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Role Leader-Member Exchange, Work Life Balance and Organizational Citizenship Behavior for Work Engagement

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Abstract

Internal monitoring at a clove company in Malang City, Indonesia, revealed moderate levels of employee work engagement, with particularly low scores for problem-solving ability, initiative, and work focus. This study examined the relationships between leader–member exchange (LMX), work–life balance (WLB), organizational citizenship behavior (OCB), and employee work engagement. A quantitative research approach was employed, with data collected from 172 employees through a structured questionnaire. The data were analyzed using partial least squares structural equation modeling (PLS-SEM). The results indicated that leader–member exchange ($\beta = 0.409$, $p < 0.001$), work–life balance ($\beta = 0.317$, $p = 0.004$), and organizational citizenship behavior ($\beta = 0.585$, $p < 0.001$) were positively and significantly associated with employee work engagement. Collectively, the three predictors explained 49.1% of the variance in work engagement. Organizational citizenship behavior exhibited the strongest reported association, suggesting that employees who demonstrated greater willingness to contribute beyond their formal job responsibilities also tended to report higher levels of work engagement. These findings highlighted the importance of supportive supervisor–employee relationships, effective management of professional and personal responsibilities, and voluntary workplace cooperation in understanding employee engagement. The study recommended that management strengthen supervisory relationships, support employees' work–life balance, and foster an organizational environment that encourages voluntary collaboration and mutual assistance. Future research should examine these relationships across different clove companies and employ longitudinal research designs to assess their stability over time

INTRODUCTION

Indonesia is one of the world's major clove producers, supplying raw materials to various industries, including pharmaceuticals, food and beverages, perfumes, and clove cigarettes (Sapira & Daspar, 2025). This diversified market creates opportunities for long-term growth in the clove industry (Putri, 2024). However, sustaining organizational competitiveness requires effective human resource management practices that support employee capabilities, motivation, and engagement (Askew, 2012; Cevik, 2025). The Theory of Planned Behavior provides a perspective for understanding how employees' attitudes, perceived behavioral control, and behavioral intentions relate to workplace behavior (Ajzen, 1985, 1991; Saflor et al., 2024). Employees with

higher levels of work engagement tend to invest greater energy, attention, and effort in achieving organizational objectives (Iddagoda & Opatha, 2020; Shimazu et al., 2020).

A clove company operating in Malang City, Indonesia, has experienced challenges related to employee work engagement across its operational areas. Internal monitoring and evaluation records from 2021 to 2025 indicated that the average work engagement score remained below the company's target, with an overall score of 1.89, categorized as moderate. Particularly low scores were recorded for problem-solving ability (1.45), initiative (1.46), and work focus (1.62). Meanwhile, work enthusiasm (2.59) and dedication (2.33) were also categorized as moderate. These findings suggested that employees experienced difficulties maintaining initiative, concentration, and proactive involvement in their work, highlighting the need to investigate workplace factors associated with employee engagement (Bakker et al., 2023).

Previous empirical studies have identified several factors associated with work engagement, including leader–member exchange (LMX), work–life balance, and organizational citizenship behavior (OCB). Studies have reported significant positive relationships between LMX and work engagement (Ananda et al., 2024; Dahalan et al., 2024; Hapsari et al., 2019; Hasan & Soetjipto, 2025; Muhiddin et al., 2025; Mulligan et al., 2021; Pradnyaswari & Putra, 2024; Prilatama et al., 2025; Zakiy, 2024). Similarly, work–life balance has been positively associated with work engagement (Ahmed et al., 2024; Lee & Shin, 2023; Nelson & Angellius, 2023), while OCB has also been linked to higher engagement levels (Ananda et al., 2024; Hermawan et al., 2020). However, the empirical findings remain inconsistent. Sunaryo et al. (2024) reported a negative relationship between LMX and work engagement, while Lee and Shin (2023) identified a negative association involving work–life balance. Other studies found nonsignificant relationships between work–life balance and work engagement (Dahalan et al., 2024) and between OCB and work engagement (Putri, 2024). These differences suggested that the relationships among these variables may depend on organizational characteristics, employee populations, and research contexts.

Given these inconsistencies, further investigation was needed to understand how LMX, work–life balance, and OCB were associated with work engagement in Indonesia's clove industry. Although previous studies have examined these relationships across various organizational settings, limited research has addressed their combined associations with work engagement among employees of clove companies. Furthermore, Indonesia's plantation sector is regulated under Law No. 39 of 2014 on Plantations (2014), which primarily addresses plantation governance rather than establishing comprehensive employment standards. Examining workplace relationships and employee engagement within this industry could therefore provide evidence relevant to organizational human resource practices and broader discussions of employee welfare in plantation-related industries.

