



Analysis of transformational leadership on organizational citizenship behavior with job satisfaction as an intervening variable

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Article Info	ABSTRACT
<p>Article history:</p> <p>Received Sep 13, 2025 Revised Sep 17, 2025 Accepted Sep 21, 2025</p> <hr/> <p>Keywords:</p> <p>Job Satisfaction; Organizational Behavior; Transformational Leadership; Citizenship</p>	<p>This study examines the influence of transformational leadership on organizational citizenship behavior (OCB) with job satisfaction as an intervening variable. Using a quantitative approach and PLS-SEM, data were collected from 92 employees in PT Lung Cheong Brothers Industrial. The results reveal that transformational leadership has a positive and significant effect on both job satisfaction and OCB. Moreover, job satisfaction is positively associated with OCB and functions as a significant mediator in the relationship between transformational leadership and OCB. These findings confirm that transformational leaders, through inspirational motivation, intellectual stimulation, idealized influence, and individualized consideration, not only directly enhance employees' extra-role behaviors but also foster higher job satisfaction, which in turn strengthens OCB. The study contributes theoretically by reinforcing Social Exchange Theory and expanding its relevance in the context of developing countries. Practically, it highlights the importance for organizations to invest in leadership development programs and strategies that enhance employee satisfaction to encourage sustainable OCB. Limitations of this study include its relatively small sample size, reliance on self-reported data, and exclusion of other potential variables such as organizational culture. Future research should consider larger samples, longitudinal designs, and additional mediating or moderating variables to further enrich the understanding of these relationships.</p> <p style="text-align: right;"><i>This is an open access article under the CC BY-NC license.</i></p>



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1. INTRODUCTION

In the midst of the rapid flow of globalization, organizations are required to be more adaptive, innovative, and highly competitive to survive in increasingly fierce competition. Competition is no longer limited to products and services alone, but also to the quality of human resources, which are the main driving force of the organization. In such conditions, employees are required not only to work according to formal descriptions, but also to show extra contributions that can strengthen the effectiveness of the team and the organization. Voluntary behavior that goes beyond formal obligations is known as Organizational Citizenship Behavior (OCB) (de Geus et al., 2020). OCB includes helping each other, providing support, maintaining a conducive work atmosphere, and providing constructive ideas for the organization. Many studies state that OCB is directly related to

organizational performance, employee loyalty, and customer satisfaction (Dai et al., 2022; Dhir et al., 2020; Haass et al., 2023; Yildiz & Amin, 2020). In other words, the higher the OCB level, the greater the organization's chances of achieving a competitive advantage (Alsheikh, 2020; Meng et al., 2022). This phenomenon makes OCB one of the main focuses in the study of modern human resource management. However, an important question that arises is what factors are actually able to encourage employees to display OCB behavior consistently. This is where the urgency of research on leadership and job satisfaction begins to find its relevance.

Most Indonesian workers are willing to make additional contributions if they receive leadership that consistently supports them (Nurjanah et al., 2020; Rahmadani & Schaufeli, 2022). OCB in Indonesia is not an automatic phenomenon, it is highly dependent on the leadership style implemented. One of the factors that is believed to be very influential in forming OCB is leadership, especially transformational leadership styles (Hermanto et al., 2024; Lee et al., 2023; Qalati et al., 2022). Differences in organizational culture characteristics in developing countries, particularly Indonesia, can influence how transformational leadership relates to OCB. Indonesia's strong collectivist culture often emphasizes social harmony, adherence to hierarchy, and the value of cooperation. This can strengthen the effects of transformational leadership, as charismatic and inspiring leaders are more likely to build loyalty and encourage OCB. Conversely, the still-dominant paternalistic cultural tendencies also have the potential to limit individual initiative in demonstrating OCB if not balanced with intrinsic motivation. Transformational leadership is known as a leadership style that is able to inspire, motivate, and empower employees to achieve higher goals (Ytterstad & Olaisen, 2023). Transformational leaders do not just provide instructions, but instill meaningful visions, provide positive examples, and encourage employees to innovate and think creatively (Manu, 2022; Rehmani et al., 2023). This leadership style also pays attention to the individual needs of employees, so they feel valued and motivated to contribute more. Several studies have stated that transformational leadership is positively correlated with employee engagement and extra-role behaviors such as OCB (Asghar et al., 2022; Chen et al., 2025). This is because inspired and empowered employees tend to have higher intrinsic motivation. Additionally, transformational leaders can create a meaningful work climate so that employees feel their work is valuable. This situation encourages the emergence of a sense of ownership towards the organization, which leads to voluntary behavior to help the organization. Therefore, the role of transformational leadership is very important to be understood further in the context of this research.

