



RESEARCH ARTICLE

The Impact of Work Engagement on Job Performance: Exploring the Mediating Role of Innovative Work Behavior in the Public Sector

Gusti Anisa Wulandari^{1*}, Dewi Susita², Mohammad Sofwan Effendi³

¹Doctoral student at the Management Department, Universitas Negeri Jakarta, Indonesia

²Professor at the Faculty of Economics and Business, Universitas Negeri Jakarta, Indonesia

³Associate Professor at the Faculty of Education, Universitas Negeri Jakarta, Indonesia

ARTICLE INFO	ABSTRACT
<p>Received: Dec 4, 2024 Accepted: Jan 31, 2025</p>	<p>This study examines the mediating effect of innovative work behavior (I.Web) on the relationship between work engagement (W.Eng) and job performance (J.Per). It explores how strategic employee engagement and innovation contribute to organizational performance, offering valuable insights for organizations aiming to enhance individual and collective outcomes. A quantitative research approach was employed to assess the relationships among W.Eng, I.Web, and J.Per. Data were collected through a structured questionnaire using Likert-scale items from 103 permanent employees (State Civil Apparatus or ASN) in the Directorate General of Land Transportation, Ministry of Transportation of the Republic of Indonesia. Structural Equation Modeling (SEM) with SmartPLS 3 software was utilized to analyze both direct and indirect effects. The findings reveal that W.Eng significantly influences I.Web ($\beta = 0.911$, $t = 39.699$, $p < 0.001$) and J.Per ($\beta = 0.550$, $t = 2.924$, $p = 0.004$). However, the mediating effect of I.Web on the relationship between W.Eng and J.Per was not significant ($\beta = 0.280$, $t = 1.549$, $p = 0.122$). These results indicate that while W.Eng positively affects both I.Web and J.Per, I.Web does not significantly mediate the relationship between engagement and performance. This study is limited to the public sector, specifically the Directorate General of Land Transportation in Indonesia, and its findings may not be generalizable to other sectors. The lack of a significant mediation effect suggests the need for further exploration of potential moderating variables or alternative mediators in the engagement-performance link. This research contributes to the understanding of the complex dynamics between W.Eng, I.Web, and J.Per, providing new empirical evidence in a public sector context. It highlights the importance of fostering engagement to drive innovation but emphasizes that innovative behavior alone may not be sufficient to enhance J.Per without other influencing factors.</p>
<p>Keywords Work engagement Innovative work behaviour Job performance Public sector Employee</p>	
<p>*Corresponding Author: wulandari80unj@gmail.com</p>	

INTRODUCTION

In the current dynamic organizational environment, W.Eng has become a crucial element in improving individual performance. W.Eng is defined by vigor, dedication, and engagement, representing a positive psychological state closely linked to one's professional duties (Husain et al., 2023; Salanova et al., 2024). This favorable mental state enhances productivity and fosters employee well-being, rendering it a crucial emphasis for firms pursuing greatness. The complex character of W.Eng highlights its importance, especially in enhancing J.Per and promoting organizational success.

Studies demonstrate that W.Eng is directly correlated with enhanced J.Per. Engaged employees demonstrate increased energy, participation, and effectiveness, allowing them to execute their responsibilities with more efficiency (Husain et al., 2023; Bailey et al., 2017). The significant link between W.Eng and job satisfaction underscores its essential role in influencing human resource

performance (Borst et al., 2020). By sustaining elevated levels of engagement, organisations may realise the complete potential of their staff, consequently improving overall results.

W.Eng impacts not only performance measures but also enhances creativity and I.Web. Engaged personnel are more inclined to produce innovative ideas and solutions, hence enhancing organisational growth and competitiveness (Sattar et al., 2015; Salanova et al., 2024; Alfadly et al., 2024; Chung et al., 2024). This creative inclination fosters innovation and aids in establishing a durable competitive advantage in a more unstable market landscape.

