JMK, VOL. 27, NO. 1, MARCH 2025, 22–32
ISSN 1411-1438 print / ISSN 2338-8234 online
DOI: https://doi.org/10.9744/jmk.27.1.22-32

THE ROLE OF ARTIFICIAL INTELLIGENCE COMPETENCIES, ORGANIZATIONAL SUPPORT, AND EMPLOYEE SELF-EFFICACY IN PREDICTING GOVERNMENT EMPLOYEE PERFORMANCE: A MEDIATION ANALYSIS WITH WORK ENGAGEMENT

Afzil Ramadian[1]*, Chairuddin[2], Loso Judijanto[3], Rachmawati[4], Encep Sopandi[5]
[1] Universitas Djuanda Bogor, Bogor, Indonesia
[2] Sekolah Tinggi Manajemen Informatika dan Komputer Indonesia Mandiri, Bandung, Indonesia
[3] Indonesia Palm Oil Strategic Studies (IPOSS), Jakarta, Indonesia
[4] Universitas Negeri Malang, Malang, Indonesia
[5] Universitas Nurtanio, Bandung, Indonesia
Corresponding author; Email: afzil.ramadian@unida.ac.id[1]

Submitted: Dec. 19, 2024; Reviewed: Feb. 2, 2025; Accepted: Mar. 12, 2025; Published: Mar. 28, 2025

Abstract

The purpose of this research is to determine the role of Artificial Intelligence Competencies, organizational support, and employee self-efficacy in predicting the performance of government employees. This research uses quantitative methods with a type of correlation research. The structural Equation Model (SEM) approach is assisted by the smart PLS application. This approach was chosen because it aims to determine the correlation between the Artifical Intelligence Competencies, Organizational Support, and Employee Self-Efficacy variables: Employee Self-Efficacy. Data analysis in this research used descriptive analysis and statistical analysis. Descriptive analysis is done by describing the results of the sampling percentage. Based on the results of the research, we show that Artificial Intelligence (AI) competencies, employee self-efficacy, work engagement, and organizational support proved to have an important contribution to improving the performance of government employees. Implications of this study indicates the need of holistic approach in human resource management in government sector. Organizations should also develop technical competencies like artificial intelligence and support psychological competencies like self-efficacy and work engagement through just policies and sufficient facilities.

Keywords: Artificial Intelligence competencies, organizational support, employee self-efficacy, government employee performance.

Introduction

The performance of government employees is very important because it relates to the efficiency and effectiveness of public services. Effective governance and high performance guarantee the better execution of government functions, and, as a result, greater public satisfaction, transparency, and accountability. In fact, it also contributes to the overall growth and stability of a nation because employee perform better can empower the implementation of policies more easily, manage the resources more appropriately and fulfil the basic needs of public area more efficiently. Therefore, the study shows that if the government employees are trained with emotional intelligence, it will result with a better performance because of their abilities to control their emotions, to overcome the pressure of making essential decisions and to create a congenial atmosphere at workplace through interpersonal relationships (Ariawan et al., 2023). According (Olufunmilayo & Hannah, 2018) employees who are satisfied do perform better, this suggests that in-order to improve job satisfaction, and ultimately job performance, effective internal control mechanisms must be enforced.

Not only does high employee performance improve service delivery, but it also allows governments to address societal challenges accordingly. This research find that good leadership are the key factor to improve employee performance in goverment agencies. According to (Shantini Rumbi et al., 2021) better leadership positively relates with employee performance with implication that good leadership can create a high-performance environment. Likewise (Hadian, 2022) pointed out that employee engagement is essential in a way that employee involvement means that the worker may perform better comparatively and thus aid in the attainment of goals of the organization.

Problems arising by sub-optimal employee performance can have a broad impact on various

aspects of public service. Impact of sub-optimal employee performance in public service is multifaceted, affecting policy implementation, resource management, and overall service quality. Low employee performance can result in significant delays in policy execution, which hampers the efficiency of public services. The research (Jumanne & Njoroge (PhD), 2019) highlight that improved employee performance is crucial for the effective delivery of public services, suggesting that a lack of performance can lead to inefficiencies that ultimately diminish public trust in government institutions. The problems arising from sub-optimal employee performance in public services are complex and interconnected (Hultman, 2020). Low performance can lead to delays in policy implementation, inefficient resource management, and a decline in service quality.

