









“Determinants of employee engagement and organizational citizenship behavior of nurses in public hospitals in Indonesia”

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ARTICLE INFO	Jufrizen, Jasman Saripuddin Hasibuan, Salman Farisi and Muslih (2025). Determinants of employee engagement and organizational citizenship behavior of nurses in public hospitals in Indonesia. <i>Problems and Perspectives in Management</i> , 23(1), 584-596. doi: 10.21511/ppm.23(1).2025.44
DOI	http://dx.doi.org/10.21511/ppm.23(1).2025.44
RELEASED ON	Wednesday, 26 March 2025
RECEIVED ON	Sunday, 26 January 2025
ACCEPTED ON	Wednesday, 19 March 2025
LICENSE	 This work is licensed under a Creative Commons Attribution 4.0 International License
JOURNAL	"Problems and Perspectives in Management"
ISSN PRINT	1727-7051
ISSN ONLINE	1810-5467
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

54



NUMBER OF FIGURES

1



NUMBER OF TABLES

9

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BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine
www.businessperspectives.org

Received on: 26th of January, 2024

Accepted on: 19th of March, 2024

Published on: 26th of March, 2025

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Conflict of interest statement:

Author(s) reported no conflict of interest

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DETERMINANTS OF EMPLOYEE ENGAGEMENT AND ORGANIZATIONAL CITIZENSHIP BEHAVIOR OF NURSES IN PUBLIC HOSPITALS IN INDONESIA

Abstract

Organizational citizenship behavior describes employees' voluntary behaviors that enhance organizational efficiency and productivity. The purpose of this paper is to examine the relationships between employee engagement, organizational justice, organizational citizenship behavior, and perceived organizational support. The population comprised employees from 11 public hospitals in Medan, North Sumatra, Indonesia. This quantitative analysis employed a Likert scale questionnaire to collect the data from nurses in public hospitals. The sample consisted of 175 nurses with at least one year of work experience. The data were then analyzed using SEM-PLS and SmartPLS 4.0. A substantial correlation was found between perceived organizational support and organizational citizenship behavior ($p < 0.05$) and employee engagement ($p < 0.05$). A strong correlation existed between organizational justice and organizational citizenship behavior ($p < 0.05$) and employee engagement ($p < 0.05$). Furthermore, employee engagement notably affects organizational citizenship behavior ($p < 0.05$). Employee engagement serves as a mediator between organizational justice and organizational citizenship behavior ($p < 0.05$) and between perceived organizational support and organizational citizenship behavior ($p < 0.05$).

Keywords organizational behavior, SEM-PLS, public hospitals,
Indonesia

JEL Classification D23, J53, M12, M54

INTRODUCTION

To attain corporate objectives, all staff must share a collective vision. Personnel must fulfill responsibilities while managing supplementary tasks beyond their formal job descriptions. The notion denoting voluntary actions surpassing prescribed work duties is organizational citizenship behavior (OCB). The human resources department is willing to engage in additional tasks beyond their officially designated roles.

An additional factor that supports OCB is high employee engagement. Employee engagement is workers' favorable conduct toward the organization and its values. Physically, cognitively, and emotionally engaged personnel are invested in their position. It is a critical concern for all organizations due to its strong correlation with critical organizational outcomes, including employee retention, customer satisfaction, productivity, and profitability. Active employees are enthusiastic and invested in their work and undertake constructive initiatives that enhance the organization's reputation. Employee engagement is crucial for organizational development and growth, as it directly correlates with heightened levels of productivity. Employee engagement is recommended for organizational leaders to cultivate to address challenges related to work motivation, productivity, and OCB. Furthermore,

OCB can be cultivated using the assistance rendered to personnel. Perceived organizational support is a theoretical framework that analyzes how organizations foster employee engagement by rewarding contributions and recognizing the potential benefits of maintaining a positive reciprocal relationship between the organization and its workforce. Perceived organizational support refers to management valuing workers' involvement, that the organization is concerned with their well-being, and that its members also have regard for one another to facilitate collaboration in pursuing business objectives.

