

Employee Engagement Mediates Self-Efficacy and Perceived Organizational Support on Nurses' Organizational Citizenship Behavior

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ABSTRACT

Human resources are vital to organizational success, especially in healthcare, where psychological and organizational factors influence service quality. This study examines how self-efficacy and perceived organizational support affect organizational citizenship behavior through employee engagement among nurses at health centers. The study aims to determine whether engagement mediates the relationship between self-efficacy, perceived organizational support, and organizational citizenship behavior. Using a quantitative causal associative design, data were collected from 89 nurses and analyzed through validity and reliability tests, classical assumption tests, and path analysis, with t-tests and Sobel tests to assess direct and indirect effects. Results show that self-efficacy and perceived organizational support significantly enhance employee engagement and organizational citizenship behavior, while engagement mediates both relationships. The findings confirm the role of engagement as a psychological bridge connecting self-efficacy and organizational support to positive extra-role behavior. Health institutions should improve nurses' self-efficacy through training, mentoring, and recognition programs while maintaining strong organizational support to foster engagement and encourage cooperative, high-quality service behavior.

Keywords: *Employee Engagement, Health Centers, Nurses, Organizational Citizenship Behavior, Perceived Organizational Support, Self-Efficacy.*

ABSTRAK

Sumber daya manusia sangat penting bagi keberhasilan organisasi, terutama di bidang kesehatan, di mana faktor psikologis dan organisasi memengaruhi kualitas layanan. Studi ini meneliti bagaimana efikasi diri dan dukungan organisasi yang dirasakan memengaruhi perilaku kewarganegaraan organisasi melalui keterlibatan karyawan di kalangan perawat di pusat kesehatan. Studi ini bertujuan untuk menentukan apakah keterlibatan memediasi hubungan antara efikasi diri, dukungan organisasi yang dirasakan, dan perilaku kewarganegaraan organisasi. Dengan menggunakan desain asosiatif kausal kuantitatif, data dikumpulkan dari 89 perawat dan dianalisis melalui uji validitas dan reliabilitas, uji asumsi klasik, dan analisis jalur, dengan uji t dan uji Sobel untuk menilai efek langsung dan tidak langsung. Hasil menunjukkan bahwa efikasi

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diri dan dukungan organisasi yang dirasakan secara signifikan meningkatkan keterlibatan karyawan dan perilaku kewarganegaraan organisasi, sementara keterlibatan memediasi kedua hubungan tersebut. Temuan ini menegaskan peran keterlibatan sebagai jembatan psikologis yang menghubungkan efikasi diri dan dukungan organisasi dengan perilaku ekstra-peran yang positif. Lembaga kesehatan harus meningkatkan efikasi diri perawat melalui pelatihan, pendampingan, dan program pengakuan sambil mempertahankan dukungan organisasi yang kuat untuk mendorong keterlibatan dan mendorong perilaku layanan berkualitas tinggi dan kooperatif.

Kata kunci: Keterikatan Karyawan, Pusat Kesehatan, Perawat, Perilaku Kewargaan Organisasi, Persepsi Dukungan Organisasi, Efikasi Diri.

INTRODUCTION

Human resources cannot be denied as one of the most important assets for companies or organizations. The role of human resources is not only seen from the quantity of work produced but also from the quality of the output and the timeliness in working (Boon et al., 2025). Therefore, employee performance needs to be the focus of the company, employees need to be nurtured and guided, and how to ensure that employees feel their abilities are accommodated (Gazi et al., 2024). Humans are not machines but have souls, will, and aspirations. This is what determines the attitude and stance of the employee. Performance can be determined by several factors, such as individual factors, leadership factors, compensation, discipline, and motivation (Arif et al., 2019).

Self-efficacy represents an individual's belief in their ability to complete tasks and manage challenges effectively. This internal confidence fosters motivation, resilience, and persistence in achieving work goals. In organizational contexts, Perceived Organizational Support (POS) refers to employees' perceptions of how much their organization values their contributions and cares for their well-being (Imran et al., 2020; Jeong & Kim, 2022; Sary & Aprilia, 2025). High levels of POS encourage employees to reciprocate through commitment, trust, and voluntary behaviors that exceed formal job expectations. Rahman and Karim (2022), as well as Armansyah et al. (2025), emphasize that Organizational Citizenship Behavior (OCB) is shaped by factors such as self-efficacy, satisfaction, organizational climate, and support, all of which contribute to the development of positive and cooperative work attitudes.