A notable consequence of W.Eng is its influence on organisational commitment and staff retention. Engaged employees exhibit a heightened commitment to their organisations and diminished turnover intentions, hence decreasing expenses related to recruiting and training (Hoxha and Ramadani, 2024). This strengthened commitment highlights the strategic significance of promoting involvement to guarantee organisational stability and continuity.

The correlation between W.Eng and J.Per is additionally influenced by I.Web. Recent research indicate that I.Web serves as a conduit, enhancing the beneficial impact of interaction on performance (Waheed et al., 2017; El Junusi et al., 2023). By cultivating an atmosphere that promotes creativity, organisations may use the synergistic impacts of engagement and innovation, leading to enhanced individual and collective performance.

Leadership and organisational strategies are essential in fostering W.Eng. Inclusive leadership, good communication, and supportive organisational practices greatly boost engagement levels (Sisodia and Jan, 2024). Furthermore, initiatives designed to foster a constructive work environment—marked by job autonomy, acknowledgement, and prospects for development—enhance I.Web (Dixit and Upadhyay, 2021). These findings underscore the necessity of employing a comprehensive strategy to engagement, merging leadership techniques with organisational policies.

This study seeks to investigate the mediating influence of I.Web on the connection between W.Eng and J.Per. The study seeks to offer practical insights for organisations aiming to improve performance through strategic engagement and innovation by examining the complex interactions among these variables. This study enhances the discourse on achieving sustained organisational success in a competitive global landscape through a thorough examination of existing literature and practical evidence.

W.Eng and I.Web have been thoroughly examined across multiple theoretical frameworks. The Job Demands-Resources (JD-R) Model emphasises that equilibrium between job demands and resources promotes engagement, which in turn stimulates inventive behaviour (Kwon and Kim, 2020; Ahmed, 2019). This model has been enhanced to more effectively comprehend the interplay between engagement and creativity, highlighting the significance of resources like autonomy and social support. The Social Identity Theory posits that leaders' emotional commitment enhances the connection between engagement and transformative behaviours, which are essential for innovation (Geibel and Otto, 2023). Moreover, Self-Determination Theory emphasises the significance of intrinsic motivation and autonomy in fostering I.Web via engagement (Kim, 2024; Nordin et al., 2024).

I.Web has been examined through the lenses of leadership and organizational theories. The Behavioral Theory of Leadership combines with the JD-R Model to elucidate how leadership behaviors indirectly affect I.Web through W.Eng (Gupta et al., 2017). Empowering leadership that promotes autonomy and psychological empowerment enhances employees' propensity for innovation (Nordin et al., 2024; Marampa et al., 2024). Furthermore, Organizational Learning and Support are essential, with studies indicating that a culture focused on learning, facilitated by W.Eng, markedly improves I.Web (Ranihusna et al., 2021).

Empirical research regularly indicates a positive correlation between W.Eng and I.Web (Kwon and Kim, 2020; Gupta et al., 2017; Agarwal, 2014). W.Eng frequently mediates the relationship among leadership behaviors, organizational support, and innovation, indicating its crucial function in

connecting individual and organizational outcomes (Ranihusna et al., 2021; Bannay et al., 2020). Recent findings underscore the significance of multilevel analyses, including individual, team, and organizational dynamics to elucidate the intricacies of engagement and creativity (Xanthopoulou and Bakker, 2021).

Nevertheless, significant gaps persist. The multilayer aspect of work involvement necessitates more investigation, especially regarding its cross-level psychological mechanisms (Xanthopoulou and Bakker, 2021). The nonlinear correlation between inventive action and psychological well-being reveals complications that remain inadequately comprehended (Kim, 2024). Third, scant research has examined the cultural subtleties affecting W.Eng and I.Web (Marampa et al., 2024). Finally, the relationship between task-level involvement and its particular influence on innovative behaviors remains little examined (Wittenberg et al., 2024).

The correlation between W.Eng and J.Per is extensively established, with engagement promoting vigor, devotion, and absorption that improve performance (Husain et al., 2023). Employees that are engaged are more inclined to demonstrate innovative behaviors, motivated by their inner drive and the accessibility of organizational resources (Ahmed, 2019). These behaviors function as mediators that convert involvement into improved performance (Waheed et al., 2017).

