassing the initial requirement of 107 participants which was determined using G*Power version 3.1.9.7, with a power level of 95% ($\alpha = .05$) and an effect size of .15. Among the participants, the majority ($n = 107$, 52.50%) were male, while most participants ($n = 188$, 92.20%) identified as Malay. In terms of employment, most participants ($n = 121$, 59.30%) were employed in the private sector, with the professional job field being the most common ($n = 60$, 29.40%). The average age of the participants was determined to be $M = 30.10$ years ($SD = 9.30$), and their average work experience was $M = 7.30$ years ($SD = 7.90$). Table 1 shows the summary of the respondents' characteristics.

To be included in this study, participants had to meet specific criteria. These criteria included having at least three months of work experience in Malaysia, being employed in the government, private sector, or being self-employed, and being at least 18 years old. The convenience sampling method was chosen to collect data from the participants in this research study because it allowed the researcher to easily access the sample population Etikan & Alkassim (2016), which consisted of employees.

Table 1
Characteristics of Respondents

Demographic Information	<i>n</i>	%
Gender		
Male	107	52.50
Female	97	47.50
Race		
Malay	188	92.20

Chinese	9	4.40
Indian	3	1.50
Sabahan Bumiputera	2	1.00
Sarawakian Bumiputera	2	1.00
Job Sector		
Government	68	33.30
Private	121	59.30
Self-employed	15	7.40
Job Field		
Management	34	16.70
Professional	60	29.40
Technical	29	14.20
Clerkship	16	7.80
Sales and Services	50	24.50
National Defense, Security, and Rescue Force	15	7.40
Total	204	100.00

Instrument

Translated by Yew et al (2017), the Bahasa Melayu version of the Utrecht Work Engagement Scale (UWES-9) was used to measure the work engagement of the participants. It was originally developed by (Schaufeli and Bakker, 2003). It consists of nine positively worded items with three subscales which are vigor (item 1, 2, 5), dedication (item 3, 4, 7), and absorption (item 6, 8, 9). The UWES-9 uses a Likert 7-point rating scale which ranges from 0 (Never) to 6 (Always). The higher the score, the higher the level of work engagement. The Bahasa Melayu version of UWES was found reliable (Yew et al., 2017) and valid (Schaufeli & Bakker, 2003). The reliability of UWES-9 in this study is high ($\alpha = .97$).

The General Work Stress Scale-9 (GWSS-9) was developed by De Bruin (2006) to measure the overall level of subjectively experienced or felt work related stress. This scale is unidimensional with nine positive items thus, reverse scoring is not needed. GWSS-9 uses a 5-points Likert scale response format ranged from 1 (Never) to 5 (Always). Higher scores of GWSS-9 shows a high level of work stress. This scale has been direct translated into Malay language by the authors and has an excellent reliability index of $\alpha = .89$.

The measurement of participants' individual work performance in this research study was conducted using the Individual Work Performance Questionnaire (IWPQ-18), a shorter

form of the original 47-item questionnaire, which was developed by (Koopmans et al., 2014). To enhance the understanding of the respondents, the researcher translated the IWPQ-18 into Malay language, using the direct translation method. IWPQ-18 is classified into three subscales: task performance (item 1 - 5), contextual performance (item 6 - 13), and counterproductive work behavior (item 14 – 18). There are 13 positively worded items (items 1 - 13), while the remaining five items are negatively worded (items 14 - 18). The response format for the IWPQ-18 is a Likert 5-point rating scale, ranging from 0 (Seldom) to 4 (Always) for the task and contextual performance subscales. For the counterproductive work behavior subscale, a rating scale ranging from 0 (Never) to 4 (Often) was used. Higher scores indicate higher levels of task performance, contextual performance, and counterproductive work behavior. In terms of reliability, Koopmans et al (2016) found excellent internal consistency ($\alpha = .79 - .89$) in a prior study on the cross-cultural adaptation of the IWPQ from Dutch to American-English language. In this study, the reliability of the IWPQ-18 was high ($\alpha = .89$). Additionally, Koopmans et al (2014) stated that the IWPQ has demonstrated good structural and face validity, along with good discriminative validity and adequate convergent validity.

Finally, there are six items that require the participants to answer thoroughly before starting the online survey. These include their personal information, such as their age, gender, race, duration of work experience, employment sector, and field work.