Employee engagement serves as a vital psychological link connecting self-efficacy and organizational support to OCB. It reflects employees' emotional and cognitive attachment to their work, characterized by enthusiasm, discipline, and a desire to give their best for the organization (Jena et al., 2018; Ly, 2024). When individuals feel confident in their abilities and perceive strong organizational support, they are more likely to experience deep engagement in their roles. This engagement, in turn, enhances organizational performance by fostering proactive, loyal, and responsible behaviors that strengthen overall workplace effectiveness.

This research needs to be conducted because there are still research gaps, such as the study conducted by Lestari and Saputra (2022), which aims to analyze the influence of self-efficacy and POS on employee OCB at PT Surveyor Indonesia. This study found that POS has a significant positive influence, and self-efficacy has a significant influence on OCB. Meanwhile, the study conducted by Na-Nan et al. (2021), which aims to analyze the influence of self-efficacy and POS on OCB, found that self-efficacy has an insignificant influence on OCB, while POS has a significant influence on OCB.

Professions or jobs related to community service are required to have OCB, especially in the health sector, which is closely related to a high human spirit (Grego, 2019). Such is the case with the community health centers in Aikmel District, East Lombok. The community health centers in Aikmel District, which include Aikmel Health Center, North Aikmel Health Center, and Kalijaga Health Center, have 148 nurses working in various units within the health centers, such as registration, pediatric clinic, dental clinic, eye clinic, general clinic, pharmacy, laboratory, and inpatient care.

The community health centers in Aikmel and Lenek sub-districts, which serve all segments of society, have a considerable number of patients. With the large amount of work that employees, especially nurses, have to handle, some nurses still complain about difficult-to-manage patients, and there are still nurses who are reluctant to help each other in completing tasks. The existence of this phenomenon indicates that the nurses' OCB is not yet optimal, which may be caused by self-efficacy, POS, and mediated by employee engagement. This study aims to examine the employee engagement in mediating the influence of self-efficacy and POS on OCB and its impact on the performance of nurses at the health centers in Aikmel and Lenek sub-districts.

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

Self-efficacy, Perceived Organizational Support, and Employee Engagement

Employee engagement is a critical factor influencing organizational effectiveness, innovation, and competitiveness (Bedarkar & Pandita, 2014; Biriowu & Ofurum, 2020). It reflects employees' commitment, morale, and participation, which drive their willingness to stay and contribute to the organization. Engagement arises from meaningful social exchanges at work, where employees perform better when they find purpose in their tasks, align with company culture, and perceive fair organizational policies (Riyanto et al., 2021; Sun et al., 2024). Engagement is also linked to an employee's identification with their job role. Srivastava and Madan (2016) describe it as a condition characterized by persistence, deep involvement, and absorption in work activities. This psychological connection fosters motivation and enhances performance, indicating that engagement is not merely behavioral but also emotional and cognitive in nature.

Among psychological determinants, self-efficacy plays a vital role in shaping engagement. Employees with high self-efficacy demonstrate stronger confidence, motivation, and perseverance, leading to active participation and greater effort in achieving organizational goals (Setyawati et al., 2025). Organizations can enhance self-efficacy by providing continuous training, promoting resilience, and ensuring that employees perceive their contributions as meaningful. Empirical evidence from Abdullah and Wider (2022) and Wang et al. (2023) confirms that self-efficacy significantly and positively affects employee engagement.

Another determinant, Perceived Organizational Support (POS), refers to employees' perceptions of how much the organization values their contributions and cares about their well-being. High levels of POS foster stronger motivation, commitment, and positive work attitudes (Theodorus et al., 2021; Curiñaupa et al., 2025). When employees feel supported and appreciated, they are more likely to reciprocate through increased loyalty and engagement, thereby enhancing overall organizational performance.

H1: Self-efficacy has a significant effect on employee engagement.

H2: Perceived organizational support has a significant effect on employee engagement.

Self-efficacy, POS, and Organizational Citizenship Behavior

Organizational Citizenship Behavior (OCB) refers to voluntary actions performed by employees that are not directly tied to formal reward systems but significantly contribute to organizational effectiveness and smooth operations. Such behaviors stem from employees' self-awareness and intrinsic motivation to assist colleagues and support organizational goals beyond formal job duties (Khajoei et al., 2024). According to Cahya et al. (2021), OCB plays a critical role in enhancing individual productivity, strengthening teamwork, and improving overall organizational performance. As Hosniah (2021) states, there is a direct effect of self-efficacy on the OCB of teachers in private junior high schools in Pamekasan, Madura. This indicates that employees who are confident in their abilities are more likely to engage in voluntary, constructive behaviors that exceed their formal job responsibilities, such as helping colleagues, taking initiative, and demonstrating loyalty to the organization. High levels of self-efficacy provide employees

with the psychological resources needed to take proactive actions, thereby enhancing teamwork, productivity, and overall organizational performance.