In addition, another element that can promote OCB and employee engagement is organizational justice. Employees' perceptions of procedural justice positively correlates to organizational engagement. Members who positively perceive their organization are more inclined to feel a sense of duty to conduct themselves fairly while carrying out their responsibilities by dedicating more to themselves through increased commitment. Conversely, employees with negative perceptions tend to disengage and withdraw.

1. LITERATURE REVIEW AND HYPOTHESES

Contemporary scholars have recently shown considerable interest in the organizational citizenship behavior (OCB) management paradigm, which has gained substantial traction. A plethora of research highlights that OCB significantly influences firms' productivity and plays a pivotal role in organizational efficiency and goal attainment, ultimately contributing to heightened employee morale (Demirel et al., 2018). OCB, which employees exhibit through discretionary behaviors, actively contributes to the overall quality of the workplace environment, transcending formal recognition (Colquitt et al., 2012). It involves intentional actions undertaken by individual members within an organization explicitly to enhance its overall effectiveness (Farh et al., 2004). Scholars define OCB as a voluntary inclination to exceed assigned duties, even when such actions may not directly improve organizational performance (Schermerhorn, 2011). Building upon prior research, Newland (2012) and Organ (1988) delineated five dimensions of OCB: courtesy, sportsmanship, conscientiousness, altruism, and civic virtue.

In the management domain, contemporary scholarship has focused on employee engagement (Wen et al., 2023). Employee engagement signifies a profound emotional attachment to one's job, characterized by a positive outlook and a resolute commitment to exceeding expectations (Ariani, 2013). Heslin et al. (2020) assert that particularly in learning, cultivating dependable relationships, defining tasks clearly, fostering freedom of expression, and acknowledging one's limitations hold greater significance than

emphasizing competition. Originating from the conceptualization of Kahn (1990), employee engagement is the employees' adeptness in executing their job responsibilities proficiently while fostering a robust connection with their work. This connection involves active engagement, highlighting physical, cognitive, and emotional talents during job execution. The physical dimension pertains to the tangible effort individuals exert in their employment, while the cognitive aspect centers on employees' thoughts and perspectives regarding the company, workplace conditions, and its leadership. The emotional facet captures subjective feelings toward the company, whether positive or negative. Employee engagement, as elucidated by Saks (2006), characterizes employees who actively and passionately dedicate themselves to their work and the enduring prosperity of the organization.

Perceived organizational support, as expounded by Rhoades and Eisenberger (2002), encapsulates the subjective perceptions of staff concerning their firm's acknowledgment of their roles and prioritization of their welfare. This conceptual framework shapes the qualitative dimensions of workers' work environments (Robbins & Judge, 2017). Grounded in the social exchange approach, elucidating the reciprocal dynamics between staff and organizations, this framework recognizes that staff, cognizant of the benefits conferred by the organization, cultivate a sense of obligation, loyalty, and dedication (Caesens & Stinglhamber, 2014). Organizational support encompasses faith in the organization's recognition of employees' roles and commitment to their overall welfare (Wu & Liu, 2014). Through the mechanism of reciprocal support, the organization has the potential to influence workers' job outcomes while mit-