Procedure and Data Analysis

Before conducting the research study, ethical approval was obtained from UPSI Research Ethics Committee (Code: 2023-0758-02). To measure the level of work engagement, work stress, and individual work performance among Malaysian employees, an online survey was conducted using a Google Form. The participants were selected from employees in Malaysia with at least three months of work experience in Malaysia, be employed in the government, private sector, or be self-employed, and be at least 18 years old. The researchers recruited participants by distributing the Google Form link through social networking websites such as Twitter, Instagram, Facebook, and WhatsApp, as well as to individuals known personally by the researcher who met the criteria. Upon clicking the link to the Google Form, participants were presented with the introduction of the study, an informed consent form, and all the research instruments. Confidentiality was assured, and participants had the option to withdraw from the study at any time without providing an explanation, with no negative consequences.

Descriptive analysis was used to illustrate the participants' demographic characteristics, such as age, gender, race, duration of work experience, employment sector, and field of work. Descriptive analysis was also employed to determine the participants' levels of work engagement, work stress, and individual work performance. Furthermore, the contribution of work engagement and work stress to individual work performance was assessed through multiple regression analysis using the Statistical Package for Social Science (SPSS) version 26 software for data analysis.

Result and Discussion

The descriptive analyses showed that the level of work engagement ($M = 35.4, SD = 12.2$), work stress ($M = 18.0, SD = 7.0$), and individual work performance ($M = 41.8, SD = 10.9$) among the participants were moderate. These results indicate that the participants demonstrated a

satisfactory level of engagement with their work and maintained a reasonable level of work stress within the organizational context. This observation aligns with the perspective put forth by Çankır & Şahin (2018), who emphasized the crucial role of organizations in enhancing work engagement, as it contributes to desirable outcomes such as psychological well-being, positive attitudes towards work, and increased productivity.

Moving on, the study also revealed that Malaysian workers experience moderate levels of work stress. However, this finding contradicts a report from The Edge in 2018, as cited in Chua (2020), which stated that 51% of Malaysian workers face high levels of work stress. This indicates that more than half of Malaysian workers encounter significant work stress issues. It is crucial for employees to maintain low levels of work stress, as high work stress can negatively impact job satisfaction and increase turnover intention, as underlined by (Panatik et al., 2012). It is important for employers to take proactive measures in reducing work stress levels among their employees. It is worth noting that work-related stress can stem from various factors beyond job satisfaction. Employers should adopt a proactive approach to identify and address these stressors, creating a conducive work environment that promotes employee well-being and reduces work stress. By doing so, organizations can foster a positive work culture that enhances employee engagement, job satisfaction, and ultimately, individual work performance.

In addition, the inferential research objective of this study is to investigate the contribution of work engagement and work stress to individual work performance among employees in Malaysia. The results of the multiple regression analysis, specifically Model 2, revealed that 25.6% of the variance in work engagement and work stress was explained in the individual work performance, $R^2 = .26$, $F_{(2, 201)} = 34.62$, $p = .001$. Work engagement was discovered to significantly contribute to individual work performance, $\beta = .48$, $t_{(201)} = 8.31$, $p = .001$. Furthermore, work stress also has a significant contribution to individual work performance as well, with $\beta = .32$, $t_{(201)} = 3.23$, $p = .001$. Therefore, H_1 was accepted as there is a significant contribution of work engagement and work stress to individual work performance among employees in Malaysia with Y (Individual Work Performance) = $19.1 + .48$ (Work Engagement) + $.32$ (Work Stress).

This result is closely aligned with prior studies. For instance, Eguchi et al (2020) conducted a study on Japanese workers and found a significant association between higher work engagement and improved work performance. The researchers emphasized that highly engaged workers are more likely to perform better as they are better equipped to invest their resources in various aspects of their work. Similarly, Bakertzis and Myloni (2020) highlighted that workers who demonstrate high levels of effort, dedication, and concentration tend to exhibit positive outcomes, including increased responsibility and productivity, which contribute to the overall effectiveness of the organization. Furthermore, Nair et al (2022) suggested that policies focusing on making employees passionate and highly involved can help improve employee engagement while Çankır & Şahin (2018) suggested that promoting psychological well-being and work engagement among employees can lead to improved job performance.

In line with the findings of the current study, Rasool et al (2020); Deng et al (2019); Foy et al (2018) also found that work stress significantly influences individual work

performance. However, Wu et al (2019) discovered that only two dimensions of work stress, namely role stress and role ambiguity, have a significant influence on individual work performance, while role conflict does not. Murali et al (2017) found that among the dimensions of work stress, only time pressure and role ambiguity have a significant negative influence on work performance, while workload and lack of motivation do not significantly affect work performance among employees in Malaysian industries.

