

Work Engagement as a Mediator Between Servant Leadership, Organizational Culture, and Job Satisfaction on Employee Performance in SPK School

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Abstract

This study aims to examine the influence of servant leadership, organizational culture, and job satisfaction on employee performance, with work engagement as a mediating variable in the context of the Cooperative Education Unit (SPK). A quantitative approach was used, collecting data through a survey of 110 respondents from one of the SPK educational institutions, Global Jaya School in South Tangerang. Data analysis was conducted using the PLS-SEM (Partial Least Squares Structural Equation Modeling) method. The results indicate that servant leadership significantly influences employee performance, both directly and indirectly through work engagement, while organizational culture and job satisfaction have no significant effect. The practical implications of these findings suggest that strengthening servant leadership and increasing work engagement are key strategies for improving employee performance in the SPK educational environment.

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1. Introduction

In today's era of global competition and digital advancement, organizations, including educational institutions, face increasingly complex and dynamic challenges. Technological changes, the rapid flow of information, and quality demands from various stakeholders are driving educational institutions to adopt an adaptive and people-oriented managerial approach. In this context, Cooperative Education Units (SPK) such as Global Jaya School face a real challenge in maintaining and improving overall employee performance. A multicultural work environment, the demands of national and international curricula, and high expectations from parents and the community require a human resource management system that is not only efficient but also humanistic, collaborative, and sustainable.

Phenomena emerging in SPK environments include declining work motivation, increasing burnout, and weakening employee engagement (work disengagement). This directly impacts the quality of educational services and team cohesion, particularly when generational gaps and role differences between academic and non-academic staff are not effectively managed. A global survey by Gallup noted that only 21% of employees are truly engaged in their work. This state of disengagement not only decreases productivity and increases absenteeism, but also diminishes employee loyalty and leads to significant economic losses. This phenomenon becomes even more critical in knowledge-based organizations, such as technology-based companies, educational institutions, and the service sector. In these organizations, the role of humans as the primary driving force makes non-technical factors such as leadership style, organizational culture, and job satisfaction crucial for employee performance. This challenge underscores the urgency of re-evaluating leadership strategies, work culture systems, and psychosocial factors that support employee performance holistically.

One approach deemed relevant to addressing these challenges is servant leadership, a leadership model that focuses on serving employees by prioritizing their well-being and growth. Research by Jonker and Dube (2025)



and DeConinck et al. (2024) suggests that servant leadership not only promotes psychological well-being and job satisfaction but also fosters an ethical climate and reinforces positive organizational behavior. In a collaborative, relationship-based educational context, this type of leadership is crucial for building trust and loyalty in cross-functional and generational teams. Similarly, organizational culture is also essential in shaping work behaviors and attitudes, serving as a key bridging factor between the influence of leadership style on work behavior. An inclusive, collaborative, and adaptable organizational culture has been shown to increase motivation, cohesion, and work engagement in achieving shared goals (Pham et al., 2024).

Another equally important factor is job satisfaction, which refers to how satisfied employees feel with their work overall. This reflects their subjective perceptions of various aspects of their work, including interpersonal relationships, role clarity, opportunities for self-development, and performance recognition. Gazi et al. (2024) and Lay-Raby et al. (2025) emphasized that job satisfaction significantly contributes to increased employee productivity and loyalty, both in the industrial and educational sectors. However, the influence of servant leadership, organizational culture, and job satisfaction on performance is not always direct; rather, it is strongly influenced by work engagement, a positive psychological state characterized by enthusiasm, dedication, and full involvement in work. Neuber et al. (2021) and Abdelwahed & Al Doghan (2023) emphasized that work engagement plays a crucial role as a bridge between supportive working conditions and optimal performance, especially in work environments that demand creativity, collaboration, and high commitment, such as SPK educational institutions.

This study aims to comprehensively examine how servant leadership, organizational culture, and job satisfaction simultaneously influence employee performance, with work engagement as a mediating variable. The research focuses on the education sector, specifically the Cooperative Education Unit, Global Jaya School, which demands high engagement and synergistic teamwork. This quantitative study will involve all academic and non-academic staff. This research focus is important because so far there are still few studies that integrate these four variables into a complete structural model, especially within Cooperative Education Units (SPK) in Indonesia. Most previous studies only highlight partial relationships or are conducted outside the education sector. Therefore, this study offers novelty in the form of developing a multidimensional conceptual model that integrates a humanistic leadership approach, organizational culture, job satisfaction factors, and psychological attachment within a single framework to improve employee performance in SPK institutions. This research is expected to provide practical contributions to human resource management in international schools and serve as a strategic reference in improving the performance and sustainability of collaborative work-based educational institutions.

