




“Impact of job crafting and perceived supervisor support on nurses’ work engagement: The mediating role of job satisfaction”

Ahmad Habil Hambali 



Harif Amali Rivai 

Hendra Lukito 

Ma’ruf 

AUTHORS

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Ahmad Habil Hambali, Ph.D. Student, Department of Management, Faculty of Economics and Business, Andalas University, Indonesia.

Harif Amali Rivai, Ph.D., Professor, Department of Management, Faculty of Economics and Business, Andalas University, Indonesia. (Corresponding author)

Hendra Lukito, Ph.D., Associate Professor, Department of Management, Faculty of Economics and Business, Andalas University, Indonesia.

Ma'ruf, Ph.D., Associate Professor, Department of Management, Faculty of Economics and Business, Andalas University, Indonesia.



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Ahmad Habil Hambali (Indonesia), Harif Amali Rivai (Indonesia),
Hendra Lukito (Indonesia), Ma'ruf (Indonesia)

IMPACT OF JOB CRAFTING AND PERCEIVED SUPERVISOR SUPPORT ON NURSES' WORK ENGAGEMENT: THE MEDIATING ROLE OF JOB SATISFACTION

Abstract

Work engagement among nurses is a critical determinant of healthcare quality and patient safety. However, the psychological mechanism through which job resources foster nurses' work engagement in non-Western healthcare contexts remains insufficiently understood. This study aims to examine the mediating role of job satisfaction in the relationship between job crafting, perceived supervisor support, and work engagement among nurses in a hospital setting. A cross-sectional survey was conducted between February and May 2025 using partial least squares structural equation modeling (PLS-SEM) on 279 valid responses (84.3% response rate) collected from four private hospitals. The results supported that job crafting has a significant positive effect on work engagement ($\beta = 0.633, p < 0.001$) and job satisfaction ($\beta = 0.187, p = 0.003$). Furthermore, perceived supervisor support significantly influences job satisfaction ($\beta = 0.542, p < 0.001$) but does not have a significant direct effect on work engagement ($\beta = 0.016, p = 0.787$). Mediation analysis reveals that job satisfaction partially mediates the relationship between job crafting and work engagement ($\beta = 0.037, p = 0.038$). Further, job satisfaction was found to fully mediate the relationship between perceived supervisor support and work engagement ($\beta = 0.106, p = 0.002$). These findings highlight the pivotal role of job satisfaction as a psychological mechanism linking job resources and proactive behaviors to nurses' work engagement in hospital settings.

Keywords

engagement, job crafting, supervisor support, job satisfaction, nurses

JEL Classification

J28, J29, M54, I11

INTRODUCTION

Work engagement is a crucial issue in human resource management. In the health industry, such as hospitals, the role of work engagement among nurses has become essential to improved quality of care, patient safety, and organizational effectiveness, whereas low levels of work engagement can lead to burnout, decreased quality of care, and increased intention to leave the organization, posing serious challenges to the hospital's sustainability. In hospital settings characterized by heavy workloads, emotional demands, and limited resources, maintaining the motivation and psychological health of nurses is a significant challenge for organizational management. This phenomenon in developing nations such as Indonesia attains significance, wherein structural constraints, shortages in the workforce, and limitations in managerial capabilities may further exacerbate efforts to sustain a stable and motivated healthcare workforce. Despite prior research illustrating favorable outcomes associated with work engagement, there remains a deficiency in comprehension regarding the conditions of the workplace and how employee initiatives can be effectively transformed into work engagement, particularly within the context of the

healthcare sector in non-Western countries, which possess cultural paradigms distinct from those of Western nations. Existing research has frequently emphasized direct associations between job characteristics and engagement, yet the underlying psychological processes through which workplace factors foster or inhibit engagement remain insufficiently clarified. Consequently, a central scientific problem arises concerning how and through what internal psychological mechanisms workplace-related factors contribute to sustaining nurses' work engagement in hospital environments marked by high demands and contextual complexity.

1. LITERATURE REVIEW AND HYPOTHESES

Work engagement has emerged as a central construct in organizational behavior and human resource management research, particularly within the healthcare sector where workforce motivation directly affects service quality and patient outcomes. Schaufeli et al. (2006) define work engagement as a positive, fulfilling, and work-related psychological state characterized by three core dimensions: vigor (high energy levels and mental resilience), dedication (strong involvement, enthusiasm, and pride), and absorption (full concentration and engrossment in work). This conceptualization distinguishes engagement from related but distinct constructs such as job involvement and organizational commitment, positioning it as a motivational state with direct implications for both individual well-being and organizational performance (Schaufeli, 2021).