While transformational leadership has been shown to have a profound influence on employee behavior, this relationship doesn't always take place directly. Psychological factors such as job satisfaction are often the link that determines whether leadership is truly capable of producing OCB. Job satisfaction refers to the extent to which an employee's needs, expectations, and feelings are met through his or her work (Baxi & Atre, 2024; Issa Gazi et al., 2022). Satisfied employees tend to have positive emotions, higher loyalty, and a tendency to selflessly help colleagues and organizations. Thus, job satisfaction can serve as an intervening variable that bridges the influence of transformational leadership on OCB. Previous research has found that transformational leadership affects OCB through job satisfaction (Meliala et al., 2023). These findings reinforce the notion that job satisfaction is not only a consequence of leadership styles, but also an important means of triggering extra-role behavior.

In the context of organizations in Indonesia, this issue is increasingly relevant because the level of job satisfaction still shows considerable variation. The phenomenon of job satisfaction in Indonesia has shown interesting and contradictory dynamics in recent years. A 2023 PwC survey noted that 75 percent of Indonesian workers are satisfied with their jobs, a figure that places Indonesia in the second-highest position in Asia Pacific after Thailand (Salsabila, 2023). This data gives the impression that the majority of Indonesian workers are quite satisfied with their working conditions. However, when examined in depth, such satisfaction often only encompasses short-term aspects such as the work environment and relationships with coworkers. When job satisfaction is viewed from the perspective of long-term guarantees, such as pension plans, the figure is much

lower. Only about 25.54 percent of Indonesian workers participate in the pension program (Indraini, 2025), indicating a misalignment between daily satisfaction and long-term career security (Polanco, 2025; Qu, 2022). This phenomenon reveals a paradox in which employees feel satisfied in the present context, but have no certainty in the future. Therefore, an analysis of the factors that drive job satisfaction needs to be done more critically and in depth. On the other hand, to encourage the emergence of OCB, organizations need additional factors in the form of inspirational leadership and the right motivation management strategy. Transformational leadership, with its ability to connect the organization's vision with the personal meaning of employees, has the potential to transform job satisfaction into productive energy. In other words, increased engagement needs to be directed to manifest in the form of OCB behavior. This emphasizes the need for further research on how transformational leadership and job satisfaction interact with each other in giving rise to OCB. With this approach, this research is here to make significant theoretical and practical contributions. This study will try to explain this connection more empirically.

2. RESEARCH METHOD

This study uses a quantitative method with the PLS-SEM approach. The use of Partial Least Squares Structural Equation Modeling (PLS-SEM) in this study is based on methodological considerations relevant to the complexity of the proposed conceptual model (Angelelli et al., 2025; Cepeda-Carrion et al., 2019). This research was conducted at PT Lung Cheong Brothers Industrial in the production department with a total population of 120 employees, while the sample used was 92 employees, resulting from the calculation of Slovin. This study involves a causal relationship between transformational leadership consisting of four indicators, namely idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Jensen et al., 2020), job satisfaction consisting of five indicators including pay, the way company is managed, expertise, autonomy, and variety (Riyanto et al., 2021) as an intervening variable, as well as organizational citizenship behavior (OCB) which consists of five measurements including courtesy, conscientiousness, altruism, civic virtue, and sportsmanship (Hermanto & Srimulyani, 2022) as dependent variables. The complexity of these relationships requires an analytical approach that is able to test the relationships between latent constructs simultaneously, as well as evaluate the role of mediation. PLS-SEM is considered appropriate because it has the advantage of analyzing models with latent variables that are multidimensional and measured through reflective and formative indicators (Usakli & Rasoolimanesh, 2023).