2. Literature Review and Hypothesis Development

2.1. Servant Leadership on Employee Performance

Empirical research shows that servant leadership plays a role in improving employee performance. Another study by Zada et al. (2024) confirmed that servant leadership improves employee task performance through the mediation of promotive voice and moderating leader-leader exchange, demonstrating that this leadership style fosters proactive work engagement for organizational improvement. In the Nigerian context, Ivwighrevero et al. (2023) showed that servant leadership increases job engagement, which in turn contributes positively to employee performance, indicating a partial mediation relationship between the two variables. Furthermore, Okai et al. (2025) highlighted through a qualitative study that the Incarnational Servant Leadership model can increase employee strategic engagement by emphasizing ethical values, trust, and psychological safety, all of which lead to improved team performance. Finally, Bieńkowska et al. (2022) demonstrated that servant leadership reduces turnover intentions and significantly improves job performance, especially when employees possess high dynamic capabilities. Therefore, hypothesis H1 is strongly supported by empirical data across contexts and sectors.

H1: Servant leadership has a positive impact on employee performance

2.2. Servant leadership on work engagement

This finding is supported by Rahal & Farmanesh (2022), who highlighted the role of trust in leaders as a mediator strengthening the relationship between servant leadership and work engagement, particularly in the post-pandemic academic context. Furthermore, Jonker & Dube (2025) in their scoping literature review study showed that servant leadership is consistently associated with positive organizational outcomes, including work engagement, through increased psychological well-being and a supportive work climate. Meanwhile, Usman et al. (2023) empirically demonstrated that servant leadership influences work engagement, which in turn mediates improved job performance, with the moderating role of trust in leaders and self-efficacy. Therefore, hypothesis H2 has a solid empirical foundation across various contexts and methodological approaches.

H2: Servant leadership has a positive effect on work engagement



2.3. Servant leadership influences employee performance through work engagement as a mediator.

Utami and Ardiyanti's (2023) research in the Indonesian technology sector found that servant leadership can improve adaptive performance through the mediation of work engagement, although trust in the leader did not significantly mediate. Bigar and Puspita (2024) found that work engagement acted as a significant mediator between servant leadership and employee performance, particularly in the public transportation sector. Overall, these four studies consistently show that servant leadership not only has a direct impact but also strengthens employee performance through the mediation of work engagement, thus supporting hypothesis H3.

H3: Work engagement can mediate the effect of servant leadership on employee performance.

2.4. Organizational culture on employee performance

Seven empirical studies have consistently shown that organizational culture contributes positively to improved employee performance. Pham et al. (2024) showed that five dimensions of organizational culture, such as corporate values, leadership, and relationships with the business environment, directly improve performance in a foreign, sustainability-based logistics company. A similar finding was confirmed by Opoku et al. (2022) in the banking sector in Ghana, where an entrepreneurial culture drives greater performance improvements than bureaucratic or consensual cultures. Finally, Urrutia Pereira et al. (2021) show that the connection between organizational culture and the environment directly influences engagement and performance, particularly in the context of Industry 4.0. Thus, based on these seven studies, it can be concluded that organizational culture is consistently a key driver of improved employee performance, thus empirically supporting hypothesis H4.

H4: Organizational culture positively impacts employee performance

2.5. Organizational culture on work engagement

Moreno-Martínez & Sánchez-Martínez (2025) also identified that job satisfaction, as a product of work engagement, positively contributes to work engagement in the healthcare sector and protects against emotional exhaustion. Finally, Bilalli et al. (2023) found that components of work engagement significantly increase work engagement dimensions such as vigor, dedication, and absorption in the public education sector. Overall, strong empirical evidence suggests that healthy and inclusive work engagement fosters high work engagement, supporting the validity of hypothesis H5.

H5: Organizational culture has a positive effect on work engagement

2.6. Organizational culture influences employee performance, mediated by work engagement.

Moqadi and Hamdan (2025) also demonstrated that organizational culture has a positive effect on employee engagement and performance. Although the mediation was not statistically significant, work engagement still acts as a strengthening pathway for this relationship. Research by Pereira et al. (2021) in the context of Industry 4.0 also showed that an organizational learning culture directly drives work engagement, which is correlated with improved performance and reduced turnover intention. Thus, these five studies consistently demonstrate that an organizational culture that supports employee learning and participation can improve performance, both directly and through increased work engagement as a mediator. This strengthens the empirical basis for hypothesis H6. H6: Organizational culture influences employee performance, mediated by work engagement

2.7. Job satisfaction on employee performance

Research consistently shows that job satisfaction has a positive and significant effect on employee performance. Gazi et al. (2022) found that job satisfaction significantly improved the performance of sugar industry workers in Bangladesh, where job factors influenced performance more than personal characteristics. Research by Pinheiro & Palma-Moreira (2025) confirms that job satisfaction acts as a mediator in improving perceived performance, especially in hybrid and remote work contexts, which offer greater flexibility and satisfaction. Overall, these findings confirm that job satisfaction is a key determinant of employee performance, both through perception, motivation, and psychological well-being. Therefore, hypothesis H7 receives strong empirical support across sectors and countries.