The conceptual framework underpinning this study is based on the job demands–resources (JD–R) model, originally proposed by Demerouti et al. (2001) and subsequently developed by Bakker and Demerouti (2014, 2017, 2024). The JD–R model posits that engagement emerges when employees have sufficient job resources (such as physical, psychological, social, or organizational) to meet work demands and support personal growth (Albrecht et al., 2021). Job resources are defined as those aspects of the job that reduce demands, facilitate goal achievement, and stimulate learning and development. The model has been extensively validated across occupational contexts, with meta-analytic and longitudinal evidence confirming that job resources are among the strongest and most consistent predictors of work engagement (Albrecht et al., 2021; Lesener et al., 2020). From a performance perspective, Christian et al. (2011) demonstrated that engagement is significantly

associated with both task and contextual performance, while Freeney and Fellenz (2013) established similar linkages specifically within nursing and midwifery settings. Intervention-based research further reveals that improving occupational resources can successfully boost engagement levels (Knight et al., 2019). In nursing contexts, engagement has been linked to resilience, reduced turnover intention, and enhanced quality of care (Ghazawy et al., 2021; Poku et al., 2025; Xue et al., 2025). Taken together, these findings underscore work engagement as a strategically vital outcome for healthcare organizations and raise important questions about the specific workplace conditions and psychological mechanisms that sustain it.

Within the JD–R framework, perceived supervisor support represents one of the most immediate and influential social resources available to employees. It reflects employees' beliefs that supervisors value their contributions and provide assistance in managing work demands (Shi & Gordon, 2020; Uslukaya & Demirtas, 2024). Drawing on social exchange theory (Blau, 1964), supportive treatment from supervisors encourages reciprocal positive attitudes and greater psychological involvement at work. Contreras et al. (2021) demonstrated that supervisory support enhances engagement among nursing staff by expanding employees' possibilities for professional development, while Kissi et al. (2023) found similar effects in the construction sector, where supervisor support reduced turnover intention through its influence on engagement. In the healthcare setting specifically, Parr et al. (2021) showed that effective leadership relationships are central to work engagement and downstream patient outcomes. More recently, Andersen et al. (2025) and Heläß et al. (2025) identified supportive supervision as a critical buffer against emotional demands and stress in nursing contexts. Wen et al. (2023) established that leadership styles that empower individuals

and strengthen psychological resources are particularly effective in promoting engagement. Across these diverse occupational and cultural contexts, a consistent pattern emerges: supervisory support functions as a social resource that expands employees' psychological capacity and creates conditions conducive to engagement.

However, this relationship does not always yield consistent results. Kurniawan and Anindita (2021) found that in Indonesia, perceived supervisor support did not influence employee engagement; the study highlighted the fieldwork context and high supervisor turnover as the primary reasons. Sunarjo et al. (2020) found that the effect of supervisor support becomes significant only through the mediator of need for achievement motivation. This inconsistency may partly reflect contextual variations, particularly between Western and non-Western organizational environments, where cultural norms surrounding authority and hierarchy influence how employees perceive and respond to supervisor behavior.

Beyond externally provided resources, employees may proactively transform their jobs through job crafting. Job crafting refers to self-initiated changes that employees make to the task, relational, or cognitive boundaries of their work to align their roles more closely with their personal strengths, interests, and values (Tims et al., 2012; Tims & Bakker, 2010). Slemp and Vella-Brodrick (2013) further conceptualized job crafting as a multidimensional construct, while Tims et al. (2012) operationalized it within the JD-R framework as behaviors to increase structural resources, enhance social resources, seek challenging demands, and reduce hindering demands. From a JD-R perspective, job crafting enables employees to expand available resources and pursue meaningful challenges, thereby fostering engagement (Seppälä et al., 2020; Wu et al., 2023).