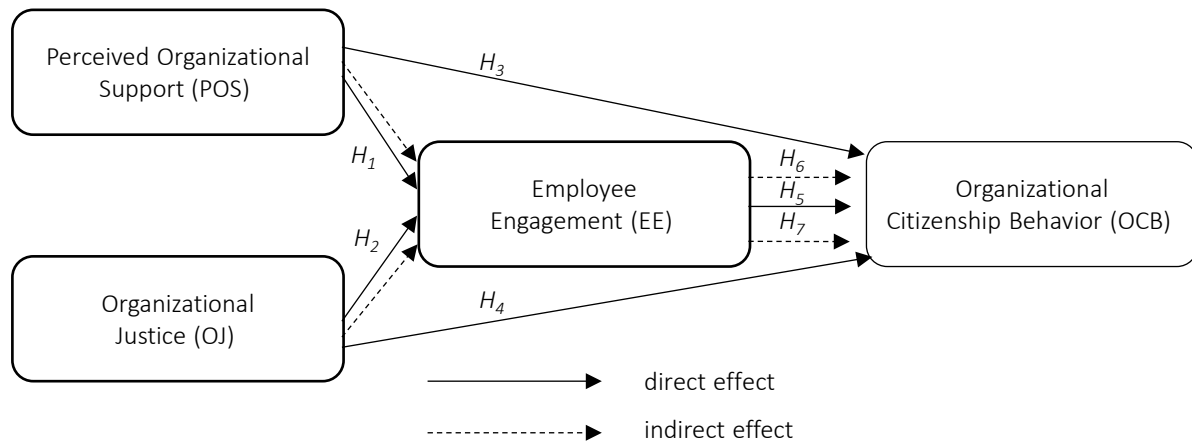


Figure 1. Research framework

igating negative repercussions positively (Wu & Liu, 2014). The scope of perceived organizational support extends to encompass workers’ comprehensive beliefs regarding the organization’s policies, procedural frameworks, personal experiences, resource allocations, interactions with organizational agents, and the demonstrated interest in their welfare (Rhoades & Eisenberger, 2002).

In contrast, organizational justice pertains to the equitable treatment meted out by an organization to its employees, encapsulating both desired outcomes and interpersonal interactions (Folger & Greenberg, 2001). Procedural justice, interchangeably termed organizational justice, relates to the fairness inherent in work operations’ rules and procedures (Yean & Yusof, 2016). It encompasses the just and unbiased treatment of employees within an organization, with interactional justice, procedural justice, and distributive justice influencing both the respective outcomes and processes (Hosmer & Kiewitz, 2005; Pan et al., 2018). Distributive justice directs attention to the outcomes achieved by the organization. Procedural justice is concerned with the formal policies and procedures utilized in pursuing organizational objectives, and interpersonal justice pertains to the attitudes, decisions, and information flow within the organization.

Theodorus et al. (2021), Ivani et al. (2019), and Koodamara et al. (2019) investigated the intricate relationships between OCB, organizational justice, perceived organizational support, and employee engagement. Koodamara et al. (2019) and Srimulyani and Hermanto (2022) showed that employee en-

gagement is affected by organizational justice and perceived organizational support. Ariani (2013) and Putri et al. (2021) confirm that employee engagement substantially impacts OCB.

Following the literature review, the purpose of this paper is to determine the influence of organizational justice and perceived organizational support on organizational citizenship behavior through employee engagement at public hospitals in Medan, North Sumatra, Indonesia. The conceptual model is shown in Figure 1 and the hypotheses are:

- H1: Perceived organizational support positively affects employee engagement.*
- H2: Organizational justice positively affects employee engagement.*
- H3: Perceived organizational support positively affects organizational citizenship behavior.*
- H4: Organizational justice positively affects organizational citizenship behavior.*
- H5: Employee engagement positively affects organizational citizenship behavior.*
- H6: Employee engagement mediates the relationship between perceived organizational support and organizational citizenship behavior.*
- H7: Employee engagement mediates the relationship between organizational justice and organizational citizenship behavior.*

2. METHODOLOGY

Utilizing a quantitative research methodology, this study harnessed statistical analyses to visually elucidate data through graphs, delving into variables such as poverty levels, unemployment rates, financial ratios, and other pertinent factors. The fundamental objective of quantitative research is to conceptualize and apply mathematical models, concepts, and hypotheses related to the observed phenomena. Correlations were tailored to the requisite explanatory depth to meticulously scrutinize the interrelationships among variables.

Perceived organizational support was measured using eight questions from Rhoades and Eisenberger (2002). An example is “The hospital management is very concerned about my welfare.” Organizational justice was measured using nine question items from Hosmer and Kiewitz (2005), such as “Job decisions made by leaders are perceived as fair by employees.” Employee engagement was measured using a scale developed by Schaufeli et al. (2006). An example is “I am willing to work beyond what is normally expected to help the company.” Finally, organizational citizenship behavior was measured using 10 items adapted from Jufrizen et al. (2024). An example is “I am willing to help my busy colleagues.”

The data collection methodology used a cross-sectional design across diverse hospitals in Medan City, Indonesia (Table 1).

Table 1. List of type B public hospitals in Medan, Indonesia

Number	Hospital
1	Imelda Worker Indonesia Hospital
2	St. Elisabeth Hospital
3	Herna Hospital
4	Columbia Medan Hospital
5	Royal Prima Hospital
6	Murni Teguh Hospital
7	Siloam Dirga Surya Hospital
8	Bina Kasih Hospital,
9	Martha Friska Hospital
10	Permata Bunda Hospital
11	Mitra Sejati Hospital

From June 2023 to December 2023, the study gathered 215 responses from nurses employed in public hospitals in Medan, North Sumatra, Indonesia.