The consequences of low performance by government employees can be vast and impact many different sectors. This loss of trust can be especially dangerous since it can lead to a citizenry that is less engaged — less willing to comply with government efforts or engage in civic processes — and this can undermine democracy (Shaumi et al., 2023). In addition, poor public service negatively affects the public perception of efficacy (Harits & Bhagya, 2021) which then creates a cycle of discontent and political disengagement from the government. An economic policy guided by (Wahyuningrum & Aisyah, 2023) it is the government that plays a big role in reducing inequality, but if the bureaucratic performance is not effective, it will be an obstacle to the implementation of policies that should be implemented, this leads to inequality.

To overcome the problem of low government employee performance, a solution is needed. These solutions include Artifical Intelligence competencies, organizational support, and employee self-efficacy. The integration of AI into organizational frameworks has become a pivotal factor in enhancing employee performance and operational efficiency (Olan et al., 2022). Sudies conclusion that organizations with robust training programs in AI technologies experience higher levels of employee engagement and performance, as employees more equipped to handle the demands of their roles (Braganza et al., 2021), the development of hybrid skills that complement AI capabilities is crucial for fostering a workforce that can thrive in an AI-enhanced environment (Alsheibani et al., 2020).

Furthermore, the role of organizational support, like training, access to tools and policies that promote employee well-being, is fundamental in establishing an environment conducive to work. One of the biggest support to motivate employees and to work in optimum way. Studies have revealed that perceived organizational support (POS) plays an important role in improving employee well-being and happiness which increases affective commitment and reduces negative outcomes in the organization (Riyono & Rezki, 2022). Based on our findings, such policies will not only play an expanded mediating role for POS, but will also weaken the negative impact of perceived flexibility stigma to promote a relatively healthier employer-employee relationship (White et al., 2020).

Self-efficacy, or employees' belief in their own abilities, also plays an important role. Employees with high self-efficacy are characterized by greater confidence, proactivity, and persistence when faced with challenges. The relationship between self-efficacy and employee performance is well-documented. For instance, (Abun et al., 2021) highlight that self-efficacy is a determining factor in goal attainment, suggesting that management should focus on enhancing employees' self-efficacy levels to improve performance outcomes.

Research by (Rožman et al., 2022) used survey involved randomly selected 317 medium-sized and large Slovenian enterprises. The findings would help managers in creating a successful work environment by applying artificial intelligence in the company. While research (Amit Dubey, 2024), This papers discusses the intersection of AI literacy and Augmented Analytics to suggest strategy for developing a culture of AI fluency among employees. The novelty in this research lies in the development of an integrative model that combines Artificial Intelligence (AI) Competencies, organizational support, and employee self-efficacy as a comprehensive approach to improving government employee performance. This research offers a novel contribution by emphasizing the importance of AI competencies not only for task automation but also as a strategic element in decision making.

Urgency of this research lies in the pressing need to improve the performance of government employees in the challenging digital era. Adequate organizational support is needed to create a conducive environment for technology adoption and employee development. This research offers an integrated solution that can help the government address performance issues, thereby strengthening the competitiveness and effectiveness of public services. Therefore, the purpose of this research is to determine the role of Artificial Intelligence Competencies, organizational support, and employee self-efficacy in predicting the performance of government employees.

Research Methods

Research Design

This research uses quantitative methods with a type of correlation research. The structural Equation

Model (SEM) approach is assisted by the smart PLS application. This approach was chosen because it aims to determine the correlation between Artificial Intelligence Competencies, Organizational Support, and Employee Self-Efficacy variables: Employee Self-Efficacy.