W.Eng is a well-established concept in organisational behaviour, defined as a good and gratifying psychological state associated to work. It comprises three fundamental elements: vigour (elevated energy and mental fortitude), dedication (a sense of purpose, enthusiasm, and challenge), and absorption (complete focus and joyful engagement in one's work) (Corbeanu and Iliescu, 2023; Bakker and Demerouti, 2008; Singh and James, 2016; Kim et al., 2013). The Job Demands-Resources (JD-R) Model has been widely utilised to elucidate W.Eng. This model posits that job resources (e.g., support, autonomy) and personal resources (e.g., resilience) are crucial in forecasting W.Eng, especially in conditions of elevated job demands (Lazauskaite-Zabielske et al., 2018; Moreira et al., 2022). Employees that are engaged are more inclined to demonstrate innovation, enhanced productivity, and a propensity to surpass expectations, therefore making substantial contributions to organisational results (Bakker and Demerouti, 2008; Reig-Botella et al., 2024).

J.Per is a multifaceted construct encompassing task performance (competence in essential tasks), contextual performance (behaviours that enhance the organisational milieu), adaptive performance (capacity to adapt to change), and counterproductive work behaviours (actions harmful to organisational objectives) (Reig-Botella et al., 2024; Wahjudi et al., 2024). This complex nature highlights the necessity of a thorough comprehension of the elements affecting performance. W.Eng, job crafting, and dynamic capacities have surfaced as crucial indicators of J.Per, underscoring the dynamic interaction between human and organisational elements (Moreira et al., 2022; Bieńkowska and Tworek, 2024).

A significant amount of research demonstrates a direct and positive correlation between W.Eng and J.Per. Meta-analytic studies indicate correlations reaching $r=0.37$, underscoring the essential influence of engagement on performance outcomes (Corbeanu and Iliescu, 2023; Lazauskaite-Zabielske et al., 2018; Reig-Botella et al., 2024). Moreover, W.Eng frequently serves as a mediator, connecting job resources to improved performance. This indicates that enhancing engagement via supportive work settings and personal resource development can markedly enhance performance outcomes (Lazauskaite-Zabielske et al., 2018; Moreira et al., 2022; Bhat et al., 2024). Notwithstanding considerable data corroborating the association between W.Eng and J.Per, methodological constraints endure. Many research predominantly utilise cross-sectional designs, which constrain the comprehension of causation and longterm impacts (Singh and James, 2016). The use of the Utrecht W.Eng Scale (UWES) in assessing engagement highlights the necessity for varied and comprehensive instruments to encapsulate the construct's complex character (Singh and James, 2016).

I.Web is a multifaceted concept that includes the stages of idea discovery, idea generation, and idea implementation. These dimensions depict a thorough innovation cycle, commencing with the

recognition of possibilities or challenges, advancing to inventive solutions, and concluding with the practical execution of these concepts (Parveen and Reddy, 2024). Factors affecting I.Web can be classified into individual traits, such as intrinsic motivation and emotions; work environment elements, including leadership and organisational justice; and organisational attributes, such as high-performance work systems and psychological capital (El Alfy and Naithani, 2021; Farrukh et al., 2022).

The theoretical foundations of I.Web are based on frameworks including the ability–motivation–opportunity model, which underscores the interaction of employee competencies, motivation, and facilitating conditions; resource dependence theory, which addresses the organization's dependence on external resources; institutional theory, which investigates external pressures and norms; and the theory of planned behaviour (TPB), which emphasises the influence of attitudes, subjective norms, and perceived control on behaviour (Farrukh et al., 2022; Zhang et al., 2021).

J.Per is characterised by the observable behaviours and actions of employees that facilitate the attainment of organisational objectives. It encompasses task performance (fundamental job duties), contextual performance (behaviours that improve the organisational milieu), and counterproductive work behaviours (activities harmful to organisational goals) (Varshney and Varshney, 2024). Factors influencing outcomes encompass personal characteristics, like self-concept and resilience, as well as external influences such as leadership styles. Leadership styles, such as paternalistic leadership and boundary-spanning leadership, greatly influence J.Per by cultivating supportive and adaptive workplace dynamics (Yamin, 2022; Sorour et al., 2024).