Jawahar and Liu (2017) further argue that employees with proactive orientations tend to experience higher levels of job satisfaction and engagement, suggesting that job crafting serves a dual function in shaping work attitudes and motivational states. Empirical evidence supporting this relationship is robust across diverse occupational and cultural contexts. Longitudinal studies have demonstrated

a positive association between job crafting and work engagement, task performance, and career satisfaction (Dubbelt et al., 2019; Frederick et al., 2020). Similarly, Kuijpers et al. (2020), using a quasi-experimental design, show that job crafting interventions significantly increase engagement even under conditions of high workload. More recent studies by Mkhwanazi and Dhanpat (2023) and Yasin Ghadi (2024) have extended these findings to broader organizational contexts. In healthcare contexts, Saleh et al. (2024) demonstrated that job crafting strengthens workplace belongingness and affective commitment, reinforcing its relevance in high-demand clinical environments. Across these diverse settings, a consistent pattern emerges: employees who proactively reshape their work boundaries develop a stronger sense of autonomy and competence, which in turn activates and sustains higher levels of engagement; a dynamic that is particularly salient in high-demand clinical environments such as hospitals where opportunities for self-directed role adjustment may be especially consequential for psychological well-being.

While supervisor support and job crafting are important predictors of engagement, their influence may operate through employees' job attitudes. Locke (1976) explained that job satisfaction has long been recognized as a central outcome of workplace conditions and a proximal predictor of work-related behaviors and states. In healthcare contexts specifically, job satisfaction has been associated with organizational commitment, reduced turnover intention, and improved performance, underscoring its strategic relevance for hospital management (Karaferis et al., 2022; Mosadeghrad et al., 2008). From a theoretical perspective, job satisfaction is expected to serve as a psychological bridge between environmental conditions and motivational states. When employees perceive their work environment as supportive and their tasks as aligned with their strengths, they are likely to develop more positive evaluations of their work, which in turn fuel greater psychological engagement.

Empirical evidence shows that supportive environments and proactive work behaviors are significant predictors of job satisfaction. Cheng and O-Yang (2018) found that job crafting reduces burnout and increases satisfaction through per-

ceived organizational support, while Yadav and Sharma (2023) established that supervisor support enhances satisfaction by reducing work-family conflict. Tirana et al. (2023) similarly found that motivational factors, including support and autonomy, positively shape satisfaction levels across professional contexts. Together, these findings suggest that when employees perceive their work environment as both supportive and personally meaningful, they are more likely to develop positive job evaluations, creating an attitudinal foundation from which greater engagement can emerge.

Critically, job satisfaction has also been identified as a positive predictor of work engagement. Orgambidez-Ramos and de Almeida (2017) found that satisfaction and social support together form a significant pathway to engagement among Portuguese nurses, while Wei et al. (2023) confirmed in a large-scale national survey that satisfaction is positively associated with engagement and inversely related to intent to leave among U.S. nurses. Toyama et al. (2022) provided direct evidence of the mediating role of job satisfaction in linking job crafting to positive work outcomes in Finnish school principals, offering a particularly relevant precedent for the present study. Collectively, these findings position job satisfaction not merely as a distal outcome of workplace conditions, but as an active psychological mechanism that converts favorable job resources into sustained motivational engagement; a mediating function that remains underexplored within integrated structural models, particularly in non-Western healthcare contexts where cultural and organizational dynamics may amplify or attenuate its influence.

Despite the growing body of evidence, several important gaps remain. Most existing studies examine these constructs in isolation or test only single-path models, leaving the simultaneous and interacting effects of proactive behavior and social support on engagement insufficiently understood (Jia et al., 2019; Nykolaiszyn, 2023; Wei et al., 2023). This is theoretically limiting because job crafting and supervisory support co-occur within the same work environment and are likely to jointly shape employees' psychological states, making an integrated framework necessary to capture their combined effects. Furthermore, the mediating

role of job satisfaction within such an integrated model has rarely been empirically tested in healthcare contexts, particularly in developing-country settings where workforce constraints and cultural norms may alter the underlying psychological processes.

The empirical evidence base also remains predominantly Western-oriented, with limited attention to non-Western healthcare systems. This gap is consequential because cultural context, particularly collectivism and high-power distance characteristic of Indonesian society, may meaningfully alter how employees perceive and respond to supervisory support and proactive work behaviors. Examining these relationships in the Indonesian context therefore offers not merely a replication of Western findings but a theoretically meaningful test of the boundary conditions of the JD-R model. The present study addresses these gaps by simultaneously testing direct and indirect effects of job crafting and perceived supervisor support on work engagement within an integrated mediated framework, using nurses in Indonesian private hospitals as an empirical context.