H7: Job satisfaction has a positive impact on employee performance

2.8. Job satisfaction has a positive effect on work engagement

Several studies have demonstrated that job satisfaction positively contributes to increased work engagement. Bakotić & Alvir (2024) concluded that job satisfaction is the strongest predictor of work engagement compared to individual values, with regression results indicating a significant contribution to employee morale, dedication, and engagement. Ibrahim and Hussein (2024) found that job satisfaction was significantly positive and positively related to work engagement in the Egyptian oil and gas industry, indicating that job satisfaction strengthens engagement. Based on these five studies, it is clear that job satisfaction is a key driver of increased work engagement across various sectors and countries. Therefore, hypothesis H8 receives strong empirical support.



H8: Job satisfaction has a positive effect on work engagement

2.9. Job satisfaction influences employee performance, mediated by work engagement.

Gazi et al. (2024) in the context of industrial workers in Bangladesh confirmed that job satisfaction influences work behaviors that directly contribute to improved performance. This study emphasized that engagement is an important channel for this effect. Similar findings were presented by Zang and Feng (2023), who found that among kindergarten teachers in China, job satisfaction significantly influenced engagement, which in turn positively impacted performance through increased dedication and vigor. Finally, Ivwighrevero et al. (2023) demonstrated that despite servant leadership being the primary variable, work engagement remained a significant partial mediator in influencing performance, which broadly supports the similar pathway for job satisfaction. Thus, the five studies reviewed consistently demonstrate that job satisfaction increases employee engagement, with work engagement acting as a mediating mechanism that strengthens this relationship. This strengthens the validity of hypothesis H9.

H9: Job satisfaction influences employee performance, mediated by work engagement.

2.10. Work engagement on employee performance.

Several international studies have demonstrated that work engagement plays a significant role in improving employee performance. A meta-analysis by Neuber et al. (2021), which included 179 effectiveness studies from 139,182 respondents, showed a strong positive relationship between work engagement and task performance, making it one of the strongest predictors of employee performance across sectors and regions. A study by Abdelwahed & Al Doghan (2023) in higher education institutions in Saudi Arabia also confirmed that work engagement, consisting of vigor, dedication, and absorption, significantly influences productivity and academic and administrative employee performance. Research by Ivwighrevero et al. (2023) showed that engagement has a partial but significant mediating role in improving employee performance in the public sector in Nigeria, emphasizing the importance of work engagement in strengthening performance outcomes. Based on empirical evidence from these five studies, work engagement has been shown to be a significant determinant in driving employee performance, strongly supporting the validity of hypothesis H10.

H10: Work engagement has a positive influence on employee performance.

3. Research Methodology

This study employed a quantitative approach with data collection through a survey. The aim of this study was to examine the influence of servant leadership, organizational culture, and job satisfaction on employee performance, with work engagement as a mediating variable.

The population in this study were employees of Satuan Pendidikan Kerjasama Global Jaya School in South Tangerang. This study used a simple random sampling technique, a method in which each individual in the population has an equal chance of being randomly selected as a sample. This means that the selection of one individual does not affect the chances of other individuals being selected.

Data collection was conducted using a closed-ended questionnaire using a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The measurement instrument was developed based on indicators from previous research: Servant Leadership: Adapted from Spears (1995), Organizational Culture: Based on the dimensions of Quinn & Rohrbaugh (1983), Job Satisfaction: Based on Herzberg's Two-Factor Theory (1959), Work Engagement: Using the UWES measurement tool (Schaufeli & Bakker, 2003) and Employee Performance: Based on Bernardin & Russell (1993).

This study used the PLS-SEM (Partial Least Squares Structural Equation Modeling) approach. Using the PLS-SEM approach, each construct was analyzed through indicators obtained from the questionnaire, which were then statistically tested. The outer model test was used to assess the validity and reliability of the indicators, while the inner model was used to examine the relationships between latent variables. The results of this model will show the significance of the relationships between variables, the R-square value, the path coefficient value, and the mediation test using the bootstrapping approach. Thus, this approach allows for a comprehensive evaluation of the contribution of each variable in improving work engagement and employee performance, in accordance with publication methodology standards in reputable international journals.