Thus, 175 surveys were aligned with the study’s criteria, with participants boasting substantial hospital experience spanning five to ten years. Participant age distribution ranged from 25 to 40, averaging 33 years, encompassing 35 male and 140 female nurses. The data collection instrument employed a four-item Likert scale questionnaire.

The study implemented the SEM approach for data analysis, explicitly utilizing the partial least squares (PLS-SEM) methodology. This involved a meticulous adherence to the recommended two-stage methodology: the inner model (structural model) and the outer model (measurement model) (Chin, 1998).

3. RESULTS

The comprehensive evaluation of the external model is a pivotal phase, centering on the precision and coherence of the employed measurement instrument. This intricate validation process is paramount, involving a meticulous examination of the instrument’s accuracy in measuring the intended variables. This scrutiny gains particular significance when utilizing advanced analytical tools, such as the SmartPLS software, for robust data analysis. Within this evaluative framework, the focus is on assessing convergent validity, discriminant validity, and composite reliability to guarantee the strength and integrity of the model. In the context of models reliant on reflective indicators, the loading factor of these indicators emerges as a critical metric for evaluating convergent validity. A stringent criterion is set in confirmatory research, mandating a loading factor of no less than 0.70 for each indicator. In investigative studies, a margin from 0.60 to 0.70 is deemed satisfactory, acknowledging the inherent adaptability of experimental inquiries.

Hair et al. (2014) established a significant benchmark in this validation process: average variance extracted (AVE) should not exceed 0.50. This criterion underscores the necessity for the instrument to capture the anticipated variability within the specified variables effectively. Furthermore, the scrutiny extends to the weight coefficients of factors, with values surpassing 0.50 as a critical confirmation of the measurement model’s sufficient validity. This robust validation process ensures the reliability and accuracy of the model, bolstered by

analytical findings that provide a solid foundation for subsequent data interpretation and research conclusions.

Table 2. Construct reliability and validity

Variable	Composite Reliability	Cronbach's Alpha	Average Variance Extracted (AVE)
EE	0.933	0.918	0.635
OCB	0.914	0.895	0.520
OJ	0.922	0.906	0.570
POS	0.943	0.930	0.677

Note: EE = employee engagement; OCB = organizational citizenship behavior; OJ = organizational justice; POS = perceived organizational support.

Further, it is necessary to check both Cronbach's alpha and composite reliability metrics. Composite reliability and Cronbach's alpha must exceed 0.70, with 0.60 deemed acceptable and values surpassing 0.80 indicative of a notably elevated level of reliability (Hair et al., 2014). The calculated Cronbach's alpha for the four latent variables ranges from 0.895 to 0.930, while the corresponding composite reliability values exhibit variability within the range of 0.914 to 0.943. This dataset provides evidence of the substantial composite dependability inherent in the measurement model.

Discriminant validity, a pivotal facet of the assessment, entails a meticulous examination of the degree of association between measurement and its intended concept, with the explicit goal of minimizing potential confusion with other concepts. The results unveil a robust correlation between each latent variable and its respective indicators, surpassing the correlations observed with other latent variables. This result verifies the measurement model's distinctiveness, confirming its proficiency in effectively distinguishing between distinct concepts and thereby reinforcing the credibility of the research findings.

Table 3. Discriminant validity

Indicator	EE	OCB	OJ	POS
POS1	0.424	0.467	0.258	0.675
POS2	0.552	0.603	0.345	0.880
POS3	0.553	0.679	0.378	0.881
POS4	0.514	0.603	0.321	0.877
POS5	0.513	0.550	0.241	0.846
POS6	0.494	0.543	0.318	0.857
POS7	0.452	0.516	0.297	0.823
POS8	0.461	0.528	0.310	0.719
OJ.1	0.300	0.315	0.787	0.297
OJ.2	0.315	0.360	0.807	0.256