The following hypotheses were formulated (Figure 1):

- H1: Job crafting is positively associated with work engagement among nurses.*
- H2: Perceived supervisor support is positively associated with work engagement among nurses.*
- H3: Job crafting is positively associated with job satisfaction among nurses.*
- H4: Perceived supervisor support is positively associated with job satisfaction among nurses.*
- H5: Job satisfaction is positively associated with work engagement among nurses.*
- H6a: Job satisfaction mediates the relationship between job crafting and work engagement among nurses.*
- H6b: Job satisfaction mediates the relationship between perceived supervisor support and work engagement among nurses.*

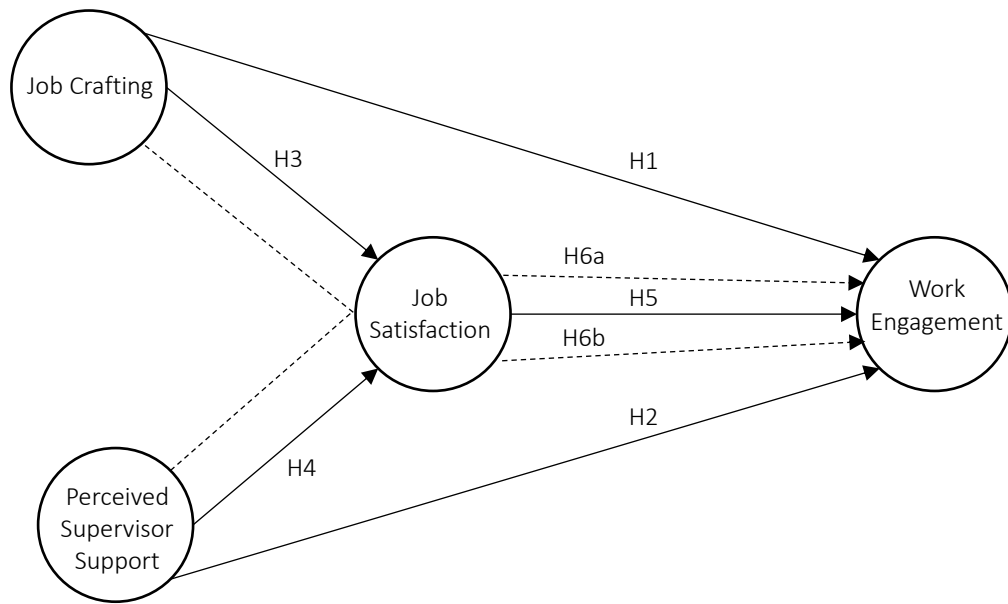


Figure 1. Conceptual framework

2. METHOD

The cross-sectional survey methodology enables the evaluation of the links of job crafting, perceived supervisor support, job satisfaction, and work engagement across nurses. To address the research aim, this study was conducted in the empirical context of private hospitals in Indonesia, a non-Western developing country with a health-care setting that provides a relevant and underexplored context for testing the proposed model.

Data were collected from four private hospitals between February and May 2025. Of the 331 responses initially collected, 279 questionnaires (84.3%) were retained for analysis after screening for outliers and random and non-random missing data, following the procedure recommended by Tsiriktsis (2005). All data gathered are original and have not been previously disseminated in any other scholarly publication. Table 1 shows the demographics of respondents.

Primary data were obtained from nurses employed in the participating hospitals. Participation was voluntary and anonymous. Respondents were informed about the research aim and that their answers would be kept confidential and only used for academic purposes. No identifying information was collected, and the study was conducted in accordance with institutional ethical standards.

Table 1. Demographics

Category		Count (N)	% of total
Gender	Male	32	11.5%
	Female	247	88.5%
Age	20–25 years old	60	21.5%
	26–30 years old	79	28%
	31–35 years old	79	28%
	36–40 years old	32	11.9%
	41–45 years old	10	3.5%
	46–50 years old	16	5.7%
	> 50 years old	3	1.4%
Work experience	< 1 year	56	20.1%
	1–4 years	76	27.2%
	5–8 years	59	21.2%
	> 8 years	88	31.5%
Work status	Contractual-based	138	49.5%
	Permanent	141	50.5%
Education	Diploma	193	69.1%
	Bachelor	86	30.9%
Monthly income (IDR)	< Rp 2,000,000	21	7.5%
	Rp 2,000,000 – 3,000,000	104	37.4%
	Rp 3,000,000 – 4,000,000	88	31.5%
	Rp 4,000,000 – 5,000,000	52	18.6%
	>Rp 5,000,000	14	5%

The measurement instruments in this study were adapted from established and validated scales in prior literature. All questionnaire items were translated into Indonesian, and a back-translation procedure was performed before field data collection to ensure content validity.