4. Discussion of Results

This study involved 111 respondents, with a diverse distribution of biographical characteristics. Based on gender, the majority of respondents were male (52.3%), followed by female (46.8%). By generation, the majority of respondents were from Generation Y/Millennials (69.4%), followed by Generation X (27.9%), and Generation Z (1.8%). The highest level of education showed that the majority of respondents held a bachelor's degree (S1) (82.0%), while another 17.1% held a master's degree (S2).



In terms of job position, the majority of respondents were teachers (70.3%), while 28.8% worked as administrative staff. In terms of length of service, the largest proportion were respondents with more than 10 years of service (41.4%), followed by those with 1–5 years (29.7%), 6–10 years (24.3%), and less than 1 year (3.6%). This demographic diversity reflects the diverse backgrounds of the workforce in educational institutions and provides a representative basis for the analysis of relationships between variables.

Table 1. Construct Reliability and Validity

Variable & Indicators	Outer Loading	CA	CR	AVE
Employee Performance				
EP1	0,815	7	0,916	0,732
EP2	0,876	0,878		
EP3	0,867	1		
EP4	0,864	7		
Job Satisfaction				
JS2	0,816		0,839	0,588
JS3	0,774	0,763		
JS4	0,877			
Organizational Culture				
OC1	0,826		0,869	0,624
OC2	0,781	0.010		
0C3	0,774	0,819		
OC4	0,778			
Servant Leadership				
SL1	0,861		0,918	0,738
SL2	0,884	0,882		
SL3	0,836	0,882		
SL4	0,854	1		
Work Engagement				
WE1	0,897		0,981	0,736
WE2	0,860	0.001		
WE3	0,823	0,881		
WE4	0,849			

The results of the reliability and construct validity analysis indicate that all latent variables in the model meet the criteria for good internal consistency and convergent validity. Cronbach's alpha values ranged from 0.763 (JS) to 0.882 (SL), above the minimum threshold of 0.70, indicating adequate internal reliability. Composite Reliability (CR) for all constructs also exceeded the ideal value of 0.70, with the highest value for WE (0.895) and the lowest for JS (0.839), indicating measurement stability between items. Meanwhile, the Average Variance Extracted (AVE) values for all constructs exceeded the minimum threshold of 0.50, indicating that each construct explained more than 50% of the variance in its indicator. This indicates that all constructs in the model have met convergent validity, thus concluding that the measurement model in this study is valid and reliable for use in testing the structural model.

Table 2. Fornell-Larcker Criterion

Variable	EP	JS	OC	SL	WE
EP	0,856				
JS	0,320	0,767			
OC	0,339	0,535	0,790		
SL	0,463	0,540	0,499	0,859	
WE	0,416	0,249	0,330	0,493	0,858

The results of the discriminant validity analysis using the Fornell-Larcker criterion indicate that the square root of the AVE (shown on the diagonal) for each construct is higher than the correlations between the other constructs (values below the diagonal). For example, the value for the Employee Performance (EP) construct is 0.856, higher than its correlations with other constructs such as JS (0.320) or SL (0.463). Similar results are seen for other constructs, including Job Satisfaction (0.767), Organizational Culture (0.790), Servant Leadership (0.859), and Work Engagement (0.858). This indicates that each construct explains more of the variance in its own indicators than the variance shared with other constructs. Therefore, it can be concluded that the measurement model meets the criteria for discriminant validity and is suitable for proceeding to structural model testing.



Table 3. R Square (R2)

Variables	R-square	R-square adjusted
EP	0,313	0,266
WE	0,256	0,235

The R-square value indicates that the model is able to explain 31.3% of the variation in Employee Performance (EP) and 25.6% of the variation in Work Engagement (WE). Based on the R-square interpretation criteria in the social and management context (Hair et al., 2021), this value is in the moderate category, indicating that the independent constructs used have sufficient explanatory power for the dependent variable. The adjusted R-square value (0.266 for EP and 0.235 for WE) also indicates the stability of the model after correction for the number of predictors. Overall, these results indicate that the model has adequate predictive power and is suitable for further analysis in PLS-SEM-based research.