One determinant influencing OCB is self-efficacy, which represents an individual's belief in their ability to control situations and achieve meaningful outcomes. Harsul et al. (2020) assert that employees with high self-efficacy are more likely to display voluntary and constructive behaviors, such as helping colleagues and maintaining loyalty to the organization. High levels of self-efficacy foster resilience, initiative, and a willingness to contribute beyond prescribed responsibilities. Another important factor is Perceived Organizational Support (POS). Alshaabani et al. (2021) found that POS has a significant positive effect on OCB, as employees who feel valued and supported by their organization tend to reciprocate through positive, extra-role behaviors. According to Sondakh et al. (2021), perceived organizational support has a positive and significant influence on OCB among hotel employees. This indicates that employees who feel valued and supported are more likely to engage in discretionary behaviors, such as helping coworkers and taking on extra tasks, making POS a key driver of overall organizational effectiveness.

H3: Self-efficacy has a significant effect on organizational citizenship behavior.

H4: Perceived organizational support has a significant effect on organizational citizenship behavior.

Employee Engagement and Organizational Citizenship Behavior

Employee engagement plays a crucial role as both an emotional and cognitive motivator in fostering Organizational Citizenship Behavior (OCB). When employees are deeply engaged, they experience a strong sense of emotional attachment to their work, coupled with enthusiasm, dedication, and commitment, which naturally leads them to contribute proactively to their organization beyond formal job responsibilities (Al-Dossary, 2022). Engagement, therefore, functions as a psychological mechanism that encourages employees to invest discretionary effort in supporting organizational objectives, demonstrating behaviors that are not strictly required but highly beneficial for overall organizational functioning.

Herrysono and Fransiska (2022) further highlight that Employee engagement positively influences OCB because engaged employees are motivated to go beyond their formal duties to support organizational goals, suggesting that engagement inspires employees to actively participate in behaviors that enhance collective performance. In addition, Sudirman and Arninda (2025) emphasize that employees who are fully engaged in their roles are more likely to participate in discretionary behaviors that improve teamwork and overall organizational effectiveness, reinforcing the idea that engagement promotes voluntary actions aimed at strengthening cooperation and efficiency within the organization. Taken together, these findings illustrate that the psychological and emotional involvement of employees in their work serves as a significant driver for OCB, enabling them to voluntarily undertake extra-role activities that ultimately contribute to higher levels of citizenship behavior and greater organizational success.

H5: Employee engagement has a significant effect on organizational citizenship behavior.

Employee Engagement as Mediating Variable

Employee engagement functions as a crucial mediating mechanism linking individual psychological factors and organizational outcomes. It reflects a state of emotional, cognitive, and behavioral involvement that motivates employees to go beyond formal job expectations (Bedarkar & Pandita, 2014; Srivastava & Madan, 2016). Engagement mediates the relationship between employees' internal beliefs, such as self-efficacy and positive work behaviors, including Organizational Citizenship Behavior (OCB). Employees with high self-efficacy possess confidence in their abilities, remain persistent in challenging situations, and demonstrate enthusiasm in achieving organizational goals (Setyawati et al., 2025). This belief fosters deeper engagement, which in turn stimulates

voluntary and constructive behaviors that benefit the organization (Abdullah & Wider, 2022; Wang et al., 2023).

Similarly, Perceived Organizational Support (POS) enhances employee engagement by fulfilling socio-emotional needs and strengthening employees' sense of belonging. When employees perceive that their organization values their contributions and cares about their well-being, they reciprocate with stronger commitment and engagement (Theodorus et al., 2021; Curiñaupa et al., 2025). High levels of POS lead to increased motivation, positive attitudes, and emotional attachment at work (Kao et al., 2023). Therefore, engagement serves as a psychological bridge through which self-efficacy and organizational support translate into higher organizational citizenship behavior, commitment, and performance, highlighting its strategic role as a mediating variable in sustaining organizational effectiveness and competitiveness.

H6: Employee engagement mediates the relationship between self-efficacy and organizational citizenship behavior.