A direct and affirmative correlation exists between I.Web and J.Per. Participation in I.Web enhances employees' creativity and problem-solving abilities, which are crucial for sustaining high performance in dynamic and competitive settings (Putra et al., 2024; Siregar and Suma, 2024). Employees that actively participate in the innovation process are more adept at adapting to evolving conditions, tackling organisational issues, and enhancing performance excellence. Notwithstanding extensive study on I.Web and J.Per, significant gaps persist. Initially, further research is required to investigate the correlation between individual-level knowledge attributes and I.Web. Current work predominantly emphasises organisational or group-level characteristics, resulting in a gap in comprehending the impact of individual knowledge traits on innovative behaviour (Masrek et al., 2016; Masrek et al., 2017). The influence of external antecedents, particularly government support for talent policy (GSTP), on influencing I.Web remains under examined (Zhang et al., 2021). Examining these external factors may yield a more thorough comprehension of the influence of macro-environmental components on employee innovation.

I.Web functions as an essential intermediary in the correlation between W.Eng and J.Per. It encompasses the phases of idea discovery, development, and realisation, allowing people to provide new solutions and adjust to evolving workplace difficulties (Parveen and Reddy, 2024). Employees that are engaged are more inclined to participate in I.Web owing to their intrinsic drive and proactive disposition (El Alfy and Naithani, 2021). Moreover, elements including organisational support, leadership styles, and psychological capital increase the probability of converting involvement into inventive results, thereby benefiting J.Per (Khusanova et al., 2021).

Notwithstanding comprehensive investigation, considerable deficiencies persist. Primarily, numerous research inadequately investigate the multifaceted character of J.Per, especially the impact of W.Eng on various performance metrics (Shimazu et al., 2018). Secondly, research frequently focusses on Western and private sector environments, underscoring the necessity for contextual investigations in public sector organisations and non-Western settings to improve the generalisability of results (Kismono et al., 2024; Li et al., 2018). Third, there is an absence of longterm research to investigate the enduring effects of W.Eng and the mediating function of I.Web on J.Per (Reig-Botella et al., 2024). The methods and boundary conditions affecting these connections, including leadership styles, organisational support, and psychological capital, require additional investigation (Khusanova et al., 2021; Waheed et al., 2017).

MATERIALS AND METHODS

This study seeks to examine the correlation between W.Eng and J.Per, with I.Web serving as a mediating factor. This study aims to offer theoretical and empirical insights into the impact of W.Eng on individual performance via creative work behaviour, particularly within the government sector. This research employs a quantitative methodology to examine the correlation between variables according to the established hypotheses. The primary data gathering approach employed is the survey method, utilising a structured questionnaire completed by permanent personnel (State Civil Apparatus or ASN) at the Directorate General of Land Transportation, Ministry of Transportation of the Republic of Indonesia. This research was undertaken from June 2022 to March 2024, encompassing the phases of design, data collection, and analysis.

Primary data were collected by a questionnaire consisting of closed-ended questions. Participants were asked to provide responses based on their impressions of statements related to the research variables, using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The questionnaire was conducted anonymously to maintain the confidentiality of respondents' identities and mitigate bias. The research population consisted of all employees of the Directorate General of Land Transportation, totaling 276 individuals, including 103 permanent employees (ASN). The sample selection utilized a purposive sampling method grounded in the subsequent criteria: respondents must be permanent workers (ASN) who have been formally assigned and must work within one of the four directorates within the Directorate General of Land Transportation. Based on these criteria, 103 permanent employees were identified as the research sample. This method was selected to guarantee that only participants possessing pertinent work experience contributed data, thus enhancing the study's validity.