Indicator	EE	OCB	OJ	POS
OJ.3	0.274	0.275	0.781	0.229
OJ.4	0.299	0.337	0.772	0.239
OJ.5	0.285	0.311	0.741	0.213
OJ.6	0.196	0.238	0.751	0.199
OJ.7	0.328	0.359	0.797	0.296
OJ.8	0.263	0.264	0.795	0.199
OJ.9	0.446	0.518	0.521	0.414
OCB1	0.546	0.549	0.270	0.287
OCB10	0.553	0.679	0.378	0.881
OCB2	0.663	0.775	0.325	0.502
OCB3	0.749	0.854	0.375	0.574
OCB4	0.460	0.649	0.467	0.441
OCB5	0.737	0.773	0.392	0.483
OCB6	0.442	0.642	0.485	0.444
OCB7	0.747	0.737	0.320	0.425
OCB8	0.761	0.764	0.377	0.476
OCB9	0.761	0.741	0.314	0.412
EE.1	0.782	0.745	0.357	0.511
EE.2	0.790	0.733	0.351	0.473
EE.3	0.786	0.716	0.307	0.519
EE4	0.806	0.698	0.366	0.461
EE5	0.790	0.745	0.334	0.442
EE6	0.797	0.663	0.289	0.406
EE7	0.839	0.714	0.350	0.528
EE8	0.783	0.755	0.394	0.504

Note: EE = employee engagement; OCB = organizational citizenship behavior; OJ = organizational justice; POS = perceived organizational support.

Table 3 elucidates that the variables demonstrate a more distinct correlation with their corresponding counterparts than their correlation with other variables. This is evident in the discriminant validity value or loading factor. A similar deduction can be made from the correlations linked with each variable, substantiating the accuracy of the indicator placement.

Upon confirming that the cross-loading value aligns with the distinctiveness criteria, the heterotrait-monotrait ratio is computed. The HTMT value functions as an additional criterion in the assessment of measurement. Juliandi (2018) posited that a construct exhibits high discriminant validity when the HTMT < 0.90.

Table 4. Hererotrait-monotrait ratio (HTMT)

Variable	EE	OCB	OJ
EE			
OCB	0.885		
OJ	0.435	0.511	
POS	0.652	0.749	0.375

Note: EE = employee engagement; OCB = organizational citizenship behavior; OJ = organizational justice; POS = perceived organizational support.

Inferences derived from Table 4 provide compelling evidence that each construct within the study attains discriminant validity, as indicated by their respective heterotrait-monotrait ratio (HTMT) values falling consistently below the threshold of 0.90. A discriminant validity value below 0.90 is deemed satisfactory, aligning with the established HTMT criterion (Henseler et al., 2015).

The careful examination of distinctiveness is performed through the rigorous Fornell-Larcker criterion. This approach systematically contrasts AVEs with its correlation with another construct within the extensive research model. Employing the Fornell-Larcker criterion reveals a significant trend: AVEs consistently surpass the correlation values between the constructs. This result unequivocally supports the reliability and strength of the distinctiveness, thereby enhancing the overall research credibility.

Table 5. Fornell-Larcker criterion

Variable	EE	OCB	OJ	POS
EE	0.797			
OCB	0.907	0.721		
OJ	0.433	0.505	0.755	
POS	0.605	0.687	0.377	0.823

Note: EE = employee engagement; OCB = organizational citizenship behavior; OJ = organizational justice; POS = perceived organizational support.

Table 5 highlights, in line with the Fornell-Larcker criterion, that the discriminant validity value exhibits a more robust association with each variable than others, complete with corresponding indications. This underscores the precision in placing indicators on each variable.

Hair et al. (2014) delineate the pivotal steps in evaluating a structural model: calculating R -values, scrutinizing path coefficients, identifying pertinent connections, and estimating the model's predictive prowess through Q^2 . The R^2 value, serving as an indicator of the assessment of endogenous constructor variance (R^2), spans from 0 to 1, with a higher R^2 value approaching 1 signifying a more favorable outcome.

For data processing and the determination of the R -square value, the SmartPLS 4.0 program was employed, with results presented in Table 6.