In addition, this approach is relevant to the condition of the research data involving a relatively small sample size, which is around 92 respondents, which is methodologically more suitable to be analyzed with PLS-SEM than with covariance-based SEM (CB-SEM) which requires a larger sample count to obtain a stable estimate (Sarstedt et al., 2023; Usakli & Rasoolimanesh, 2023). PLS-SEM also does not assume normal data distribution, so it is able to handle potential distribution irregularities that often appear in social and organizational survey data. Thus, PLS-SEM provides greater flexibility in producing accurate parameter estimates even though the data has limitations in terms of distribution and sample size (Aburumman et al., 2023). Another justification that strengthens the orientation of predictive power that PLS-SEM has. In contrast to CB-SEM which is more oriented towards confirming theories through goodness-of-fit testing, PLS-SEM emphasizes on the predictive ability between latent constructs. This approach is in line with the research objectives, which are to explain and predict the influence of transformational leadership on OCB through a work satisfaction mediation mechanism. The PLS-SEM analysis allows researchers to obtain information not only related to the strength of structural relationships, but also the level of accuracy of the model's predictions in explaining the civic behavior of the organization.

In addition, PLS-SEM also offers convenience in testing mediation effects through bootstrapping procedures that result in more reliable estimates of the significance of indirect effects (Cheah et al., 2021; Streukens & Leroi-Werelds, 2016). This is important considering that the focus of the research is on the role of job satisfaction as an intervening variable. With this approach, the validity of the results can be improved through a combination of evaluation of the measurement

model (outer model) and structural model (inner model), thus providing a more comprehensive picture of the validity of the construct, the reliability of the instrument, and the predictive power of the proposed model (Hair et al., 2022).

3. RESULTS AND DISCUSSIONS

The measurement model test showed that the entire research construct met the reliability and validity criteria recommended in the PLS-SEM literature. The outer loadings value of each indicator is in the range of 0.706 to 0.898, which means that all indicators have a significant contribution in explaining their respective latent variables. According to (Hair et al., 2022), an indicator with a load above 0.70 is considered adequate because it is able to explain more than 50% of the variance of the indicator. These results indicate that the indicators used in the study are not only relevant but also consistent in measuring the concepts of transformational leadership, job satisfaction, and organizational civic behavior (OCB).

Table 1. Factor-loadings values and convergent validity and reliability scores

Variable	Factor-Loadings Values	CA	CR	AVE	R ²
<i>Job Satisfaction (JS)</i>		0,853	0,895	0,631	0,513
JS1; pay	0,767				
JS2; the way company is managed	0,846				
JS3; expertise	0,898				
JS4; autonomy	0,707				
JS5; variety	0,738				
<i>Organizational Citizenship Behavior (OCB)</i>		0,840	0,886	0,611	0,867
OCB1; courtesy	0,841				
OCB2; conscientiousness	0,732				
OCB3; altruism	0,881				
OCB4; civic virtue	0,733				
OCB5; sportsmanship	0,706				
<i>Transformational Leadership (TL)</i>		0,785	0,862	0,611	
TL1; idealized influence	0,793				
TL2; inspirational motivation	0,862				
TL3; intellectual stimulation	0,733				
TL4; individualized consideration	0,730				

In addition, the internal reliability of the construct is also at an excellent level. Cronbach's Alpha values for the entire construct range from 0.785 to 0.853, while Composite Reliability (CR) is in the range of 0.862 to 0.895. Both of these measures far exceed the minimum threshold of 0.70 recommended for social research (Hair et al., 2022). Thus, it can be concluded that the internal consistency between the indicators in each construct is very high, thus being able to guarantee the stability of the measurements in this model.

The convergent validity is also well achieved, as shown by the Average Variance Extracted (AVE) value which is between 0.611 and 0.631. According to Hair et al. (2022), an AVE value above 0.50 indicates that more than half of the variance of the indicator can be explained by latent constructs. This confirms that the indicators used have strong representational capabilities against the theoretical constructs being measured. Thus, this measurement model has qualified for convergent validity and is worthy of further analysis on structural models.

Structural model testing shows substantial explanatory power. The job satisfaction variable had an R² value of 0.513, indicating that transformational leadership was able to explain more than 51% of employee job satisfaction variations. Meanwhile, the OCB variable had an R² value of 0.867, which indicates that the research model was able to explain almost 87% of the variation in organizational civic behavior. This high R² value reflects the model's very strong predictive capabilities.