Leader–member exchange (LMX) represents the quality of the professional relationship between employees and their immediate supervisors. Relationships characterized by mutual trust, respect, and support may encourage employees to seek guidance, communicate concerns, and demonstrate initiative (Brady et al., 2025). Mulligan et al. (2021), in a study published in Sustainability, examined work engagement and mindfulness as mechanisms linking LMX to

innovative work behavior. Similarly, Zakiy (2024) investigated the mediating role of LMX in the relationship between person–supervisor fit and work engagement among employees of Islamic banks in Indonesia. These studies provided a theoretical and empirical foundation for examining whether the quality of supervisor–employee relationships was associated with employees' energy, dedication, and concentration in the clove industry.

Work–life balance represents another potential factor associated with employee engagement. Employees who effectively manage their professional, family, and personal responsibilities may have greater psychological resources available for their work. Lee and Shin (2023), in a study published in Public Personnel Management, examined the role of work–life balance policies in the relationships between perceived organizational support, supervisory support, and employee engagement during the COVID-19 pandemic. Meanwhile, Dahalan et al. (2024), in a study involving 191 millennial employees in the manufacturing sector, found that LMX was positively associated with work engagement, whereas the hypothesized relationship between work–life balance and engagement was not statistically supported. These findings highlighted the importance of distinguishing between employees' perceived work–life balance and the organizational policies intended to support it, particularly when interpreting results across different occupational settings.

Organizational citizenship behavior (OCB) introduces a behavioral perspective into the examination of work engagement. OCB encompasses discretionary employee contributions, such as assisting colleagues, demonstrating consideration for others, and voluntarily supporting organizational activities beyond formal job requirements (Organ, 1988). Such behaviors may be associated with stronger workplace involvement by encouraging cooperation, mutual support, and shared responsibility. Ananda et al. (2024) reported a positive relationship between OCB and employee engagement among employees of an Indonesian tax office, with engagement also functioning as a mediating variable in their model of in-role performance. Nevertheless, the direction of the relationship between OCB and work engagement requires careful consideration. Employees who frequently engage in voluntary cooperative behaviors may experience greater involvement in their work, while employees who are already highly engaged may also be more inclined to assist colleagues. Consequently, cross-sectional evidence cannot establish the causal direction of this relationship.

Collectively, these studies revealed contextual and empirical gaps in the existing literature. Previous research conducted in banking, manufacturing, and public administration has examined LMX, work–life balance, OCB, and work engagement using different employee populations and analytical models. However, the reviewed literature provided limited evidence regarding the simultaneous relationships between these three predictors and work engagement among employees of Indonesian clove companies. This gap was particularly relevant given the company's internal monitoring results, which indicated relatively low levels of initiative, problem-solving ability, and work focus. Although these indicators identified areas requiring managerial attention, they did not explain which workplace conditions were most closely associated with employee engagement. Examining LMX, work–life balance, and OCB within a single analytical framework could

therefore provide a more comprehensive understanding of the factors associated with work engagement in this organizational context.

The novelty of this study lay in examining the simultaneous associations of LMX, work–life balance, and OCB with work engagement among employees of a clove company in Malang City, Indonesia. The proposed model integrated three complementary perspectives: the relational dimension represented by LMX, the work–personal life interface represented by work–life balance, and the discretionary behavioral dimension represented by OCB. By positioning work engagement as the dependent variable, the study examined the distinct associations of these predictors with employee engagement, encompassing vigor, dedication, and absorption, while accounting for their relationships within the same structural model. This integrated approach extended previous research by applying the three-variable framework to an industry that had received limited attention in the reviewed literature.

Accordingly, this study aimed to examine the relationships between LMX, work–life balance, OCB, and work engagement among employees of a clove company in Malang City. Specifically, the study sought to estimate the individual associations of LMX, work–life balance, and OCB with work engagement and determine the proportion of variance in work engagement explained collectively by these predictors. A quantitative research approach was employed, using questionnaire responses from 172 employees and partial least squares structural equation modeling (PLS-SEM). The resulting estimates were intended to identify the relative strength of the observed associations without implying causal relationships beyond the study's research design.