The research variables were assessed using indicators verified in prior literature, with modifications for the context of this study. J.Per: Denotes individual accomplishment in relation to work objectives. Measurement include measures such as effectiveness, efficiency, and quality of work. W.Eng: Assesses the degree of emotional and cognitive commitment of employees to the organisation. Indicators encompass commitment, zeal, and concentration on tasks. I.Web: Denotes individual actions aimed at identifying, cultivating, and executing novel ideas for the organization's advantage. Indicators encompass concept research, solution formulation, and innovation execution. Each component is assessed utilising a five-point Likert scale to ascertain the degree of respondents' perceptions regarding the presented assertions. Data were analysed by Structural Equation Modelling (SEM) with SmartPLS 3 software. SEM was selected for its capacity to assess both direct and indirect correlations among variables and to examine mediation effects.

Figure 1 depicts the relationship between the analyzed variables and the proposed hypothesis framework.

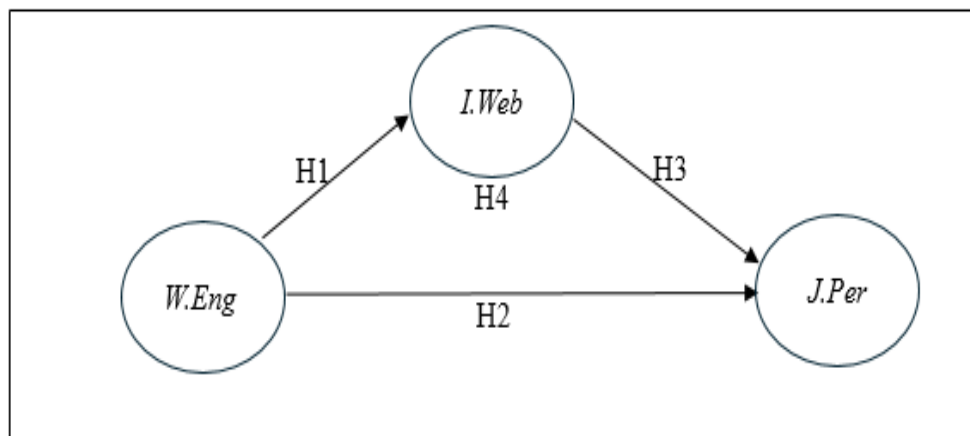


Figure 1: Conceptual framework

RESULTS

Respondent characteristics

This study included participants who were permanent employees (State Civil Apparatus/ASN) in the Directorate General of Land Transportation, Ministry of Transportation of the Republic of Indonesia. The gender breakdown indicates that most responders were male, comprising 69 individuals or 67%, while the remainder were female. This indicates that male employees predominate among the ASN in this research setting. There is considerable age diversity among responses. The predominant age group comprises individuals aged 36 to 40 years, totalling 28 individuals (27.18%). Individuals aged 30 to 36 years rank second with 24 participants (23.30%), followed by those under 30 years, comprising 20 participants (19.42%). Simultaneously, respondents aged 40 to 45 years totalled 18 individuals (17.48%), while the cohort over 45 years was the least represented, including 13 individuals (12.62%). This fluctuation indicates considerable age variety within the organisation.

The responders exhibited a diverse educational background. A majority of respondents possessed either a Diploma or Bachelor's degree, amounting to 54 individuals (52.43%). This cohort was succeeded by 29 responders with a Master's degree (S2), constituting 28.16% of the total. In the meantime, there were 18 respondents with a high school education (17.48%), while those with a Doctoral degree (S3) constituted the smallest group, comprising 2 individuals (1.94%). The majority of responders possessing advanced educational qualifications asserted that this organisation has a comparatively competent workforce. The cohort with 3 to 6 years of work experience constituted the biggest group, comprising 41 individuals (39.81%). The cohort with 6 to 10 years of work experience ranked next, comprising 27 individuals (26.21%). Simultaneously, respondents with fewer than 3 years of work experience and those with 10 to 15 years of experience each included 12 individuals (11.65%). The cohort of respondents with over 15 years of service constitutes the smallest segment, including 11 individuals (10.68%). This pattern suggests that the organisation possesses a workforce with diverse experience levels, predominantly within the medium service group.