H7: Employee engagement mediates the relationship between perceived organizational support and organizational citizenship behavior.

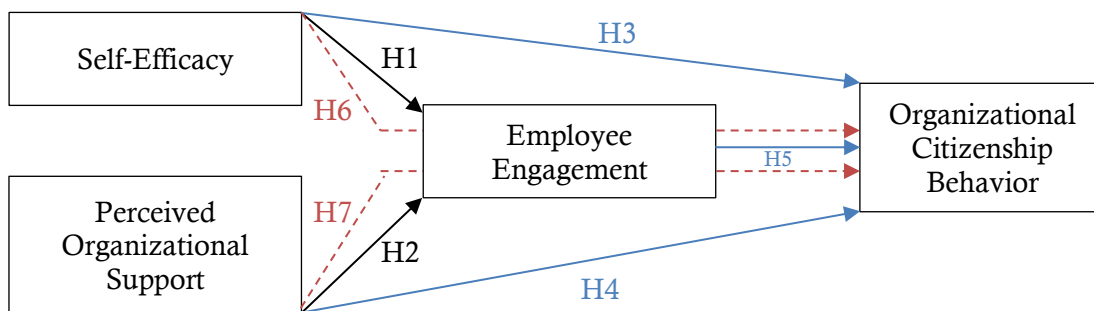


Figure 1. Research Framework

Based on Figure 1, the research framework posits that self-efficacy and perceived organizational support are key antecedents influencing both employee engagement and organizational citizenship behavior. Employees with high self-efficacy and strong perceived support tend to be more engaged, which in turn fosters greater OCB. Employee engagement also functions as a mediating variable, explaining how self-efficacy and POS indirectly enhance employees' voluntary behaviors that contribute to organizational effectiveness.

RESEARCH METHODS

This research employed a quantitative approach using path analysis to examine the direct and indirect effects of self-efficacy and Perceived Organizational Support (POS) on Organizational Citizenship Behavior (OCB), with employee engagement acting as a mediating variable. The study aimed to provide empirical evidence on how psychological and organizational factors influence nurses' willingness to perform beyond their formal job duties in community health settings.

The population of this study consisted of all nurses working at community health centers in Aikmel and Lenek Districts, East Lombok Regency, including Aikmel Health Center, North Aikmel Health Center, and Kalijaga Health Center. From the total of 148 nurses, 89 respondents were selected as the research sample. The sampling was conducted using proportionate stratified random sampling to ensure that each health center and unit was adequately represented according to its proportion of nurses.

Data were collected using a structured questionnaire designed on a five-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). To ensure the measurement quality, the research instrument was first tested for validity using the

Pearson product–moment correlation, while reliability was assessed through Cronbach’s Alpha coefficient with a minimum acceptable threshold of 0.6. These preliminary tests confirmed that the items were both accurate and consistent in measuring each construct. Data analysis was conducted using SPSS software.

Prior to hypothesis testing, several classical assumption tests were performed to guarantee the robustness and accuracy of the regression model. These included the Kolmogorov–Smirnov test for normality, tolerance and Variance Inflation Factor (VIF) values for multicollinearity, and a heteroscedasticity test to confirm the uniform variance of residuals. Once the model met all required assumptions, hypothesis testing was carried out using the t-test to analyze partial effects and the F-test to assess the simultaneous influence of the independent variables. Additionally, the Sobel test was employed to identify and verify the mediating role of employee engagement within the proposed framework. To deepen the analysis, path analysis was then utilized to examine both direct and indirect causal relationships among variables, providing a comprehensive understanding of how self-efficacy and Perceived Organizational Support (POS) shape Organizational Citizenship Behavior (OCB) through the mediating mechanism of employee engagement.

RESULTS

The characteristics of the respondents indicate that the majority of nurses are in the productive age group, specifically under 35 years old, with the largest group being in the 26–30 year age range (30%). In terms of education, the majority of respondents (74%) have completed a bachelor’s degree, reflecting a fairly good quality of human resources. Meanwhile, more than half of the respondents (52%) have less than five years of work experience, indicating that most nurses are still in the early stages of their careers. This implies the importance of organizational interventions to foster work engagement and encourage the development of OCB behavior from the early stages of their careers.