This study contributed empirical evidence from Indonesia's clove industry to the literature on employee work engagement and provided a basis for comparison with findings from other organizational sectors. From a managerial perspective, the findings could inform further assessments of supervisory relationships, organizational support for work–life balance, and opportunities for voluntary cooperation among employees. For employees, workplace initiatives informed by these findings could strengthen access to supervisory support and facilitate the management of professional and personal responsibilities. For future researchers, the proposed model offered a foundation for comparative and longitudinal investigations across multiple clove companies to assess the consistency of the observed relationships and explore their potential causal mechanisms.

METHOD

This study employed a quantitative research design involving a population of 303 employees at a clove company in Malang City, Indonesia. A sample of 172 respondents was selected, with the sample size determined using Slovin's formula at a 5% margin of error (Etikan et al., 2016). Leader–member exchange (LMX) was measured using four dimensions: affect, loyalty, professional contribution, and respect (Ananda et al., 2024; Mulligan et al., 2021). Work–life balance (WLB) was assessed using indicators related to organizational policies, work, family, and health (Ahmed et al., 2024; Fernandez-Crehuet et al., 2016; Smeltzer et al., 2016). Organizational citizenship behavior (OCB) was measured through altruism, courtesy, conscientiousness, and

sportsmanship (Ananda et al., 2024; Atatsi et al., 2020). Work engagement was assessed using three dimensions: vigor, dedication, and absorption (Ali et al., 2022; Mulligan et al., 2021). Primary data were collected through a structured, closed-ended questionnaire using a Likert-type response scale ranging from strongly disagree to strongly agree. Data were analyzed using partial least squares structural equation modeling (PLS-SEM) with SmartPLS software. The analysis included assessments of the measurement model (outer model) and structural model (inner model).

RESULT AND DISCUSSION

Respondent Identity Analysis

Based on the collected data, the majority of the 172 respondents were male (110 respondents, or 64%). The largest age group was 46–55 years, comprising 91 respondents (52.9%). In terms of educational attainment, most respondents had completed senior high school or an equivalent level of education (101 respondents, or 58.7%). The data also revealed that the largest proportion of respondents had 11–15 years of work experience (81 respondents, or 47.1%). These findings indicate that although most respondents did not hold a bachelor's degree, their considerable work experience may have contributed to the development of the knowledge and skills required to perform their daily responsibilities, thereby supporting improved employee performance.

Analysis of Respondents' Responses to Research Variables

The average response score for leader–member exchange was relatively high (3.79), with the respect and affection indicators scoring above the overall mean, whereas professional contribution and loyalty scored below it. Work–life balance also received a high average score (4.06), with the health and work indicators exceeding the overall mean, while the family and organizational policy indicators scored below it. Similarly, organizational citizenship behavior recorded a high average score (3.94), driven by the ethics and conscientiousness indicators, which scored above the overall mean, whereas altruism and sportsmanship scored below it. Employee work engagement also demonstrated a high average score (3.68), with vigor and absorption exceeding the overall mean, while dedication scored below it.

Smart-PLS Multiple Linear Regression Analysis Results

Test Outer Model

Test Convergent Validity

Table 1 shows that all indicators of leader–member exchange, work–life balance, organizational citizenship behavior, and work engagement have outer loading values of at least 0.70. These results indicate that all indicators meet the recommended threshold for convergent validity, suggesting that they adequately represent their respective constructs.

Table 1 Test Results *Outer Loading*

Indicators and Variables	Coefficient *Outer Loadings*	*Cut Off*	Conclusion
$X_{1.1}$ <- LMX (X_1)	0,762	>0,7	Valid.
$X_{1.2}$ <- LMX (X_1)	0,701	>0,7	Valid.
$X_{1.3}$ <- LMX (X_1)	0,712	>0,7	Valid.
$X_{1.4}$<- LMX (X_1)	0,791	>0,7	Valid.
$X_{2.1}$<- WLB (X_2)	0,718	>0,7	Valid.
$X_{2.2}$<- WLB (X_2)	0,782	>0,7	Valid.
$X_{2.3}$<- WLB (X_2)	0,751	>0,7	Valid.
$X_{2.4}$<- WLB (X_2)	0,796	>0,7	Valid.
$X_{3.1}$<- OCB (X_3)	0,740	>0,7	Valid.
$X_{3.2}$<- OCB (X_3)	0,772	>0,7	Valid.
$X_{3.3}$<- OCB (X_3)	0,750	>0,7	Valid.
$X_{3.4}$<- OCB (X_3)	0,719	>0,7	Valid.
Y_1 <- WE (Y)	0,773	>0,7	Valid.
Y_2 <- WE (Y)	0,725	>0,7	Valid.
Y_3 <- WE (Y)	0,752	>0,7	Valid.