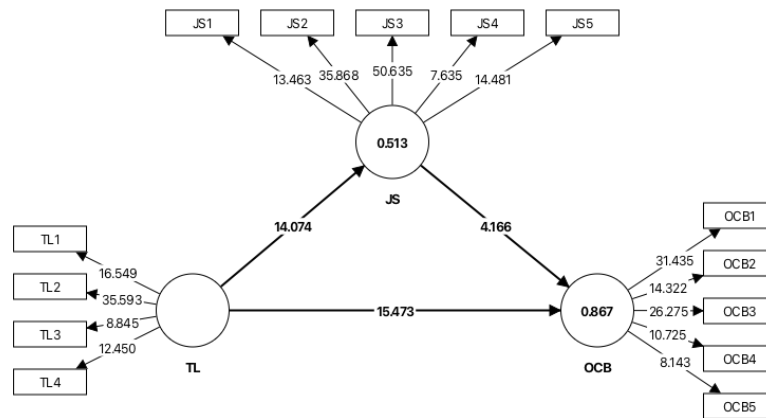


Figure 1. Paths coefficients

In this study, hypothesis testing was carried out using the Partial Least Squares – Structural Equation Modeling (PLS-SEM) approach with a bootstrapping procedure. The main advantage of bootstrapping is that it does not require the assumption of normal distribution of data. This is relevant because survey data in social and management research is often abnormally distributed. Therefore, this method is more robust in testing the significance of path coefficients, including direct effects, indirect effects, and total effects in structural models (Hair et al., 2021). As for the decision-making, if the T-Value is greater than 1.96 and the P-Value is less than 0.05, it can be determined that the hypothesis is acceptable which states a significant influence.

Table 2. Path Analysis using Bootstrapping

Hypot	β	T-Value	P values
Transformational Leadership (TL) → Organizational Citizenship Behavior (OCB)	0,748	15,473	0,000
Transformational Leadership (TL) → Job Satisfaction (JS)	0,716	14,074	0,000
Job Satisfaction (JS) → Organizational Citizenship Behavior (OCB)	0,236	4,166	0,000
Transformational Leadership (TL) → Job Satisfaction (JS) → Organizational Citizenship Behavior (OCB)	0,169	3,885	0,000

The main results showed that TL had a strong and significant direct influence on OCB with a path coefficient of $\beta = 0.748$, $t = 15.473$, $p < 0.001$. Practically, a β value of 0.748 indicates a substantive effect, with each one-unit increase in the TL score expected to be followed by a large increase in the OCB, if the other variables remain. The high t-value and p-value = 0.000 confirm that this influence is not a statistical coincidence but is consistent with the hypothesis that leaders who apply transformational characteristics (idealized influence, inspirational motivation, intellectual stimulation, individualized consideration) encourage pro-social and extra-role behaviors in subordinates. The analysis also showed that TL had a strong effect on JS with $\beta = 0.716$, $t = 14.074$, $p < 0.001$. This coefficient indicates that transformational leadership is effective in improving affective and cognitive aspects of work well-being; For example, motivating leader insights, personal attention, and job enablement tend to increase employee satisfaction. From the perspective of social exchange theory, improving the quality of the leader-follower relationship creates positive reciprocity in the form of higher job satisfaction. These findings are consistent with the literature linking transformational leadership practices to employee satisfaction. The effect of job satisfaction on OCB was also significant but smaller ($\beta = 0.236$, $t = 4.166$, $p < 0.001$). This coefficient suggests that although job satisfaction drives OCB (satisfied employees are more likely to engage in extra-role behavior), the magnitude of the effect is relatively moderate compared to the direct influence of TL → OCB. Mediation pathway analysis (TL → JS → OCB) showed significant indirect/mediated effects with $\beta = 0.169$, $t = 3.885$, $p < 0.001$. Since the model also shows a significant direct effect of TL → OCB ($\beta = 0.748$), this pattern suggests partial mediation: part of TL's influence on OCB works through increased job satisfaction.

The results of the study show a difference in the strength of the direct influence of TL → OCB ($\beta = 0.748$) compared to the indirect influence of TL → JS → OCB ($\beta = 0.169$). This difference can be explained by the transformational leadership mechanism. The strong direct effect indicates that leadership characteristics such as inspiration, intellectual stimulation, and individual attention immediately motivate employees to display OCB, without having to wait for significant changes in job satisfaction. However, the indirect effect through job satisfaction remains significant although smaller, indicating that some of the leadership influence works through psychological pathways in the form of feelings of satisfaction, appreciation, and motivation. Thus, the transformational leadership mechanism can be understood in two pathways: (1) the direct pathway, which emphasizes the symbolic and motivational power of the leader; (2) the indirect pathway, which emphasizes the formation of positive psychological conditions (job satisfaction) that subsequently encourage OCB. These results support a partial mediation model that emphasizes the complexity of social processes in leadership.