Table 1. Descriptive Analysis

Variable	Item	Average
Self-Efficacy	X1_1	4.10
	X1_2	4.10
	X1_3	4.12
	X1_4	4.04
	X1_5	4.00
Perceived Organizational Support	X2_1	4.18
	X2_2	4.13
	X2_3	4.08
	X2_4	4.13
	X2_5	4.16
	X2_6	4.04
	X2_7	4.11
	X2_8	4.08
Employee Engagement	Z_1	4.24
	Z_2	4.17
	Z_3	4.06
	Z_4	4.02
	Z_5	4.12
	Z_6	4.17
	Z_7	4.19
	Z_8	4.13
	Z_9	4.00
Organizational Citizenship Behavior	Y_1	4.24
	Y_2	4.17
	Y_3	4.06
	Y_4	4.01
	Y_5	4.12
	Y_6	4.17
	Y_7	4.19

The majority of nurses at the health centers in Aikmel District responded positively to all self-efficacy indicators, with a dominance of Strongly Agree (SA) and Agree (A) responses. Table 1 shows the descriptive analysis results for all research variables, indicating consistently high average scores across each measurement item. The Self-Efficacy variable demonstrates strong perceptions, with mean values ranging from 4.00 to 4.12, showing that employees generally feel confident in their abilities. Perceived organizational support also records high averages between 4.04 and 4.18, suggesting that employees feel appreciated and supported by their organization. Employee engagement presents some of the highest scores, ranging from 4.00 to 4.24, reflecting strong enthusiasm, dedication, and involvement in work activities. Likewise, Organizational Citizenship Behavior displays averages between 4.01 and 4.24, indicating that employees frequently engage in voluntary, cooperative, and helpful behaviors beyond their formal job responsibilities. These results highlight a positive psychological and behavioral environment in which employees exhibit strong self-belief, perceive meaningful organizational support, show high engagement, and demonstrate positive citizenship behaviors that contribute to organizational effectiveness.

Table 2. Validity and Reliability Tests

Variable	Item	Validity		Reliability	
		r-count	Description	Cronbach's Alpha	Description
Self-efficacy	X1_1	0.747	Valid	0.908	Reliable
	X1_2	0.767	Valid		
	X1_3	0.794	Valid		
	X1_4	0.744	Valid		
	X1_5	0.791	Valid		
Perceived Organizational Support	X2_1	0.810	Valid	0.944	Reliable
	X2_2	0.823	Valid		
	X2_3	0.792	Valid		
	X2_4	0.747	Valid		
	X2_5	0.807	Valid		
	X2_6	0.805	Valid		
	X2_7	0.790	Valid		
	X2_8	0.806	Valid		
Employee Engagement	Z_1	0.828	Valid	0.957	Reliable
	Z_2	0.843	Valid		
	Z_3	0.841	Valid		
	Z_4	0.773	Valid		
	Z_5	0.833	Valid		
	Z_6	0.839	Valid		
	Z_7	0.805	Valid		
	Z_8	0.814	Valid		
	Z_9	0.841	Valid		
Organizational Citizenship Behavior	Y_1	0.833	Valid	0.940	Reliable
	Y_2	0.780	Valid		
	Y_3	0.793	Valid		
	Y_4	0.827	Valid		
	Y_5	0.783	Valid		
	Y_6	0.823	Valid		
	Y_7	0.770	Valid		

Table 2 shows that all items in the variables Self-Efficacy, Perceived Organizational Support (POS), Employee Engagement (EM), and Organizational Citizenship Behavior (OCB) meet the validity criteria, indicated by r-count values that are all above the minimum limit. In addition, all four variables have high Cronbach's Alpha values, respectively 0.908 for Self-Efficacy, 0.944 for POS, 0.957 for EM, and 0.940 for OCB, so all instruments are declared reliable. These results confirm that the research instrument has a strong level of accuracy and consistency in measuring each construct.

Table 3. Normality Test

Test	Items	Unstandardized Residual 1	Unstandardized Residual 2	Unstandardized Residual 3
N		89	89	89
Normal Parameters a,b	Mean	0E-7	0E-7	0E-7
	Std. Deviation	1.89177642	1.57661056	1.74224909
	Absolute	0.049	0.079	0.071
Most Extreme Differences	Positive	0.048	0.079	0.071
	Negative	-0.049	-0.047	-0.046
Kolmogorov-Smirnov Z		0.467	0.742	0.671
Asymp. Sig. (2-tailed)		0.981	0.641	0.758

Table 3 shows that the significance values (Asymp. Sig.) are 0.981 for equation model 1 (unstandardized 1), 0.641 for equation model 2 (unstandardized 2), and 0.758 for equation model 2 (unstandardized 2). Since the Asymp. Sig. value is greater than 0.05, the regression residual values generated from these three equations are normally distributed in the population.