Work engagement was measured using the short version of the Utrecht Work Engagement Scale (UWES-9; Schaufeli et al., 2006), consisting of nine items grouped into three dimensions: vigor, dedication, and absorption. Job crafting was measured using 15 items that consist of three dimensions: increasing structural job resources, increasing social job resources, and increasing challenging job demands, from the Dutch Job Crafting Scale developed by Tims et al. (2012). Furthermore, perceived supervisor support was measured using nine items developed by Greenhaus et al. (1990), comprising three dimensions: career development support, performance support, and task support. Finally, job satisfaction was measured using the nine-item scale proposed by Mosaddeghrad et al. (2008). All statements were based on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The collected data were analyzed using a structured approach following established methodological guidelines (Hair et al., 2019). Data preparation involved coding and screening responses for completeness before consolidating them into a single dataset. Descriptive statistics were computed to examine response distributions and identify potential outliers. The study employed partial least squares structural equation modeling (PLS-SEM) using SmartPLS 4.0. This technique was selected due to its suitability for predictive modeling, handling complex relationships among latent constructs, and maintaining statistical robustness with moderate sample sizes (Hair et al., 2022). The analysis followed the two-step approach recommended by Hair et al. (2019), consisting of the assessment of the measurement model and the evaluation of the structural model. Bootstrapping with 5,000 resamples was applied to determine the statistical significance of the structural paths.

Reliability was assessed using Composite Reliability (CR) and outer loading values. Indicators with composite reliability and outer

loading values above 0.70 were considered reliable (Hair et al., 2013). Convergent validity was evaluated using the Average Variance Extracted (AVE), with acceptable values exceeding 0.50 (Hair et al., 2019). Discriminant validity was evaluated using the Fornell-Larcker criterion. Following Hair et al. (2019), discriminant validity is established when the square root of a construct's AVE exceeds its correlations with other constructs in the model. The results confirmed that this criterion was satisfied for all variables.

3. RESULTS

The measurement model was first evaluated in terms of reliability and validity, as shown in Table 2. Hair et al. (2013) stated that internal consistency reliability should be assessed using Cronbach's alpha and Composite Reliability (CR), and all constructs exceeded the recommended threshold of 0.70. Composite reliability confirmed satisfactory internal consistency, with values ranging from 0.925 to 0.972. The validity of the variables and their corresponding indicators is further supported by AVE analysis, which indicates that each variable has an AVE greater than 0.5 (Hair et al., 2019). The Average Variance Extracted (AVE) value was used for validity testing. The results in Table 2 show that ten items were left and five items of job crafting were to be eliminated because the outer loading value was less than 0.6. For work engagement, two items had to be eliminated, and after the process, seven items remained.

Discriminant validity was assessed using two complementary approaches. First, the Fornell-Larcker criterion was applied. According to Hair et al. (2019), this method involves comparing the square root of the Average Variance Extracted (AVE) for each variable with its correlations with other variables in the model. Discriminant validity is established when a variable's AVE square root exceeds its correlation coefficient with all other variables. Table 3 shows that the square root of each variable's AVE exceeds its correlation coefficient with other variables.