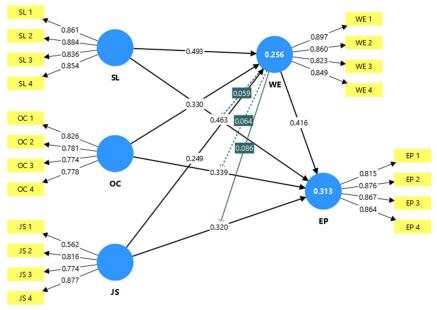


Figure 1. Path analysis

Table 4. Hypothesis

Hypot	hesis	Standardized Coefficient	T-statistics	P-values	Result
H1:	SL -> EP	0,135	2,649	0,008	Hypothesis Supported
H2:	SL -> WE	0,115	4,050	0,000	Hypothesis Supported
H3:	WE \rightarrow SL \rightarrow EP	0,113	2,032	0,042	Hypothesis Supported
H4:	OC -> EP	0,124	0,330	0,735	Hypothesis Not Supported
Н5:	OC -> WE	0,109	1,274	0,203	Hypothesis Not Supported
Н6:	WE -> OC -> EP	0,148	0,678	0,498	Hypothesis Not Supported
H7:	JS -> EP	0,155	0,107	0,915	Hypothesis Not Supported
H8:	JS -> WE	0,147	0,521	0,602	Hypothesis Not Supported
Н9:	WE -> JS -> EP	0,127	0,099	0,921	Hypothesis Not Supported
H1:	WE -> EP	0,121	2,598	0,009	Hypothesis Supported

The analysis shows that servant leadership has a significant positive effect on employee performance (p=0.008). This finding is supported by research by DeConinck et al. (2024), who confirmed that servant leadership directly and indirectly contributes to increased customer value, organizational identification, and sales force performance, surpassing the influence of other leadership styles such as transformational and ethical. Zada et al.



(2023) also demonstrated that servant leadership positively impacts work-role performance through the mediation of knowledge sharing and self-efficacy, strengthening the role of servant leadership in fostering collaboration-based performance.

The analysis shows that servant leadership has a significant positive effect on work engagement (p=0.000). This suggests that servant leadership plays a crucial role in enhancing work engagement through an approach focused on employee well-being and growth. Cai et al. (2024) stated that servant leadership significantly improves work engagement in the context of project-based organizations by increasing employee resilience and organizational support, consistent with conservation of resources (COR) and job demands–resources (JD–R) theories. Kenek (2024) confirmed that servant leadership directly increases work engagement, with personorganization fit as a partial mediator, reflecting the alignment of values and emotional bonds between employees and the organization.

The analysis shows that work engagement can mediate the relationship between servant leadership and employee performance. Research shows that work engagement significantly mediates the relationship between servant leadership and employee performance. Usman et al. (2023) found that servant leadership indirectly contributes to improved employee performance through the mediating role of work engagement. This effect is reinforced by trust and self-efficacy. Aruoren et al. (2023) also demonstrated partial mediation of job engagement in this relationship, confirming that servant leadership creates a psychological bond that drives improved work performance.

The analysis shows that organizational culture does not directly affect employee performance (p>0.05). This contradicts the research findings of Hamkar and Watanyar (2024), who concluded that organizational culture plays a vital role in increasing productivity and work motivation, as well as contributing to customer loyalty. Meanwhile, Pereira et al. (2021) emphasized that a learning culture in IT organizations impacts work engagement, which drives long-term performance. Yang et al. (2024) highlighted that a culture that supports psychological well-being and job satisfaction significantly improves performance and productivity. Hamkar and Watanyar (2024) also emphasized that although not all cultural dimensions had a significant effect, mission and engagement proved to be key determinants of work performance.

The analysis showed that organizational culture did not directly influence work engagement (p>0.05). The results of the study indicate that organizational culture does not play a significant role in increasing employee work engagement. A study by Song et al. (2023) showed that organizational cultural tightness can increase work engagement during the COVID-19 pandemic, especially with the support of transformational leadership and positive interactions between team members. Research by Şengün & Tuğrul (2023) confirmed that clan and hierarchical cultures in Turkish organizations both encourage work engagement, reflecting the influence of collectivistic culture on employee engagement.

The analysis shows that work engagement cannot mediate the relationship between organizational culture and employee performance. This contradicts several studies that show that organizational culture impacts employee performance, with work engagement as a mediator. These results also contradict research by Abdelwahed and Al Doghan (2023), who found that organizational factors such as learning culture, management support, and the work environment directly increase productivity and employee performance through work engagement in Saudi Arabian higher education institutions. Meanwhile, Naqshbandi et al. (2024) confirmed that an organizational learning culture not only increases organizational effectiveness but also makes work engagement a key mediating mechanism in the manufacturing and service sectors in India.