Construct reliability and validity

The evaluation of convergent validity is performed by comparing the outer loading values of each measurement indicator with the associated variable it represents. Indicators with an outer loading value less than 0.6 exhibit insufficient efficacy in reflecting the variables within the created model. The external loading values obtained from each indicator in this study are displayed in Table 1 below.

Table 1: Outer Loading Values

Variable	Indicators	Outer Loadings	Decision
W.Eng	W.Eng.1	0.856	Valid
	W.Eng.2	0.866	
	W.Eng.3	0.919	
	W.Eng.4	0.849	
I.Web	I.Wb.1	0.844	Valid
	I.Wb.2	0.891	
	I.Wb.3	0.903	
	I.Wb.4	0.880	
J.Per	J.Per.1	0.905	Valid
	J.Per.2	0.934	
	J.Per.3	0.922	

The outer loading values for each measurement instrument related to each variable in our study model, as shown in Table 1, demonstrate that each instrument accurately reflects its corresponding variable. No instrument exhibited an outer loading value below 0.7, so confirming that each instrument accurately represents the latent variable it denotes. According to the calculations performed by the PLS Algorithm for the indicators presented in the subsequent table, the AVE value and its squared counterpart are detailed in Table 2 below.

Table 2: Value of AVE, Composite Reliability, and Cronbach's Alpha

Variable	Average Variance Extracted	Composite Reliability	Cronbach's Alpha
W.Eng	0.762	0.927	0.895
I.Web	0.774	0.932	0.903
J.Per	0.847	0.943	0.910

Table 2 indicates that the AVE values for all variables above the required threshold of 0.5. The W.Eng variable displays the minimum AVE value, noted as 0.762. The loading factor values in Table 1 and the AVE values in Table 2 indicate that the results of this study meet the requirements for assessing convergent validity. Subsequent to the assessment of construct validity, the next evaluation is the construct reliability test, which is measured by two criteria: Composite Reliability (CR) and Cronbach's Alpha (CA). These metrics evaluate the CR construct to have strong reliability. A construct is considered reliable if the composite reliability and Cronbach's Alpha values above 0.6. The composite reliability test produces a result of 0.7, while Cronbach's alpha surpasses 0.6, signifying that the values of all variables exhibit reliability.

Structural equation model

The final stage of inferential statistical analysis in this study is hypothesis testing. The procedure entails juxtaposing the t-statistic values against the critical t-table values derived from the interrelations among variables in the proposed model. Hypotheses are considered supported if the t-statistic exceeds the critical t-value or if the p-value is less than 0.05.

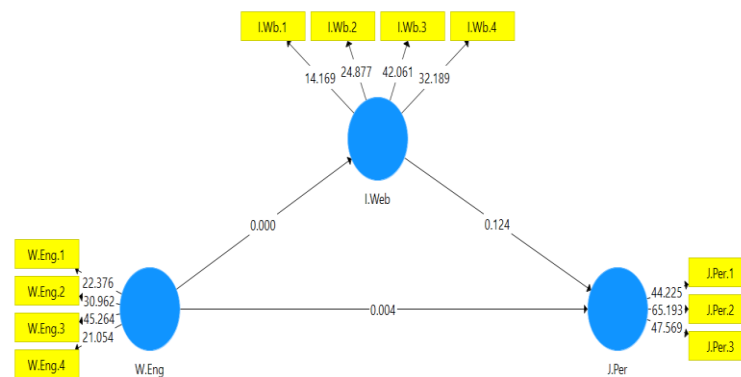


Figure 2: Results of SEM Analysis

Table 3: Path coefficients in PLS-SEM

Path	Std. Coeff	t-value	p-value	Decision
H1 W.Eng → I.Web	0.911	39.699	0.000	Support
H2 W.Eng → J.Per	0.550	2.924	0.004	Support
H3	0.307	1.543	0.124	Not Support