Source: processed primary data (2026)

Table 2 presents the results of the convergent validity assessment using average variance extracted (AVE). The findings indicate that leader–member exchange, work–life balance, organizational citizenship behavior, and work engagement each have an AVE value greater than 0.50. These results suggest that all constructs meet the recommended criterion for convergent validity.

Table 2 AVE test

Variables	AVE Coefficient	Cut Off	Conclusion
LMX (X_1)	0,538	>0,5	Valid.
WLB (X_2)	0,513	>0,5	Valid.
OCB (X_3)	0,525	>0,5	Valid.
WE (Y)	0,541	>0,5	Valid.

Source: processed primary data (2026)

Discriminant Validity

Table 3 presents the results of the discriminant validity assessment using the Fornell–Larcker criterion. The square roots of the average variance extracted (AVE) for leader–member exchange (0.733), work–life balance (0.716), organizational citizenship behavior (0.724), and work engagement (0.736) are greater than their respective correlations with other constructs. These findings indicate that the constructs satisfy the Fornell–Larcker criterion for discriminant validity.

Table 3 Test *Fornell-Larcker*

Variables	LMX (X_1)	WLB (X_2)	OCB (X_3)	WE (Y)	Results
LMX (X_1)	**0,733**				Valid
WLB (X_2)	0,388	**0,716**	0,212	0,173	Valid
OCB (X_3)	0,265		**0,724**		Valid

Variables	LMX (X_1)	WLB (X_2)	OCB (X_3)	WE (Y)	Results
WE (Y)	0,101		0,247	**0,736**	Valid

Source: processed primary data (2026).

As presented in Table 4, all heterotrait–monotrait ratio (HTMT) values are below the recommended threshold of 0.90. These findings indicate that the constructs meet the criterion for discriminant validity.

Table 4 Test HTMT

Variables	HTMT coefficient	*Cut Off*	Results
OCB (X_3) <-> LMX (X_1)	0,618	<0,90	Valid
WE (Y) <-> LMX (X_1)	0,494	<0,90	Valid
WE (Y) <-> OCB (X_3)	0,618	<0,90	Valid
WLB (X_2) <-> LMX (X_1)	0,454	<0,90	Valid
WLB (X_2) <-> OCB (X_3)	0,456	<0,90	Valid
WLB (X_2) <-> WE (Y)	0,527	<0,90	Valid

Source: processed primary data (2026).

Table 5 presents the cross-loading results for all indicators of leader–member exchange, work–life balance, organizational citizenship behavior, and work engagement. Each indicator has a loading greater than 0.70 on its respective construct, and these loadings exceed the corresponding cross-loadings on other constructs. These findings provide further support for the discriminant validity of the measurement model.

Table 5 Test *Cross Loadings*

Indicator	Coefficient Cross Loadings				*Cut Off*	Results
	LMX (X_1)	WLB (X_2)	OCB (X_3)	WE (Y)		
$X_{1.1}$	**0,762**	0,053	0,034	0,057	>0,7	Valid
$X_{1.2}$	**0,701**	0,121	0,083	0,024	>0,7	Valid
$X_{1.3}$	**0,741**	0,059	0,123	0,083	>0,7	Valid
$X_{1.4}$	**0,871**	0,120	0,034	0,099	>0,7	Valid
$X_{2.1}$	0,044	**0,727**	0,017	0,125	>0,7	Valid
$X_{2.2}$	0,014	**0,740**	0,017	0,089	>0,7	Valid
$X_{2.3}$	0,039	**0,735**	0,052	0,037	>0,7	Valid
$X_{2.4}$	0,010	**0,786**	0,019	0,078	>0,7	Valid
$X_{3.1}$	0,083	0,033	**0,720**	0,111	>0,7	Valid
$X_{3.2}$	0,013	0,098	**0,779**	0,090	>0,7	Valid
$X_{3.3}$	0,055	0,034	**0,740**	0,058	>0,7	Valid
$X_{3.4}$	0,050	0,020	**0,709**	0,195	>0,7	Valid
Y_1	0,016	0,148	0,171	**0,834**	>0,7	Valid
Y_2	0,161	0,088	0,108	**0,725**	>0,7	Valid
Y_3	0,103	0,096	0,188	**0,730**	>0,7	Valid

Source: processed primary data (2026)

Reliability Assessment

Table 6 shows that leader–member exchange, work–life balance, organizational citizenship behavior, and work engagement have Cronbach's alpha values greater than 0.70. Similarly, the reliability coefficients, including rho_A and composite reliability (rho_C), exceed the recommended threshold of 0.70. These results indicate that all constructs demonstrate acceptable internal consistency reliability.