Table 6. R -square

Construct	R -square	R -square adjusted
Employee engagement	0.415	0.408

OCB is strongly associated with perceived organizational support, employee engagement, and organizational justice, as highlighted by the R -square value of 0.862 in Table 6. This statistic implies that 86.2% of the variability in OCB can be explained by variations in perceived organizational support, employee engagement, and organizational justice, underscoring the model's statistical significance. Furthermore, the interplay among perceived organizational support, organizational justice, and employee engagement explains 41.5% of the variability in employee engagement, leaving 58.5% influenced by other contributing factors.

To assess predictive relevance (Q^2), the blindfolding procedure, synthesis, and cross-validation function were utilized. Structural models with Q^2 values above zero are considered predictive, with classifications of 0.35 as high, 0.15 as moderate, and 0.02 as low. The calculated Q^2 score of 0.75 signifies a predictive value of 75%, categorizing it as high/significant. Model quality was further evaluated by computing Q^2 through PLS's blindfolding procedure, generating estimated outcomes based on variable scores. Additionally, cross-validated redundancy scores were obtained, offering insights into the internal constructs and affirming excellent results.

A Q^2 value above zero indicates the model's capability to predict endogenous variables, whereas a negative value suggests a lack of predictability (Hair et al., 2021). The study also delves into the model's parameter estimates and the default values inherent in PLS, contributing to a comprehensive understanding of the analytical framework.

Table 7. Predictive relevance (Q^2)

Variable	SSO	SSE	$Q^2 (=1-SSE/SSO)$
EE	1400.000	1045.157	0.253
OCB	1750.000	999.453	0.429
OJ	1575.000	1575.000	
POS	1400.000	1400.000	

Note: EE = employee engagement; OCB = organizational citizenship behavior; OJ = organizational justice; POS = perceived organizational support.

Table 7 shows the model’s predictive solid capabilities, revealing significant predictive relevance metrics of 0.253 for employee engagement and 0.429 for organizational citizenship behavior. These values confirm the model’s effectiveness in forecasting and elucidating variations in these crucial components. Notably, both elements exhibit Q^2 values that significantly surpass zero, underscoring the model’s pronounced predictive efficacy. This outcome emphasizes the model’s valuable contribution to understanding employee engagement and OCB.

The thorough validation of hypotheses involves a meticulous examination using *T*-statistics and probability values. In this context, significance is established by a probability value below 0.05, adhering to a predefined significance level of 5%. The strength of each hypothesis hinges on the *T*-statistic surpassing the threshold set by the *t*-table, identified by a *t*-value of 1.96 for a 5% significance level. The stringent adherence to these statistical criteria ensures that hypothesis acceptance or rejection is based on a robust and rigorous evaluation process.

Moreover, the intricate details of the find-it-effect hypothesis test are elucidated in the route coefficient (Table 8). This detailed analysis of the route coefficients ensures a comprehensive understanding of the relationships and effects posited in the study’s hypotheses, adding depth and clarity to the overall interpretation of the findings.

Table 8 is a comprehensive repository encapsulating the rigorous Smart PLS analysis outcomes. The exhaustive investigation unveiled compelling findings, elucidating the profound impact of perceived organizational support ($t = 6.488, p = 0.000$) and organizational justice ($t = 3.633, p = 0.000$) on employee engagement, thus robustly affirming the veracity of H1 and H2. Furthermore, the study discerned the noteworthy influence of perceived organizational support ($t = 4.380, p = 0.000$), organizational justice ($t = 2.881, p = 0.004$), and employee engagement ($t = 16.558, p = 0.000$) on organizational citizenship behavior, thereby providing robust validation for H3, H4, and H5.

The subsequent analysis phase involves a meticulous examination to elucidate the nuanced realm of indirect effects exerted by the predictor variable on the outcome variable. This intricate exploration aims to unravel the complex pathways through which the predictor variables intricately contribute to the observed variations in the outcome variable, providing a more nuanced understanding of the underlying dynamics within the conceptual framework.

To confirm H6, a thorough examination of the mediation effect was conducted, as outlined in Table 9. This was pivotal in clarifying the intricate connection between OCB and perceived organizational support, utilizing employee engagement as the mediating variable. The analysis unveiled a substantial and positive correlation between em-

Table 8. Path coefficients

Hypothesis	Path	T-Statistics	P-Values	Decision
H1	POS → EE	6.488	0.000	Accepted
H2	OJ → EE	3.633	0.000	Accepted
H3	POS → OCB	4.380	0.000	Accepted
H4	OJ → OCB	2.881	0.004	Accepted
H5	EE → OCB	16.588	0.000	Accepted

Note: EE = employee engagement; OCB = organizational citizenship behavior; OJ = organizational justice; POS = perceived organizational support.