This study has implications for organizations and human resource practitioners. The significant contribution of work engagement and work stress to individual work performance raises awareness about the importance of promoting work engagement and managing work stress within organizations. This finding encourages organizations and human resource practitioners to explore and implement practices that cultivate a positive work environment, foster employee engagement, and manage work stress, such as providing psychological services. By creating a supportive work culture, organizations can cultivate a more productive and healthier workforce.

Currently, there is a lack of research papers investigating the contribution of work engagement and work stress to individual work performance in Malaysia. Therefore, this study contributes to the literature and provides a more comprehensive understanding of the contribution of work engagement and work stress to individual work performance in Malaysia. The findings of this study will also offer vital insights and knowledge that can be utilized by organizations, workers, and researchers.

Limitation of Research and Suggestion for Future Study

It is important to acknowledge the limitations of this research study for future investigations. Firstly, the sample size of the study was small and may not adequately represent the entire population of employees in Malaysia. Consequently, the small sample size may have implications for the validity, reliability, and generalizability of the study's findings. Another limitation to consider is the potential for response bias in this study. Self-report measures, such as the UWES-9, GWSS-9, and IWPQ-18, were utilized to assess work engagement, work stress, and individual work performance. However, this introduces the possibility of social desirability bias, where participants may be inclined to provide responses that align with societal expectations. To present themselves in a favorable light, participants may have exaggerated or downplayed certain aspects, compromising the accuracy and reliability of the results. Furthermore, this research study relied solely on a single source of data, namely online self-report surveys administered through the Google Form platform. This introduces the possibility of biases and subjective interpretations. By relying on only one source of data, the study may have limited its ability to capture a complete and comprehensive picture of the participants' level of work engagement, work stress, and individual work performance.

Considering these limitations, several recommendations can be proposed to enhance the accuracy of future studies on the contribution of work engagement and work stress to individual work performance, particularly in the context of Malaysia. Firstly, future researchers should aim to conduct more extensive studies in this area, filling the existing research gap. To improve the generalizability of the findings, it is crucial to focus on recruiting larger samples that accurately represent the diverse employee population in Malaysia. This will enable researchers to obtain a more representative sample and draw more reliable

conclusions that are applicable to a broader range of individuals. Additionally, future researchers are encouraged to utilize multiple data sources instead of relying solely on self-report measures. For instance, instead of solely relying on the data obtained from the IWPQ-18 answered by the participants to assess their work performance, researchers should consider gathering information from various sources, such as supervisor ratings. Incorporating multiple perspectives can provide a more comprehensive evaluation and enhance the validity and reliability of the findings.

Conclusion

In today's dynamic and competitive work environments, organizations play a pivotal role in nurturing employees' work engagement, managing work stress, and enhancing individual work performance. This study successfully investigated the contribution of work engagement and work stress to individual work performance among employees in Malaysia, thereby enriching the comprehension of organizational practices and management approaches prevalent in Malaysian workplaces. By implementing an online survey method and utilizing instruments such as UWES-9, GWSS-9, and IWPQ-18, the researchers gathered data from a total of 204 respondents, predominantly male, Malay, working in the private sector, and in professional job fields. Descriptive analysis was employed to analyze the demographic information and determine the levels of work stress, work engagement, and individual work performance among the participants. Multiple regression analysis was used to measure the contribution of work stress and work engagement to individual work performance.

The results of this study indicated intermediate levels of all the variables tested among workers in Malaysia. Furthermore, the findings demonstrated a significant contribution of work engagement and work stress to individual work performance among workers in Malaysia. By delineating the relationship between work engagement, work stress, and individual work performance, this research equips organizations with insights into the determinants of employee productivity and well-being. These results provide valuable insights into the relationship between these factors and emphasize the importance of addressing work engagement and work stress to enhance individual work performance in the Malaysian context. The practical implications of the research findings extend to organizations, policymakers, and human resource practitioners in Malaysia. This study underscores how crucial work engagement and managing work stress are for predicting individual work performance, which furnishes valuable insights that provide guidance for implementing interventions aimed at alleviating work stress, promoting employee engagement, enhancing overall organizational effectiveness, and deepening the understanding of human behavior in the workplace.

This study not only sheds light on the significance of these factors in predicting employees' performance but also paves the way for future researchers to delve into related areas and contribute to broader knowledge in organizational psychology. The organization's role in nurturing employee's work engagement, limiting work stress and enhancing individual work performance not only will benefit the organizations but it will also promote healthy well-being among employees. This study underscores the importance of these factors in the context of the Malaysian workplace.

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