Second, the heterotrait-monotrait ratio (HTMT) was examined. As shown in Table 4, all HTMT values were below the conservative threshold of

Table 2. Reliability and validity

Variable	Outer loading	α	CR	AVE
Job crafting				
JC1	0.730	0.921	0.934	0.588
JC2	0.813			
JC3	0.790			
JC4	0.782			
JC6	0.737			
JC7	0.753			
JC8	0.733			
JC9	0.828			
JC10	0.800			
JC11	0.620			
Perceived supervisor support				
PSS1	0.869	0.968	0.972	0.797
PSS2	0.915			
PSS3	0.919			
PSS4	0.898			
PSS5	0.912			
PSS6	0.869			
PSS7	0.905			
PSS8	0.903			
PSS9	0.838			
Job satisfaction				
JS1	0.745	0.930	0.941	0.642
JS2	0.839			
JS3	0.837			
JS4	0.703			
JS5	0.871			
JS6	0.849			
JS7	0.774			
JS8	0.811			
JS9	0.768			
Work engagement				
WE1	0.759	0.904	0.925	0.638
WE2	0.849			
WE3	0.715			
WE4	0.870			
WE5	0.875			
WE6	0.805			
WE7	0.701			

Note: AVE is average variance extracted; CR is Cronbach’s alpha; JC is job crafting; PSS is perceived supervisor support; JS is job satisfaction; WE is work engagement.

Table 3. Fornell-Larcker criterion

Variables	JC	JS	PSS	WE
JC	0.767	–	–	–
JS	0.507	0.801	–	–
PS	0.591	0.652	0.893	–
WE	0.742	0.527	0.519	0.799

Note: JC is job crafting; PSS is perceived supervisor support; JS is job satisfaction; WE is work engagement.

0.85 (and below the liberal threshold of 0.90), as recommended by Hair et al. (2019). These results confirm robust discriminant validity.

Table 4. Heterotrait-monotrait values

Variables	JC	JS	PSS	WE
JC				
JS	0.544			
PSS	0.628	0.679		
WE	0.806	0.576	0.555	

Note: JC is job crafting; PSS is perceived supervisor support; JS is job satisfaction; WE is work engagement.

Table 5 and Figure 2 present the structural model results. Job satisfaction indicates that 44.9% of its variance can be explained by job crafting and perceived supervisor support. Meanwhile, job crafting, perceived supervisor support, and job satisfaction jointly explain 56.1% of work engagement

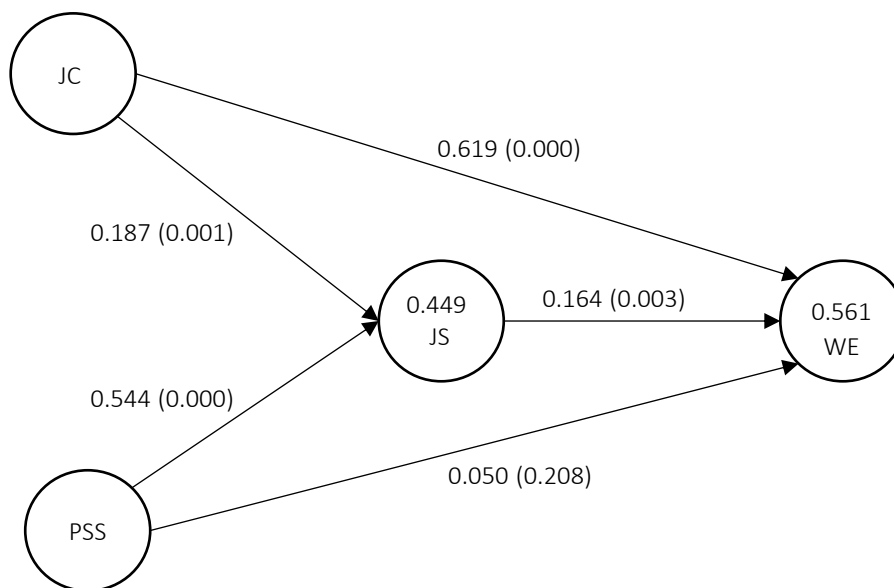
variance. According to the benchmarks proposed by Hair et al. (2019), these values indicate moderate explanatory power in the context of behavioral research.

Job crafting demonstrated a positive and significant effect on work engagement ($\beta = 0.633, p < 0.001$) and job satisfaction ($\beta = 0.187, p = 0.003$), supporting H1 and H3. Relationship between perceived supervisor support and job satisfaction is significantly significant ($\beta = 0.542, p < 0.001$), supporting H4. However, perceived supervisor support showed no significant direct effect on work engagement ($\beta = 0.016, p > 0.1$), rejecting H2. Subsequently, job satisfaction significantly predicted work engagement ($\beta = 0.195, p = 0.001$), supporting H5. Job satisfaction partially mediated the relationship between job crafting and work engagement (H6a: $\beta = 0.037, p = 0.038$) and fully