Table 9. Specific indirect effects

Hypothesis	Path	T-Statistics	P-Values	Decision
H6	POS → EE → OCB	6.655	0.000	Accepted
H7	OJ → EE → OCB	3.394	0.001	Accepted

Note: EE = employee engagement; OCB = organizational citizenship behavior; OJ = organizational justice; POS = perceived organizational support.

ployee engagement and perceived organizational support. Consequently, this relationship led to a noteworthy enhancement in organizational citizenship behavior, with statistical significance ($t = 6.655, p = 0.000$).

Furthermore, the study validated H7. The analysis demonstrated a significant correlation between organizational citizenship behavior and organizational justice, facilitated through employee engagement ($t = 3.394, p = 0.001$). This comprehensive exploration reinforces the proposed connections and provides a nuanced understanding of the underlying dynamics within the organizational context.

4. DISCUSSION

The initial scrutiny of hypotheses underscores a noteworthy and positive impact of perceived organizational support on employee engagement ($t = 6.488, p = 0.000$). Perceived organizational support signifies the acknowledgment of employee contributions and the prioritization of their well-being. This observation aligns with Rhoades and Eisenberger (2002): heightened perceived organizational support correlates with increased employee interest in their roles and organizational involvement, in harmony with the norm of reciprocity posited in SET. The theory asserts that individuals with elevated perceived organizational support show higher motivation to achieve organizational objectives. Building upon prior investigations by Bonaiuto et al. (2022), Imran et al. (2020), Canboy et al. (2023), and Jankelová et al. (2021), the study underscores the positive associations between employee engagement and perceived organizational support.

Further, there is a substantial and positive correlation between employee engagement and organizational justice ($t = 3.633, p = 0.000$). Nurturing nurse engagement involves prioritizing equitable treatment by hospital administrators and supervisors, encompassing a fair distribution of outcomes, impartial decision-making, and transparent justifications. This approach cultivates positive energy, mental resilience, job satisfaction, and a sense of achievement among nurses, fostering a focused and diligent work attitude and a perceived accel-

eration of time passage. These results align with Saks (2006), Mubashar et al. (2022), Aggarwal et al. (2022), and Gomes and Marques (2022), accentuating the constructive impact of organizational justice on employee engagement. A heightened perception of justice stimulates employees to reciprocate with commitment and dedication, characterized by enthusiasm and diligence.

Exploring the third hypothesis unveils the significant and positive influence of perceived organizational support on OCB ($t = 4.380, p = 0.003$). The study posits that nurses' perceptions of perceived organizational support shape their OCB, aligning with organizational employees' theory. This theory asserts that addressing socio-emotional needs fosters favorable evaluations of leaders and the organization. Positive behaviors, including proactive problem-solving, willingness to assist colleagues, and consistent attendance, are nurtured. Meeting or surpassing legal requirements culminates in heightened OCB. These findings are in concordance with empirical investigations by Kao et al. (2023), Jehanzeb (2020), Chiang and Hsieh (2012), and Firmansyah et al. (2022).

The fourth hypothesis posits organizational justice's meaningful and positive influence on OCB ($t = 2.881, p = 0$). Thus, employees who perceive fairness within the workplace are more engaged in assigned tasks and encouraged to go above and beyond by extending assistance to colleagues and surpassing performance expectations. Individuals with robust analytical skills are likelier to express favorable opinions about the organization. Organizational justice, notably, is pivotal in influencing employee satisfaction and commitment. Those who perceive fairness in the workplace exhibit higher job satisfaction and commitment, while those perceiving organizational unfairness tend to experience lower levels of both. A pronounced commitment to organizational justice catalyzes the promotion and fostering of OCB. This study aligns with Rahman and Karim (2022), Jafari and Bidarian (2012), Tesfaye et al. (2022), and Chahar (2023).