The analysis showed that job satisfaction did not significantly influence employee performance (p=0.915). This finding is not supported by research by Pirrotta et al. (2024), who highlighted the importance of internal communication in public organizations, which strengthens job satisfaction and directly impacts organizational performance in the Italian healthcare sector. A study by Yang et al. (2024) also confirmed that job satisfaction mediates the relationship between psychological well-being and employee performance, where a supportive work environment increases self-confidence and productivity. Furthermore, these results contradict research by Mustafa-Sadiku (2025), which showed that job satisfaction accounted for over 70% of the variation in employee performance across sectors in Kosovo, and the effect was even greater when combined with work motivation. Finally, Memon et al. (2023) in the Pakistani construction industry demonstrated that job satisfaction significantly improves employee performance by increasing commitment and loyalty.

The analysis showed that job satisfaction had no significant effect on work engagement (p=0.602). This contradicts research by Abdelwahed & Al Doghan (2023), which confirmed that the work environment and job satisfaction foster dimensions of work engagement such as vigor, absorption, and dedication, which ultimately have a positive effect on productivity and employee performance in the higher education sector. Furthermore, this research also contradicts the findings of Romero-Martín et al. (2022) in a study of the COVID-19 pandemic in the UK found that participants with high levels of job satisfaction recorded significantly higher work engagement scores, indicating a strong emotional link between job satisfaction and engagement.



The analysis results show no evidence that work engagement mediates the relationship between job satisfaction and employee performance. This finding contradicts the research of Cerqueira et al. (2025) in the Brazilian software industry, which found that the combination of job satisfaction and high engagement resulted in better productivity and work quality in a remote work environment. It also contradicts Riyanto et al. (2021) who found that job satisfaction significantly influences employee engagement through employee engagement mediation, particularly in the information technology sector in Indonesia. Work engagement acts as an important channel that indirectly transmits the influence of job satisfaction on employee engagement.

The analysis shows that work engagement has a significant positive effect on employee performance (p=0.009). This finding is supported by the research of Alnagbi et al. (2025) in the United Arab Emirates, which found that work engagement directly improves individual work performance, with work-life balance acting as an additional mediator in strengthening this relationship, reflecting the importance of a work climate that supports engagement. Finally, the study by Ye et al. (2024) showed that work engagement not only increases positive affect and creativity but also has a significant impact on work output in the technology and service sectors in China, reinforcing the relevance of work engagement as a driver of innovative performance.

5. Conclusion

This study aimed to examine the influence of servant leadership, organizational culture, and job satisfaction on employee performance, with work engagement as a mediating variable in the Cooperative Education Unit (SPK) educational institution. The results of the PLS-SEM analysis showed that servant leadership has a significant direct effect on employee performance, as well as an indirect effect through work engagement as a mediator. Furthermore, work engagement also proved to have a significant direct effect on employee performance, confirming the central role of work engagement as a link between leadership and performance. Conversely, organizational culture and job satisfaction variables did not show a significant effect on work engagement or employee performance, either directly or indirectly, within the context of this model.

5.1. Study Limitations and Suggestions for Further Research

This study has several limitations. First, the relatively small number of respondents (n = 110) and the limited sampling at one SPK educational institution may limit the generalizability of the findings to other SPK schools or different educational sectors. Second, the cross-sectional design of this study does not allow for observing the dynamics of the relationships between variables over time. Third, although the model tests mediation effects, other variables such as perceived organizational support, psychological safety, or leadership trust have not been included and may be relevant in explaining performance. Therefore, further research is recommended to: (1) expand the number and variety of respondents from various SPK schools or national schools; (2) use a longitudinal or mixed quantitative-qualitative approach to capture temporal and contextual dimensions; and (3) integrate additional, broader variables within the mediation and moderation model framework to gain a more comprehensive understanding of the determinants of employee performance in the education sector.

References

- Abdelwahed, N. A. A., & Doghan, M. A. A. (2023). Developing employee productivity and performance through work engagement and organizational factors in an educational society. *Societies*, 13(3), 65.
- Alnagbi MA, Aldabbas H, Gernal L, Elamin AM and Ahmed AZE (2025) Work engagement and individual work performance in the UAE: the mediating role of work-life balance. Front. Sociol. 10:1567207. https://doi.org/10.3389/fsoc.2025.1567207
- Bakotić, D., & Alvir, A. (2024). Individual values and job satisfaction as work engagement predictors: Example from Croatia. *Zagreb International Review of Economics & Business*, 27(2), 291–310. https://doi.org/10.2478/zireb-2024-0028
- Bernardin, H. J., & Russell, J. E. A. (1993). Human Resource Management: An Experiential Approach. McGraw-Hill.
- Bieńkowska, A., Koszela, A., Ludwikowska, K., & Tworek, K. (2022). Turnover-Mitigating Effect of Servant Leadership on Job Performance. Engineering Management in Production and Services, 14, 67 81. https://doi.org/10.2478/emj-2022-0017.
- Bilalli Abduraimi, P., Mustafi, M., & Islami, X. (2023). The role of organizational culture on employee engagement. *Business: Theory and Practice*, 24(1), 109–122. https://doi.org/10.3846/btp.2023.17241
- Cai, M., Wang, M., & Cheng, J. (2024). The effect of servant leadership on work engagement: The role of employee resilience and organizational support. *Behavioral Sciences*, 14(4), 300.
- Cerqueira, L., Nunes, L., Guerra, R., Malheiros, V., Freire, S., Carneiro, G., Leite, J. C., Spínola, R., Macedo Santos, J. A., & Mendonça, M. (2025). Assessing software practitioners' work engagement and job satisfaction in a large software company—What we have learned. SN Computer Science, 6(3), 273. https://doi.org/10.1007/s42979-025-03772-1