Table 5. Hypothesis testing

Hypothesis	Path	T-statistics	P values	Decision
H1: JC → WE	0.633	10.913	0.000	Supported
H2: PSS → WE	0.016	0.271	0.787	Not Supported
H3: JC → JS	0.187	3.004	0.003	Supported
H4: PSS → JS	0.542	8.631	0.000	Supported
H5: JS → WE	0.195	3.414	0.001	Supported
H6a: JC → JS → WE	0.037	2.075	0.038	Partial mediation
H6b: PSS → JS → WE	0.106	3.103	0.002	Full mediation

Note: JC is job crafting; PSS is perceived supervisor support; JS is job satisfaction; WE is work engagement.



Note: JC is job crafting; PSS is perceived supervisor support; JS is job satisfaction; WE is work engagement.

Figure 2. Measurement model assessment

mediated the relationship between perceived supervisor support and work engagement (H6b: $\beta = 0.106, p = 0.002$).

4. DISCUSSION

The findings advance the existing body of knowledge by empirically clarifying the structural relationships among job crafting, perceived supervisor support, job satisfaction, and work engagement within a developing-country context. While prior studies have generally examined these constructs in isolation or within single-path models (Jia et al., 2019; Nykolaiszyn, 2023; Wei et al., 2023), the present study integrates them into a mediated structural framework, thereby providing a more comprehensive explanation of how proactive behavior and managerial support jointly influence engagement outcomes in healthcare settings. By assessing both direct and indirect paths, this paper improves our knowledge of motivational processes in hospital settings with high psychological and operational needs.

The results confirmed that job crafting significantly predicts work engagement, supporting H1. This result is consistent with earlier empirical evidence (Tims et al., 2012; Rózsa et al., 2023), which demonstrates that proactive modifications of job roles increase employees' access to valuable resources and reinforce their motivational condition. Similar patterns were reported by Yasin Ghadi (2024) and Karatepe and Kim (2023), who found that employees who actively increase job challenges and seek developmental opportunities report higher vigor and dedication. The stability of this association can be attributed to the self-driven character of job crafting. In hospital environments marked by substantial workload pressures, employees who actively adjust their task scope and pursue additional resources are likely to develop a stronger sense of autonomy and competence, which in turn fosters higher levels of engagement.

Nonetheless, perceived supervisor support had no direct significant effect on employee engagement, rejecting hypothesis 2. However, some previous empirical evidence (Adi et al., 2024; Lee & Shin, 2023; Kissi et al., 2023) reported contradictory results, finding a direct positive association

between supervisory support and engagement. Nevertheless, it is consistent with research suggesting that supervisory support primarily influences motivational outcomes through attitudinal mediators (Contreras et al., 2021; Uslukaya & Demirtas, 2024). In the present study, perceived supervisor support significantly predicted job satisfaction, which subsequently influenced engagement. This indicates that supervisory support operates indirectly rather than directly. A plausible explanation is that, in Indonesian private hospitals, supervisory support may be perceived as a normative managerial responsibility rather than a distinctive motivational resource, thereby shaping employees' evaluative attitudes before influencing their engagement levels.

The positive effects of both job crafting and perceived supervisor support on job satisfaction (supporting H3 and H4) are consistent with previous findings emphasizing the combined role of proactive behavior and leadership support in shaping work attitudes (McKevitt et al., 2022; Mondo et al., 2023; Wen et al., 2023; Yadav & Sharma, 2023). While effective supervisory assistance in operational procedures is combined with employees' readiness to adjust their jobs, employees are more likely to rate their working circumstances positively. This supports the claim that satisfaction results from the interplay of internal influence and external support systems.

The mediation analysis provides additional theoretical insight. The construct of job satisfaction served as a partial mediator in the nexus between job crafting and work engagement, while it acted as a full mediator in the association between perceived supervisor support and engagement (thus corroborating hypotheses H6a and H6b). This distinction is theoretically meaningful. It suggests that job crafting inherently stimulates engagement through both direct motivational activation and indirect attitudinal pathways. In contrast, supervisory support requires the formation of positive job evaluations before translating into engagement. Similar indirect mechanisms have been documented in recent studies (Helaß et al., 2025; Sidin et al., 2021; Trépanier et al., 2015), supporting the argument that not all job resources operate through identical psychological processes. The differentia-

tion between partial and full mediation contributes to a more nuanced understanding of how distinct workplace resources function within healthcare institutions.