The fifth hypothesis suggests a significant relationship between OCB and employee engagement ($t = 16.588, p = 0.000$). The findings reveal a compelling connection between nurses' engagement in

the hospital setting and their inclination to undertake additional responsibilities synonymous with OCB. Employee engagement, characterized by emotional attachment, loyalty, and a voluntary inclination to contribute, positively correlates with OCB. Highly engaged individuals are predisposed to provide constructive feedback to the organization by assuming additional responsibilities. Nurses exhibiting OCB willingly take on supplementary tasks, contribute innovative ideas, and readily extend assistance to colleagues and superiors. The study's findings resonate with Jufrizen et al. (2023), Rahman and Karim (2022), Sridadi et al. (2022), Rekha and Sasmita (2019), and Sugianingrat et al. (2019).

Next, the findings show a substantial correlation between OCB and perceived organizational support, indicating that this influence is effectively mediated by employee engagement ($t = 6.655, p = 0.000$). This implies that employee engagement can mitigate the effect of perceived organizational support on OCB. When the organization is perceived as supportive, employees better participate in their roles and contribute positively to the overall organizational dynamics, thereby nurturing a culture of OCB. These outcomes align with Alshaabani et al. (2021), Priskila et al. (2021), and Srimulyani and Hermanto (2022). These studies offer additional support, emphasizing the recurring pattern that fostering a supportive organizational environment is paramount in augmenting employee engagement and, consequently, promoting OCB.

This underscores the multifaceted significance of cultivating a workplace culture prioritizing perceived organizational support to enhance employee engagement and OCB.

The seventh hypothesis examination demonstrated a relationship between OCB and organizational justice, with this influence being mediated by employee involvement ($t = 3.394, p = 0.001$). This indicates that employee engagement can attenuate the impact of organizational fairness on OCB. These findings align with Yanthi and Rahyuda (2019), Rahman and Karim (2022), and Sadiyah et al. (2023), all highlighting that employee engagement serves as a mediator in the relationship between organizational justice and OCB. These findings affirm that organizational justice directly influences and shapes OCB. When employers treat their employees fairly and respectfully, positive emotions are invoked, motivating employees to go beyond their primary responsibilities and fostering a workplace culture that encourages proactive and positive contributions.

This study suggests that by optimizing organizational citizenship behavior, management needs to revise or make new policies, especially on the provision of overtime pay for nurses who get overtime schedules and consider involving nurses in policymaking. It is necessary to carry out activities outside of working hours that are appreciative and motivate nurses to be more enthusiastic at work, such as celebrating Service Week and giving awards to nurses verbally or in writing.

CONCLUSION

The purpose of this paper was to assess the complex interplay between organizational citizenship behavior, perceived organizational support, employee engagement, and organizational justice at public hospitals in Medan, North Sumatra, Indonesia. It was found that that organizational justice and perceived organizational support positively and significantly affect employee engagement and organizational citizenship behavior. Furthermore, employee engagement has a positive and significant influence on organizational citizenship behavior. The findings also showed that employee engagement mediated the effect of perceived organizational support and organizational justice on organizational citizenship behavior. Therefore, organizational justice and perceived organizational support emerged as catalysts to drive employee engagement and organizational citizenship behavior.

Future studies can explore employee engagement into two facets, namely work engagement and organizational engagement, or into three dimensions: cognitive, behavioral, and emotional engagement. Similarly, organizational justice, a critical aspect of workplace dynamics, can be assessed through infor-

mation, distributive, interpersonal, and procedural justice. The study posits the potential expansion of the characteristics associated with various types of employee engagement, inviting further investigation into their nuanced impacts. This may involve exploring their influence on individual outcomes, such as developing innovative work habits, quick learning, and adaptive capabilities.

While providing valuable insights, this paper has certain limitations. The samples were confined to type B public hospitals in Medan, Indonesia; thus, it is difficult to generalize research findings. Next, the sample size may not optimize the robustness of the outcomes. Notably, the study does not delve into certain variables, such as personality traits and leadership styles, which are believed to impact organizational citizenship behavior and warrant further examination. Therefore, future studies should encompass a broader spectrum of variables, expand the scope of inquiry, and augment the sample size to enhance the robustness and generalizability of the research outcomes.

AUTHOR CONTRIBUTIONS

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