Table 4. Results of Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Self-efficacy	0.148	6.736
Perceived Organizational Support	0.148	6.736

Table 4 presents the results of the multicollinearity test conducted to evaluate whether the independent variables exhibit high intercorrelation. The tolerance values for both X1 and X2 are 0.148, while the corresponding VIF values are 6.736. Although the VIF values are above the common threshold of 5, they are still below the critical limit of 10, indicating that multicollinearity is present but not severe enough to violate regression assumptions. It concludes that the model can still be used for further analysis.

Table 5. Heteroscedasticity Test

Model	Independent Variable	t-Count	Sig.	Description
Self-Efficacy & POS → Employee Engagement	X1	-0.182	0.856	Non-heteroscedasticity
	X2	-0.653	0.515	
Self-Efficacy & POS → Organizational Citizenship Behavior	X1	1.758	0.082	Non-heteroscedasticity
	X2	-1.547	0.125	
Employee Engagement → Organizational Citizenship Behavior	Z	-0.174	0.862	Non-heteroscedasticity

Table 5 shows the results of the heteroskedasticity test, indicating that none of the three models exhibit heteroskedasticity problems. This conclusion is supported by the significance (Sig.) values for all independent variables across the models, which are greater than 0.05. Consequently, the regression estimates are considered reliable, and the influence of the two independent variables on the dependent variable can be interpreted without concern for heteroskedasticity effects.

Table 6 presents the results of the hypothesis testing, showing the path coefficients, t-values, and significance levels for each proposed relationship. The findings indicate that all hypotheses are supported, as every path demonstrates a positive coefficient and a significance value of 0.000, which is well below the 0.05 threshold. Specifically, Self-Efficacy positively influences employee engagement (H1), and Perceived Organizational Support (POS) also shows a positive effect on employee engagement (H2). Furthermore, Self-Efficacy positively affects Organizational Citizenship Behavior (OCB) (H3), and

POS has a positive and significant effect on OCB (H4). Lastly, employee engagement strongly and positively influences OCB (H5), with the highest path coefficient (0.945) and t-value (26.977). These results confirm that all hypothesized relationships are positive and statistically accepted based on the analysis.

Table 6. T-Test

Hypothesis	Influence	Coef. Path	T-statistic	Sig.	R ²	Std. Error	Adjusted R ²
H1	Self-Efficacy → Employee Engagement	0.356	4.856	0.000	0.931	0.263	0.930
H2	POS → Employee Engagement	0.627	8.556	0.000			
H3	Self-Efficacy → OCB	0.519	6.276	0.000	0.913	0.327	0.911
H4	POS → OCB	0.455	5.496	0.000			
H5	Employee Engagement → OCB	0.945	26.977	0.000	0.893	0.892	0.930

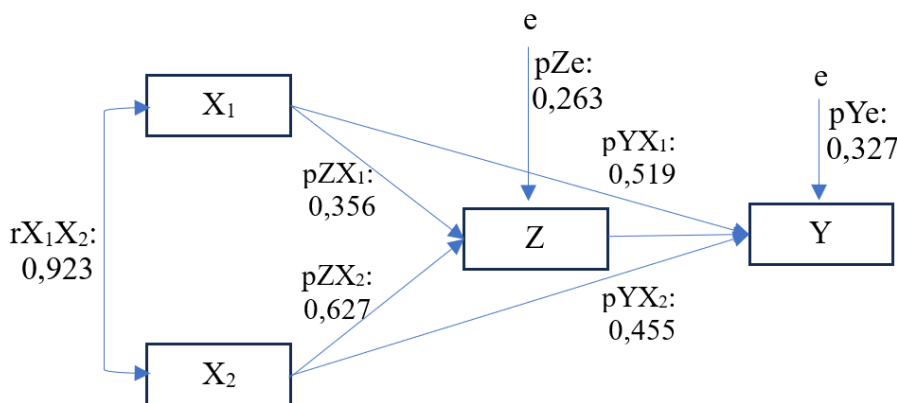


Figure 2. Sobel Test Model

The Sobel test diagram, illustrated in Figure 2, shows the mediating role of Z in the relationships between X₁, X₂, and Y. As shown in the figure, both X₁ and X₂ have significant paths to Z (p_{ZX₁} = 0.356; p_{ZX₂} = 0.627) and also to Y through Z (p_{YX₁} = 0.519; p_{YX₂} = 0.455). The error terms (p_{Ze} = 0.263; p_{Ye} = 0.327) indicate acceptable residuals. The model confirms that Z functions as a significant mediator, supporting the indirect effects of X₁ and X₂ on Y.