Table 6 Test Reliability

Variables	Cronbach's Alpha	Composite Reliability		Cut Off	Results
		rho_a	rho_c		
LMX (X_1)	0,743	0,749	0,737	>0,7	Reliable
WLB (X_2)	0,720	0,710	0,713	>0,7	Reliable
OCB (X_3)	0,732	0,721	0,728	>0,7	Reliable
WE (Y)	0,757	0,743	0,743	>0,7	Reliable

Source: processed primary data (2026).

Inner Model Assessment

The inner (structural) model was assessed through several procedures, including collinearity testing, coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), goodness of fit (GoF), and hypothesis testing. Table 7 shows that all variance inflation factor (VIF) values for the indicators of leader–member exchange, work–life balance, organizational citizenship behavior, and work engagement are below 5.0. These results indicate that no substantial collinearity issues were detected among the assessed indicators.

Table 7 Test *Collinierity*

Variables and Indicators	VIF	*Cut Off*	Conclusion
LMX (X_1) :			
$X_{1.1}$	1,256	<5,0	There is no multicollinearity.
$X_{1.2}$	1,007	<5,0	There is no multicollinearity.
$X_{1.3}$	1,040	<5,0	There is no multicollinearity.
$X_{1.4}$	1,262	<5,0	There is no multicollinearity.
WLB (X_2) :			
$X_{2.1}$	1,051	<5,0	There is no multicollinearity.
$X_{2.2}$	1,033	<5,0	There is no multicollinearity.
$X_{2.3}$	1,073	<5,0	There is no multicollinearity.
$X_{2.4}$	1,087	<5,0	There is no multicollinearity.
OCB (X_3) :			
$X_{3.1}$	1,017	<5,0	There is no multicollinearity.
$X_{3.2}$	1,013	<5,0	There is no multicollinearity.
$X_{3.3}$	1,026	<5,0	There is no multicollinearity.
$X_{3.4}$	1,028	<5,0	There is no multicollinearity.
WE (Y) :			
Y_1	1,041	<5,0	There is no multicollinearity.
Y_2	1,018	<5,0	There is no multicollinearity.

Variables and Indicators	VIF	*Cut Off*	Conclusion
Y_3	1,033	<5,0	There is no multicollinearity.

Source: processed primary data (2026)

Coefficient of Determination (R^2) and Goodness of Fit (GoF)

Table 8 presents an R-squared (R^2) value of 0.491, indicating that leader–member exchange, work–life balance, and organizational citizenship behavior collectively explain 49.1% of the variance in work engagement. This represents moderate explanatory power, while the remaining 50.9% of the variance is attributable to factors not included in the research model. Furthermore, the goodness-of-fit (GoF) value of 0.581 exceeds the reference threshold of 0.36, suggesting a strong overall model fit according to the criterion adopted in this study.

Table 8. R-Squared and Goodness-of-Fit Test Result

Variables	R-square	R-square Adjusted	GoF
WE (Y)	0,491	0,479	0,581

Source: processed primary data (2026)

Effect Size (f^2)

Table 9 presents the effect size (f^2) values for the relationships between the independent variables and work engagement. Leader–member exchange (0.351) and work–life balance (0.340) were classified as having moderate effect sizes in the original analysis. Meanwhile, organizational citizenship behavior (0.368) demonstrated a relatively higher effect size on employee work engagement.

Table 9 Test *Effect Size*

Variables	*f-square*	Category
LMX (X_1) -> WE (Y)	0,351	Moderate
WLB (X_2) -> WE (Y)	0,340	Moderate
OCB (X_3) -> WE (Y)	0,368	High

Source: processed primary data (2026)

Hypothesis Testing

Table 10 presents the results of the direct-effect hypothesis testing, with statistical significance assessed using t-statistics greater than 1.96 and p-values < 0.05. The findings demonstrate that leader–member exchange has a positive and statistically significant effect on work engagement ($\beta = 0.409$, $t = 5.167$, $p < 0.001$), supporting H_1. Similarly, work–life balance has a positive and statistically significant effect on work engagement ($\beta = 0.317$, $t = 2.624$, $p = 0.004$), supporting H_2. Organizational citizenship behavior also has a positive and statistically significant effect on work engagement ($\beta = 0.585$, $t = 9.111$, $p < 0.001$), supporting H_3. These findings indicate that all three proposed hypotheses are supported by the empirical results.