I.Web → J.Per				
H4 W.Eng → I.Web → J.Per	0.280	1.549	0.122	Not Support

This study's hypothesis test results aimed to ascertain the association among W.Eng, I.Web, and J.Per, including the mediating effect of I.Web. This investigation use the SEM technique utilising PLS. The analytical results demonstrate that job involvement has a significant and beneficial impact on I.Web, evidenced by a standardised coefficient of 0.911, a t-value of 39.699, and a p-value of 0.000. The hypothesis is supported (H1 support) with a p-value below 0.05. This research suggests that increased employee W.Eng correlates with a greater propensity for I.Web. The correlation between W.Eng and J.Per is strong, evidenced by a standardised coefficient of 0.550, a t-value of 2.924, and a p-value of 0.004. The hypothesis is supported (H2 support) due to the p-value being less than 0.05. The data demonstrate that increased W.Eng directly enhances employee performance. The hypothesis test results indicate that I.Web does not significantly affect J.Per.

The standardised coefficient is 0.307, the t-value is 1.543, and the p-value is 0.124. The p-value exceeds 0.05, indicating that this hypothesis is unsupported (H3 not supported). This suggests that while people exhibit innovative behaviour, it does not substantially enhance work performance. The mediation analysis indicates that I.Web does not significantly mediate the association between W.Eng and J.Per. The standardised coefficient for the mediation effect is 0.280, accompanied by a t-value of 1.549 and a p-value of 0.122. As the p-value exceeds 0.05, this hypothesis is not substantiated (H4 not substantiated). This suggests that while W.Eng may enhance I.Web, such behaviour lacks sufficient impact to buffer the association between W.Eng and J.Per.

DISCUSSION

The findings indicate a robust and considerable positive impact of W.Eng on I.Web, corroborating the first hypothesis (H1). This discovery corresponds with the Job Demands-Resources (JD-R) Model, which asserts that engaged individuals, motivated by the equilibrium between job demands and resources, demonstrate enhanced creativity and invention (Kwon and Kim, 2020; Ahmed, 2019). Elevated involvement enhances psychological resources, including autonomy, vigour, and social support, hence promoting intrinsic motivation for innovative endeavours (Kim, 2024; Nordin et al., 2024).

The results support Social Identity Theory, emphasising the significance of emotional commitment and leadership in influencing innovative behaviours (Geibel and Otto, 2023). Engaged personnel frequently align with organisational objectives, increasing their propensity to contribute creatively. The Behavioural Theory of Leadership posits that empowering leadership behaviours, in conjunction with W.Eng, foster an environment favourable to innovation (Gupta et al., 2017; Marampa et al., 2024). These findings corroborate current literature and underscore the necessity for additional investigation into multilevel dynamics, including team-level participation and its collective influence on innovation. Cultural subtleties in the role of participation in fostering creativity are insufficiently examined, indicating potential avenues for future research (Xanthopoulou and Bakker, 2021; Marampa et al., 2024).

The second hypothesis (H2) is validated, indicating that W.Eng has a favourable and significant impact on J.Per. This outcome corresponds with prior research that designates job engagement as a major determinant of task performance, contextual performance, and overall productivity (Husain et al., 2023; Reig-Botella et al., 2024). Engaged employees demonstrate increased vigour, commitment, and immersion, resulting in improved performance outcomes (Bakker and Demerouti, 2008; Singh and James, 2016). The JD-R Model elucidates this relationship by highlighting the interaction between job and personal resources that foster engagement and, subsequently, performance (Lazauskaite-Zabielske et al., 2018). The results further substantiate the idea that engaged employees utilise organisational support and personal resources to exceed performance objectives (Moreira et al., 2022). Nonetheless, methodological constraints, such as dependence on cross-

sectional data, may hinder causal interpretations of this association. Subsequent research utilising longitudinal methodologies may yield a more refined comprehension of the impact of involvement on performance over time (Singh and James, 2016).