Table 7. The effect of X1 on Y through Z

Influence	Weight of Influence	Standard Error (Se)
Self-Efficacy → Employee Engagement	0.934 (a)	0.073
Employee Engagement → OCB	0.945 (c)	0.026
Self-Efficacy → OCB	0.441 (b)	0.064
Indirect Self-Efficacy → Employee Engagement → OCB	0.533 (c')	0.123
Total Effect	1.378 (c+c')	

Table 7 shows the direct and indirect effects used in the Sobel mediation analysis. The direct effect of Self-Efficacy on employee engagement is 0.934, while its direct influence on OCB is 0.441. Employee engagement itself has a strong direct effect on OCB, with a coefficient of 0.945. The indirect effect of Self-Efficacy on OCB through employee

engagement is 0.533, producing a total effect of 1.378. To determine whether mediation occurs, the Sobel test was applied. A Z-score greater than 1.96 indicates that employee engagement significantly mediates the relationship between Self-Efficacy and OCB, whereas a score below 1.96 suggests the absence of mediation. The calculation for the Sobel test of the mediation hypothesis is as follows:

$$Z = \frac{ab}{\sqrt{\{b^2 Se_a^2\} + \{a^2 Se_b^2\}}}$$

$$Z = \frac{0.934 * 0.441}{\sqrt{\{0.441^2 * 0.073^2\} + \{0.934^2 * 0.064^2\}}}$$

$$Z = 6.067$$

The Sobel test results show a Z value (6.067) > 1.96, so the decision made is to accept H6, meaning employee engagement mediates the influence of Self-Efficacy on OCB. In other words, the indirect effect of Self Efficacy on OCB (through the mediation of employee engagement) with a weight of 0.533 is significant.

Table 8. The effect of X2 on Y through Z

Influence	Weight of Influence	Standard Error (Se)
POS → Employee Engagement	0.955 (a)	0.038
Employee Engagement → OCB	0.945 (c)	0.026
POS → OCB	0.357 (b)	0.100
POS → Employee Engagement → OCB	0.604 (c')	0.083
Total Effect	1.249 (c+c')	

Table 8 presents the direct and indirect effects used in the Sobel mediation analysis. The direct influence of Perceived POS on employee engagement is 0.955, while its direct effect on OCB is 0.604. Through employee engagement, the indirect effect contributes to a total combined effect of 1.249. To evaluate the mediation hypothesis of Perceived POS on OCB through employee engagement, the Sobel test is applied. A Z-score greater than 1.96 indicates significant mediation and leads to hypothesis acceptance, whereas a Z-score below 1.96 results in hypothesis rejection. The calculation for the Sobel test of the mediation hypothesis is as follows:

$$Z = \frac{ab}{\sqrt{\{b^2 Se_a^2\} + \{a^2 Se_b^2\}}}$$

$$Z = \frac{0.955 * 0.357}{\sqrt{\{0.357^2 * 0.026^2\} + \{0.955^2 * 0.038^2\}}}$$

$$Z = 3.535$$

The Sobel test results show a Z value of 3.535, which is greater than 1.96. Therefore, the decision is to accept H7, meaning employee engagement mediates the influence of POS on OCB. In other words, the indirect effect of POS on OCB (through the mediation of employee engagement) with a weight of 0.604 is significant.

DISCUSSION

The results show that self-efficacy significantly and positively influences employee engagement. This aligns with van Hooft et al. (2025), who define self-efficacy as an individual's belief in their capacity to manage situations and achieve desired outcomes. Such a belief builds confidence, motivation, and active involvement in work. For nurses in Aikmel District's community health centers, self-efficacy serves as a psychological foundation that sustains emotional and cognitive engagement amid demanding service conditions. Abdullah and Wider (2022) found that self-efficacy significantly affects OCB, while Wang et al. (2023) highlight the role of engagement in enhancing voluntary behavior. Thus, higher self-efficacy enables nurses to face challenges confidently,

demonstrating commitment and loyalty to healthcare goals. Self-efficacy therefore not only builds confidence but also fosters engagement that promotes positive and voluntary behavior in healthcare environments.