Table 10 Hypothesis Testing

Variables	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	Conclusion
LMX (X_1) -> WE (Y)	0,409	5,167	0,000	H_1 accepted
WLB (X_2) -> WE (Y)	0,317	2,624	0,004	H_2 accepted
OCB (X_3) -> WE (Y)	0,585	9,111	0,000	H_3 accepted

Source: processed primary data (2026).

Discussion

Leader–Member Exchange and Work Engagement

Leader–member exchange has a direct and significant effect on improving work engagement. From the perspective of organizational theory, particularly the theory of planned behavior, high-quality leader–member exchange strengthens employees' organizational attachment and dedication to their work (Hemsworth et al., 2024; Saflor et al., 2024; Torlak et al., 2021). This theoretical perspective also suggests that employee attitudes contribute to the positive relationship between leader–member exchange and work engagement (Zhao et al., 2025; Afota et al., 2024). Consistent with the findings of Hasan and Soetjipto (2025), employees who maintain positive reciprocal relationships with their supervisors tend to develop favorable attitudes toward their work. Furthermore, supervisory support provided through high-quality leader–member exchange encourages employees to demonstrate greater effort and commitment, ultimately strengthening work engagement, as also reported by Prilatama et al. (2025), Muhiddin et al. (2025), and Hemsworth et al. (2024).

Work–Life Balance and Work Engagement

The findings also indicate that employees who successfully maintain work–life balance tend to demonstrate significantly higher levels of work engagement. According to the theory of planned behavior, work engagement is not determined solely by individual factors, such as good physical health resulting from a balanced work and personal life (Saflor et al., 2024). The theory also emphasizes the importance of subjective norms, including high expectations from supervisors and insufficient support from colleagues, which may limit the positive effect of work–life balance on work engagement (Fernandez-Crehuet et al., 2016). Prilatama et al. (2025), Ahmed et al. (2024), and Kanwal et al. (2025) similarly reported that work–life balance contributes positively to improving work engagement. This relationship is further supported by the findings of Muhiddin et al. (2025) and Nelson and Angellius (2023). Additionally, Lee and Shin (2023) and Zakiy (2024) emphasized that employees who effectively manage their time and energy are more likely to achieve a satisfactory balance between their professional and personal responsibilities.

Organizational Citizenship Behavior and Work Engagement

Organizational citizenship behavior was also found to have a direct and significant effect on improving work engagement. As explained by Atatsi et al. (2020), employees who demonstrate positive work ethics voluntarily contribute beyond their formal job responsibilities to support organizational objectives. Such voluntary contributions reflect organizational citizenship behavior,

which ultimately strengthens work engagement (Sulistiana & Prawitowati, 2025; Muhiddin et al., 2025). The findings of Ananda et al. (2024) and Hadi and Hanif (2022) also support the positive and significant relationship between organizational citizenship behavior and work engagement. Employees who demonstrate strong organizational attachment tend to exhibit higher levels of work engagement (Torlak et al., 2021). Consistent with the theory of planned behavior, employees with high levels of organizational citizenship behavior generally demonstrate greater empathy and other positive attitudes that support their involvement in organizational activities (Saflor et al., 2024; Putri, 2024; Wibowo et al., 2024).

CONCLUSION

Among 172 employees of a clove company in Malang City, Indonesia, leader–member exchange (LMX), work–life balance (WLB), and organizational citizenship behavior (OCB) were positively and significantly associated with work engagement. Organizational citizenship behavior exhibited the strongest association ($\beta = 0.585$), followed by leader–member exchange ($\beta = 0.409$) and work–life balance ($\beta = 0.317$). Collectively, these three predictors explained 49.1% of the variance in work engagement. These findings indicated that employees who reported greater voluntary contributions beyond their formal job responsibilities, stronger supervisor–employee relationships, and better work–life balance also tended to demonstrate higher levels of work engagement.

Future research should involve employees from multiple clove companies to examine the generalizability of these relationships across organizations and geographical regions. Longitudinal research designs could further clarify the temporal relationships between organizational citizenship behavior and work engagement, particularly whether voluntary contributions preceded increased engagement, whether higher engagement encouraged greater willingness to assist colleagues, or whether these relationships were reciprocal. Additionally, future studies could examine perceived organizational support, job satisfaction, and career development opportunities as potential predictors of work engagement to determine whether they explained additional variance beyond the three variables investigated in this study.

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