The effect of transformational leadership on organizational citizenship behavior

The results of this study show that transformational leadership has a positive and significant influence on organizational citizenship behavior (OCB). These findings confirm that leaders who are able to inspire, provide a clear vision, pay attention to individual needs, and stimulate subordinate critical thinking will encourage employees to display extra behaviors that benefit the organization. These extra behaviors, such as helping colleagues, maintaining an organizational image, and taking initiative in tasks outside of the formal job description, reflect a tangible form of employee contribution born from a healthy interpersonal relationship with the leader. From the perspective of social exchange theory, this relationship can be understood as a reciprocal process, in which the support and trust given by the leader is reciprocated with loyalty and commitment through the emergence of OCB (Ahmad et al., 2023).

These findings are also in line with the conceptual framework of transformational leadership put forward by Deng et al. (2022), which emphasizes the importance of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration in shaping positive employee behavior. When these dimensions are present in leadership practice, employees feel more valued and empowered and are encouraged to show voluntary contributions. This condition is relevant to the dynamics of modern organizations that demand flexibility, collaboration, and innovation to face global competition. In a real-world context, many organizations that adopt transformational leadership strategies report an increase in collaborative work cultures and the emergence of extra-role behaviors that underpin organizational effectiveness amid the uncertainty of the business environment. This study reinforces many previous studies that found a positive relationship between transformational leadership and OCB. A study in Indonesia by Abas et al. (2018) also reported that transformational leadership has a positive effect on OCB both directly and indirectly through work attachments. Similarly, research Sabbrina & Sandi (2025) in the hospitality sector found that the influence of transformational leadership on OCB is amplified by organizational culture. These results show that despite different organizational contexts, the effects of transformational leadership on OCB are consistent and robust.

The effect of transformational leadership on job satisfaction

The results of this study show that transformational leadership has a positive and significant influence on employee job satisfaction. These findings indicate that leaders who can inspire, motivate, stimulate innovative thinking, and pay attention to the individual needs of subordinates play an important role in increasing job satisfaction. In the context of modern organizations facing rapidly changing dynamics, transformational leadership creates a sense of meaning, emotional engagement, and intrinsic motivation that reinforces employees' positive perceptions of their work. Previous research has supported this positive relationship. For example, research Hussain & Khayat (2021) found that transformational leadership increases job satisfaction, which further contributes to organizational commitment. Studies Alatailat et al. (2019) on the hospitality sector also prove that

the transformational leadership dimension is able to increase intrinsic motivation and employee job satisfaction. Thus, the consistency of the results of this study with previous findings strengthens the evidence that transformational leadership is a significant predictor for cross-sector and cross-cultural job satisfaction.

The effect of job satisfaction on organizational citizenship behavior

The results of this study show that job satisfaction has a positive and significant effect on organizational citizenship behavior (OCB). These findings confirm that when employees feel satisfied with their work, both from intrinsic aspects such as job meaning and recognition, as well as extrinsic aspects such as compensation and work environment, they are encouraged to display extra-role behaviors that go beyond formal demands. These behaviors include a willingness to help colleagues, maintaining an organizational image, and a willingness to take on additional responsibilities. Thus, job satisfaction plays a role not only as an indicator of individual well-being, but also as a key factor in strengthening social cohesion and organizational effectiveness.

When an organization meets employee needs and expectations through job satisfaction, employees will respond by demonstrating voluntary behavior that benefits the organization. These findings are also consistent with the Job Characteristics Model which states that meaningful work, autonomy, and the presence of feedback will increase intrinsic motivation, which ultimately encourages extra behaviors such as OCB (Urbini et al., 2023). In other words, job satisfaction is not only the end result of organizational management, but also a trigger for prosocial behavior that strengthens collective performance. The findings of this study are in line with various previous empirical studies. For example, Torlak et al. (2021) affirm that job satisfaction is one of the strongest predictors of OCB. Studies in Indonesia also support these results, such as a study by Nurjanah et al. (2020) which found that employees with high levels of job satisfaction show a greater tendency to engage in OCB.