Overall, the findings substantiate prior empirical evidence while also revealing context-specific dynamics. Unlike studies that position supervisory support as a direct driver of engagement, the present results highlight the central role of job satisfaction as a psychological bridge. This integrated model demonstrates that proactive employee behavior (job crafting) exerts a more immediate motivational influence, whereas managerial support strengthens engagement primarily through attitudinal reinforcement.

This study contributes to the theoretical body of prior research by expanding the role of job crafting as a proactive strategy for increasing work engagement, particularly among private hospital nurses, who have received little attention. This study further underscores the function of job satisfaction as an intervening mechanism through which workplace resources, such as perceived supervisor support, are translated into sustained work motivation, thereby enriching the job demands–resources framework by clarifying the linkage between satisfaction and work engagement. The findings also highlight the significance of integrating proactive employee actions with supportive management approaches in order to maintain engagement in high-pressure healthcare contexts.

CONCLUSION

This study aims to examine the role of job satisfaction as a critical psychological mechanism linking job resources to sustained work engagement among nurses in hospital settings. Conducted in the empirical context of private hospitals in West Sumatera Province, Indonesia, the findings offer theoretically meaningful insights that extend the job demands–resources framework to non-Western, developing-country healthcare environments.

Job crafting emerged as the strongest and most direct predictor of work engagement ($\beta = 0.633$), confirming that nurses are far more engaged when they proactively adapt their tasks and seek out professional development resources to improve their performance. Beyond its direct effect, job crafting also contributed indirectly to engagement through job satisfaction ($\beta = 0.037$), making it a construct with two motivational pathways: it directly triggers engagement and fosters job satisfaction, which in turn further strengthens it. Thus, these findings confirm that proactive work behavior is not merely a behavioral outcome but a primary driver of motivational conditions in a demanding clinical environment.

In contrast, perceived supervisor support showed no meaningful direct effect on work engagement ($\beta = 0.016$, $p = 0.787$), yet exerted a substantial influence on job satisfaction ($\beta = 0.542$). Meanwhile, job satisfaction fully mediates the relationship between perceived supervisor support and work engagement ($\beta = 0.106$), indicating that supervisor support must first be positively evaluated in relation to the job before it can translate into engagement.

From a practical standpoint, these findings suggest that hospital management should prioritize structured job crafting programs such as job crafting workshops and resource-seeking training to directly and sustainably enhance nurses' work engagement. Concurrently, building supervisory competence in providing consistent career, performance, and task support remains essential, as this strengthens nurses' job satisfaction ($\beta = 0.542$), which in turn drives their engagement ($\beta = 0.195$). In non-Western healthcare contexts such as Indonesia, where collectivist values and hierarchical structures influence workplace dynamics, interventions that simultaneously strengthen proactive employee behavior and supportive leadership relationships are particularly critical for cultivating an engaged and motivated nursing workforce.

This study has several limitations that should be acknowledged. First, the cross-sectional design prevents firm causal conclusions, indicating the need for longitudinal research to examine relationships

over time. The use of self-reported measures may also introduce common method bias, suggesting the value of future studies that incorporate multiple data sources, such as supervisor assessments or behavioral indicators. Furthermore, because the research was conducted in a private hospital setting, the findings may not fully generalize to public institutions with different organizational structures and cultures. Future studies should test the model across diverse contexts and explore additional mediators or moderators, such as psychological empowerment or work meaning, to further clarify the mechanisms underlying work engagement.

AUTHOR CONTRIBUTIONS

Conceptualization: Ahmad Habil Hambali.

Data curation: Harif Amali Rivai.

Funding acquisition: Ahmad Habil Hambali.

Investigation: Harif Amali Rivai.

Methodology: Ma'ruf.

Project administration: Ahmad Habil Hambali.

Resources: Harif Amali Rivai.

Software: Harif Amali Rivai, Hendra Lukito.

Supervision: Ahmad Habil Hambali.

Validation: Hendra Lukito, Ma'ruf.

Visualization: Harif Amali Rivai.

Writing – original draft: Harif Amali Rivai.

Writing – review & editing: Ahmad Habil Hambali, Harif Amali Rivai, Hendra Lukito, Ma'ruf.

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