- Deconinck, J., Johnson-Busbin, J., & Deconinck, M. B. (2024). SERVANT LEADERSHIP IN SALES: EXPLORING ITS DIRECT AND INDIRECT EFFECTS ON SALESPERSON PERFORMANCE. Global Journal of Management and Marketing, 8(1), 71-87. Retrieved from https://www.proquest.com/trade-journals/servant-leadership-sales-exploring-direct/docview/3183028053/se-2
- Gazi, M. A. I., Islam, M. A., Shaturaev, J., & Dhar, B. K. (2022). Effects of job satisfaction on job performance of sugar industrial workers: Empirical evidence from Bangladesh. *Sustainability*, 14(21), 14156.
- Gazi, M. A. I., Yusof, M. F., Islam, M. A., Amin, M. B., & Senathirajah, A. R. S. (2024). *Analyzing the impact of employee job satisfaction on their job behavior in the industrial setting: An analysis from the perspective of job performance*. Journal of Open Innovation: Technology, Market, and Complexity, 10(4), 100427. https://doi.org/10.1016/j.joitmc.2024.100427
- Hamkar, Nasir & Watanyar, Abdul. (2024). The Effect of Organizational Culture on Employee's Performance and Productivity. Integrated Journal for Research in Arts and Humanities. 4. 115-118. http://dx.doi.org/10.55544/ijrah.4.4.19
- Ibrahim, B. A., & Hussein, S. M. (2024). Relationship between resilience at work, work engagement and job satisfaction among engineers: A cross-sectional study. *BMC Public Health*, 24, 1077. https://doi.org/10.1186/s12889-024-18507-9
- Jonker, C.S., & Dube, S.C. (2025). Servant leadership and well-being: A scoping review of positive organisational outcomes. SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur, 23(0), a2783. https://doi.org/10.4102/sajhrm.v23i0.2783
- Kenek, G. (2024). The Effect of Servant Leadership on Work Engagement: The Mediating Role of Person-Organization Fit. Mehmet Akif Ersoy Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi. https://doi.org/10.30798/makuiibf.1489564.
- Memon, A. H., Khahro, S. H., Memon, N. A., Memon, Z. A., & Mustafa, A. (2023). Relationship between job satisfaction and employee performance in the construction industry of Pakistan. *Sustainability*, 15(11), 8699.
- Moreno-Martínez, M., & Sánchez-Martínez, I. (2025). The Associated Factors of Work Engagement, Work Overload, Work Satisfaction, and Emotional Exhaustion and Their Effect on Healthcare Workers: A Cross-Sectional Study. In *Healthcare* (Vol. 13, No. 2, p. 162). MDPI.
- Moqadi, Saed & Hamdan, Akram. (2025). Organizational culture and organizational performance in the Palestinian public sector: The mediating role of employee engagement. International Journal of Management & Entrepreneurship Research. 7. 152-170. http://dx.doi.org/10.51594/ijmer.v7i2.1816
- Mustafa-Sadiku, K. (2025). Job satisfaction and motivation in enhancing performance. International Journal of Scientific and Research Publications, 15(2), 1–7. https://doi.org/10.29322/IJSRP.15.02.2025.p1580
- Naqshbandi, M. M., Said, T., & Hisa, A. (2024). Organizational effectiveness: The role of culture and work engagement. *Management Decision*, 62(3). https://doi.org/10.1108/MD-11-2023-2180
- Neuber, L., Englitz, C., Schulte, N., Forthmann, B., & Holling, H. (2021). How work engagement relates to performance and absenteeism: a meta-analysis. *European Journal of Work and Organizational Psychology*, 31(2), 292–315. https://doi.org/10.1080/1359432X.2021.1953989
- Rahal, F. E. Z. M., & Farmanesh, P. (2023). Does servant leadership stimulate work engagement in the workplace? The mediating role of trust in leader. Sustainability, 15(5), 4307. https://doi.org/10.3390/su15054307
- Usman, A., Abdullah, M., & Basit, A. (2024). The Role of Servant Leadership in Predicting Job Performance of Public Sector Employees: Examining the Mediation of Work Engagement and Moderation of Trust in Leader and Self-Efficacy. Bulletin of Business and Economics (BBE), 13(2), 1300-1308. https://doi.org/10.61506/01.00495
- Utami, A. R., & Ardiyanti, N. (2023). Servant leadership's impact on adaptive performance in indonesian tech companies: How work engagement and trust in leaders play a role. *The Asian Journal of Technology Management*, 16(2), 109-120. doi:https://doi.org/10.12695/ajtm.2023.16.2.3
- Odiri, V. I., Aruoren, E. E., & Obieroma, A. A. (2023). Mediating effect of job engagement on the relationship between servant leadership and employee performance. *International Journal of Business and Social Science*, 14(2), 78–91. https://doi.org/10.30845/ijbss.v14n2a8
- Okai, E. S., Boateng, P. A., Akonor, E. F., Owusu, J., & Gyabea, A. (2025). Servant leadership and strategic employee engagement: Incarnational leadership for enhanced workforce commitment. International Journal of Research and Innovation in Social Science, 9(2), 145–151. https://dx.doi.org/10.47772/IJRISS.2025.90400161
- Opoku, E. O., Hongqin, C., & Aram, S. A. (2022). The influence of organizational culture on employee performance in the banking sector: Evidence from GCB Bank, Ghana. European Journal of Business and Management Research, 7(2), 168–175. https://doi.org/10.24018/ejbmr.2022.7.2.1345
- Pereira, G., De Lara Machado, W., & De Oliveira, M. (2021). Organizational learning culture in industry 4.0: relationships with work engagement and turnover intention. Human Resource Development International, 25, 557 577. https://doi.org/10.1080/13678868.2021.1976020.