The effect of job satisfaction mediation on transformational leadership on organizational citizenship behavior

The findings of this study confirm that job satisfaction plays a significant mediator in the relationship between transformational leadership and organizational citizenship behavior (OCB). This means that the influence of transformational leadership not only directly encourages the realization of extra-role behaviors, but also works through increasing employee job satisfaction. This is consistent with the framework of Social Exchange Theory where employees who feel treated fairly, cared for, and valued by their leaders will show positive reciprocity in the form of organizational civic behavior. Thus, job satisfaction acts as a psychological mechanism that bridges the leadership style and behavior of employees.

These results reinforce the argument that transformational leadership has the power to build employee emotional satisfaction, which further increases their tendency to help colleagues, take initiative, and show loyalty to the organization. Transformational leadership encourages deep emotional engagement so that subordinates are more satisfied with their work and motivated to contribute beyond the formal job description. In the context of modern organizations facing a dynamic business environment, these findings show that leaders who are able to combine inspirational vision with individualized attention can maintain employee job satisfaction while giving rise to OCB as a form of support for organizational sustainability. Previous studies support this result. For example, research on the automotive sector in Indonesia found that transformational leadership has a positive effect on job satisfaction, which in turn mediates relationships with OCB (Andiningtyas et al., 2025). Other research in the education sector also shows that job satisfaction is an important mediator that strengthens the link between leadership styles and employee extra-role behaviors (Naimah et al., 2022).

4. CONCLUSION

This study found that transformational leadership has a positive and significant effect on organizational citizenship behavior (OCB), both directly and through job satisfaction mediation. The results of the analysis show that transformational leadership not only increases employee job satisfaction but also encourages extra-role behaviors that contribute to organizational effectiveness. Mediation of job satisfaction has proven to be significant, indicating that this psychological factor plays an important role as a connecting mechanism between leadership style and employee behavior. Thus, this study confirms that transformational leaders can create a more meaningful work climate, increase job satisfaction, and strengthen OCB.

Theoretically, this study enriches the literature on the relationship between transformational leadership, job satisfaction, and OCB, particularly in the context of organizations in developing countries like Indonesia. This study makes an important contribution to the development of leadership studies in developing countries. The results expand the application of transformational leadership theory by showing that the TL–OCB relationship applies not only in developed countries but also in the collectivist cultural context of Indonesia. These findings also confirm the Social Exchange Theory that fair and inspirational leadership creates positive reciprocity in the form of job satisfaction and extra-role behavior. However, the results also provide a new nuance by showing that the direct effect of TL on OCB is much stronger than the mediation pathway, thus opening up discussion to challenge the assumption that job satisfaction is always the primary mechanism. Thus, this study enriches transformational leadership theory in the context of developing countries and provides directions for further research.

Practically, this study contributes by emphasizing the importance of developing a transformational leadership style in organizations, particularly in the aspects of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration to increase employee volunteer behavior. These findings have important managerial implications. Organizations are advised to invest in transformational leadership training programs that focus on inspirational communication skills, empathy, and subordinate empowerment, establish a fair reward system, and pay attention to employee welfare holistically. Efforts to increase job satisfaction, through open communication, career support, and the creation of a healthy work environment, will strengthen the emergence of OCB in a sustainable manner. Thus, a leadership development strategy that focuses on employee empowerment can be the foundation for achieving organizational competitive advantage in the era of disruption.

This research has several limitations. First, the sample size is relatively small, so the generalization of the results is still limited. Second, data is collected through a self-report survey method, which has the potential to cause subjective bias. Third, the study focused only on transformational leadership and job satisfaction, while other factors, such as organizational culture, work attachment, or psychological climate, have not been included in the analysis model. Future research is recommended to involve a larger and more diverse sample, both across sectors and across cultures, in order to improve the generalization of findings. In addition, the use of a longitudinal design can provide a more comprehensive understanding of the causal relationships between variables over time. Researchers can also further test other moderator variables, such as organizational culture, work engagement, or trust in leaders, to expand understanding of leadership dynamics and OCB. Thus, a more comprehensive study will further strengthen academic contributions while providing practical recommendations for human resource management in various organizational contexts.

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