Unexpectedly, I.Web does not significantly influence J.Per, thereby invalidating the third hypothesis (H3). This indicates that although employees may demonstrate innovative behaviours, such acts do not directly result in quantifiable enhancements in performance. Multiple plausible explanations arise. The setting of innovation implementation may influence its effect on performance. Employees may encounter structural, resource, or organisational impediments that hinder the efficacy of creative solutions (Parveen and Reddy, 2024). The initial results of innovation may not consistently correspond with conventional performance measurements, necessitating extended assessments to gauge their effects (Putra et al., 2024; Siregar and Suma, 2024). These findings underscore a deficiency in the research concerning the conditions that influence the innovation-performance relationship. Organisational support, leadership styles, and cultural context may significantly influence the efficacy of innovative behaviours.

The mediation study reveals that I.Web does not significantly mediate the association between W.Eng and J.Per. Therefore, the fourth hypothesis (H4) lacks support. Although work involvement fosters inventive behaviour, the latter does not adequately impact J.Per to buffer this link. This discovery questions the presumption that innovation functions as a universal conduit for translating engagement into performance. The contextual and organisational elements influencing the translation of innovation into performance improvements necessitate additional examination. Resource limitations, organisational culture, and alignment with strategic objectives may influence the effectiveness of innovative initiatives (Ranihusna et al., 2021; Masrek et al., 2016).

These findings offer multiple theoretical contributions. They enhance the JD-R Model by illustrating the intricate relationship between W.Eng, innovation, and performance. They highlight the constraints of supposing linear correlations between creativity and performance, stressing the necessity to consider contextual variables. Organisations should prioritise enhancing W.Eng by promoting supportive leadership, allocating resources effectively, and ensuring autonomy. Enhancing creativity alone may be insufficient to improve performance; organisations must ensure that creative initiatives match with strategic objectives and mitigate operational obstacles.

CONCLUSION

Initially, W.Eng serves as a pivotal catalyst for I.Web and J.Per. The robust correlation between W.Eng and I.Web underscores the necessity of cultivating psychological resources and establishing a supportive work environment to enhance creativity and innovation among employees. Likewise, the beneficial impact of W.Eng on J.Per highlights its crucial function in improving both task-specific and contextual performance. The lack of a substantial correlation between inventive work behaviour and J.Per contradicts traditional beliefs regarding the direct influence of innovation on performance results. This conclusion indicates that although people may demonstrate innovative behaviours, their efficacy in enhancing performance is contingent upon organisational support, strategy alignment, and the elimination of structural impediments. The absence of a notable mediating influence of I.Web on the connection between W.Eng and J.Per underscores the intricacy of these interactions. It emphasises the necessity for organisations to not only foster innovation but also to consider contextual elements that facilitate the conversion of innovation into quantifiable performance enhancements.

This study enhances theoretical frameworks like the Job Demands-Resources (JD-R) Model by elucidating the complex interactions among engagement, innovation, and performance. The findings underscore the necessity of formulating comprehensive strategies that integrate the promotion of employee engagement, the alignment of innovative initiatives with organisational objectives, and the resolution of obstacles to performance improvement. Notwithstanding its merits, this study possesses drawbacks. The cross-sectional design constrains causal inferences, and the dependence on self-reported data may induce bias. Future study ought to employ longitudinal methodologies and

integrate multi-source data to substantiate these conclusions. Furthermore, examining the moderating impacts of cultural and industry-specific factors will yield a more profound comprehension of the contextual complexities affecting these connections.

AUTHORS' CONTRIBUTIONS

Conceptualisation, Gusti Anisa Wulandari and Mohammad Sofwan Effendi; Methodology, Dewi Susita; Software, Mohammad Sofwan Effendi; Validation, Gusti Anisa Wulandari, Mohammad Sofwan Effendi and Dewi Susita; Formal analysis, Mohammad Sofwan Effendi; Investigation, Dewi Susita; Resources, Gusti Anisa Wulandari; Data curation, Dewi Susita; Original draft preparation, Gusti Anisa Wulandari and Mohammad Sofwan Effendi; Review and editing, Gusti Anisa Wulandari; Visualization, Dewi Susita; Supervision, Dewi Susita; Project administration, Gusti Anisa Wulandari; Funding acquisition, Gusti Anisa Wulandari

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