- Pinheiro, A., & Palma-Moreira, A. (2025). Job Satisfaction, Perceived Performance and Work Regime: What Is the Relationship Between These Variables?. *Administrative Sciences*, 15(5), 175.
- Pirrotta, L., Ferrari, A., Cantarelli, P. and Belle, N. (2024), "Communication and job satisfaction among public employees: evidence from large-scale surveys with healthcare professionals", *International Journal of Public Sector Management*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/IJPSM-07-2024-0222
- Quinn, R. E., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. *Management Science*, 29(3), 363–377.
- Romero-Martín, M., Gómez-Salgado, J., Alcaide-Carrasco, M., Rodríguez-Jiménez, L., Ortega-Moreno, M., López-López, D., & Ruiz-Frutos, C. (2022, June). Impact of the COVID-19 pandemic on the work engagement of UK active employees. In *Healthcare* (Vol. 10, No. 7, p. 1226). MDPI.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293–315.
- Spears, L. C. (1995). Reflections on Leadership: How Robert K. Greenleaf's Theory of Servant Leadership Influenced Today's Top Management Thinkers. John Wiley & Sons.
- Setyo Riyanto, Endri Endri and Novita Herlisha (2021). Effect of work motivation and job satisfaction on employee performance: Mediating role of employee engagement. *Problems and Perspectives in Management*, 19(3), 162-174. doi:10.21511/ppm.19(3).2021.14
- Uyuğ Şengün, D., & Tuğrul, T. (2023). Exploring the relationship between organizational cultures, openness to experience and work engagement. Proceedings of the International Conference on Business Excellence, 17(1), 2108–2118. https://doi.org/10.2478/picbe-2023-0184
- Yang, Y., Obrenovic, B., Kamotho, D. W., Godinic, D., & Ostic, D. (2024). Enhancing job performance: The critical roles of well-being, satisfaction, and trust in supervisor. *Behavioral Sciences*, 14(8), 688. https://doi.org/10.3390/bs14080688
- Ye, L.; Li, Y.; Zhang, N.; Zhang, J. The Influence of Work Engagement on Employee Affect and Creativity: Insights from Occupational Mental Health. Behav. Sci. 2024, 14, 1217. https://doi.org/10.3390/bs14121217
- Zada, M., Khan, J., Saeed, I., & Zada, S. (2024). Examining the nexus between servant leadership and employee task performance: the moderation mediation model. *Humanities and Social Sciences Communications*, 11(1), 1-12
- Zang, L., & Feng, Y. (2023). Relationship between job satisfaction and work engagement in Chinese kindergarten teachers: Vocational delay of gratification as a mediator. *Frontiers in Psychology*, 14. https://doi.org/10.3389/fpsyg.2023.1114519