Perceived Organizational Support (POS) also has a significant positive effect on employee engagement. Zheng et al. (2024) describe POS as the extent to which employees perceive that their organization values their contributions and cares about their well-being. When nurses feel supported, they display greater emotional and cognitive engagement (Browne & Chun Tie, 2024). This supports Curiñaupa et al. (2025), who state that engagement reflects job satisfaction, belief in organizational values, and willingness to give one's best. Similarly, Theodorus et al. (2021) found that POS positively influences OCB. Hence, organizational support becomes a foundation for strong engagement, as valued nurses exhibit enthusiasm, loyalty, and participation, qualities essential for maintaining professional dedication and service quality.

Self-efficacy also significantly enhances OCB. Harsul et al. (2020) define it as a belief in one's ability to control situations and achieve favorable outcomes. Among nurses, this belief motivates concern for colleagues, voluntary assistance, and institutional loyalty beyond formal duties. Thus, nurses with high self-efficacy tend to be proactive, responsible, and empathetic key indicators of OCB that improve healthcare service quality. Likewise, POS has a significant positive impact on OCB. Zhang et al. (2024) explain that POS reflects the degree to which employees feel recognized and supported by their organization. In Aikmel's health centers, strong POS fosters altruism, loyalty, and concern for patients. Alshaabani et al. (2021) found that POS significantly influences OCB, suggesting that organizational support not only fulfills basic needs but also encourages cooperation and extra-role behaviors crucial in healthcare's dynamic environment. Employee engagement further has a significant positive effect on OCB. Al-Dossary (2022) states engagement as emotional attachment and commitment, reflected in enjoyment, discipline, and the drive to contribute optimally. For nurses, engagement is critical since healthcare demands both mental and physical dedication. Idris et al. (2021) found that engagement enhances OCB and job satisfaction, showing that engaged employees often exceed formal expectations by supporting colleagues and improving service quality. In public healthcare, such behaviors enhance teamwork and patient satisfaction.

Moreover, self-efficacy influences OCB indirectly through engagement. Zarrin et al. (2023) explain that self-efficacy fosters confidence, which strengthens involvement and emotional connection to work. Wei et al. (2023) state that engagement transforms this belief into voluntary, performance-enhancing behavior. Similarly, POS affects OCB through engagement. Li et al. (2022) and Teutsch et al. (2025) observed that when employees feel appreciated, they develop stronger commitment and motivation. Firmansyah et al. (2022) and Liu et al. (2023) confirmed that engagement mediates the POS-OCB relationship, encouraging employees to exceed formal roles. In healthcare, particularly in Aikmel District, engagement sustains teamwork, loyalty, and patient-centered service. This study supports self-efficacy and social exchange theories by showing that employee engagement bridges self-efficacy and organizational support with Organizational Citizenship Behavior (OCB) among nurses. Practically, health centers should enhance nurses' self-efficacy and organizational support through training, mentoring, and recognition to strengthen engagement and teamwork. However, this study was limited to one district and used a cross-sectional design, which restricts generalization and causal interpretation.

CONCLUSION

Based on the discussion in the previous chapter, it can be concluded that self-efficacy has a significant positive effect on employee engagement; POS has a significant positive effect on employee engagement, self-efficacy has a significant positive effect on OCB; POS has a significant positive effect on OCB, employee engagement has a significant positive effect on OCB, self-efficacy significantly affects OCB through employee

engagement;], and POS has a significant positive effect on OCB through employee engagement. These findings indicate the importance of strengthening POS, employee engagement, and self-efficacy to improve OCB, which can make a significant practical contribution to productivity and work quality in the environment, especially in public service environments such as community health centers. Theoretically, these results support the theory of innovative work behavior, where POS, employee engagement, and self-efficacy influence OCB.

This study, despite its significant findings, presents several limitations. The research was conducted in a single institutional context, specifically the health centers of Aikmel, Lenek, and Kalijaga, which may restrict the generalizability of the findings to other organizational settings or industries. Self-reported questionnaires may introduce response bias, as participants might offer socially desirable answers instead of accurate reflections of their behavior. The study also includes potential bias in the questionnaire, time constraints, and respondent subjectivity. Future research should broaden its scope to encompass various organizational contexts, including private and non-profit sectors, to improve the generalizability of the findings. Longitudinal studies are essential for capturing the dynamic interactions between these variables over time, thereby enhancing the understanding of how Employee engagement, driven by self-efficacy, has a positive influence on OCB through POS. Future studies should include additional moderating factors, such as organizational culture, competencies leadership style, job satisfaction, or employee engagement, to enhance the understanding of the mechanisms driving OCB in sustainability.

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