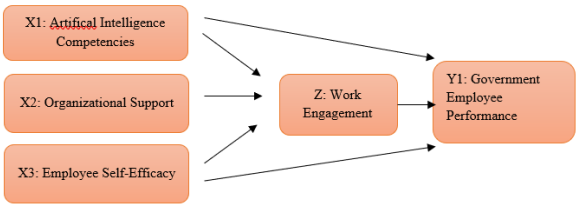

Figure 1. Flow of research hypothesis

Population, Sample and Sampling Technique

In this study, the population studied was SMEs in the government service employee sector in Indonesia. The population includes various types of government service employee SMEs in Malang City. Sampling was conducted using cross-sectional and non-probability methods, namely purposive sampling techniques. In this context, the sample was selected based on the criteria for the level of employee interaction in providing services to the community. Among them are the Education Office, Health Office, Transportation Office, and Environment Office. So that a sample of 100 employees was obtained. This sample size was determined based on methodological considerations to ensure sufficient representation of government service employees while maintaining the feasibility of data collection and analysis. Additionally, the selected sample reflects a diverse range of government functions, which strengthens the generalizability of the findings within the context of public service delivery in Malang City.

Data Collection Technique

The data technique used in this study used a questionnaire distributed to government employees in Malang City with offices that have been determined by the researcher. The distribution of questionnaires in this study refers to an instrument that refers to a Likert scale of 1-5 on items that have been adapted to this study.

Data Analysis Technique

Data analysis in this research uses descriptive analyzing and statistical analyzing. Descriptive analysis is done by describing the results of the sampling percentage. While statistical testing is carried out by 1) analyzing the outer model using convergent validity, discriminant validity, composite reliability, average variance extracted (ave), Cronbach alpha and 2) analyzing the inner model using the coefficient of determination (R2) test and t test. The analysis method uses smartPLS SEM (Structural Equation Modeling) software.

Results and Discussion

Descriptive Analysis

The sharpness and accuracy in the use of analytical tools greatly determines the accuracy in concluding research conclusions. The data analysis used in this research is descriptive analysis. Descriptive analysis with a quantitative approach is broadly used to analyze data by describing or describing the data that has been collected to obtain general conclusions.

The data and steps that can use descriptive analysis techniques include presenting data in tabular form or cross-tabulation frequency distribution, presenting data in visual forms such as histograms, polygons, and diagrams, calculating measures of central tendency, calculating measures of location, and calculating measures of spread.

Table 1
Outer Loading

	AIC	ESF	GEP	OS	WE
AI1	0,903				
AI2	0,908				
AI3	0,904				
AI4	0,915				
AI5	0,861				
ES1		0,834			
ES2		0,871			
ES3		0,896			
ES4		0,872			
ES5		0,911			
GEP1			0,833		
GEP2			0,858		
GEP3			0,828		
GEP4			0,869		
GEP5			0,847		
OS1				0,841	
OS2				0,894	
OS3				0,830	
OS4				0,876	
OS5				0,874	
WE1					0,871
WE2					0,889
WE3					0,847
WE4					0,885
WE5					0,830

Outer loading factor is said to be valid if it has a value greater than 0.7. The output of outer loadings can

be obtained from the PLS Algorithm Report SmartPLS. Based on the table above, it can be seen that each variable in this study has a value greater than 0.7 so that the variables in this study have a correlation and are valid for research and data analysis.

Construct Reliability and Validity

Based on the data test results in the table 2, it can be seen that the variables tested are valid, this is because the r-count> r-table value and is positive. While the reliability value in the table above is reliable because the r value *(Cronbach's alpha)* is greater than 0.60.

Table 2
Construct Reliability and Validity

	Cronbach's alpha	rho_a	rho_c	AVE
Artificial Intelligence Competencies	0,940	0,947	0,954	0,807
Employee Self Efficacy	0,925	0,927	0,943	0,769
Government Employee Performance	0,902	0,903	0,927	0,718
Organizational Support	0,915	0,924	0,936	0,745
Work Engagement	0,915	0,916	0,937	0,747

R-Square

Based on the results of data processing in this study, the work engagement variable in R-Square has a value of 0.575 and R Square Ajusted has a value of 0.562 so that it can be seen that the tested model is still classified as strong because the value is almost close to 1. The government employee performance has an R Square value of 0.641 and R Square Ajusted 0.626 so that it can be seen that the tested model is classified as strong because it is almost close to 1.

Table 3
Uji R-Square

	R-square	R-square adjusted
Government Employee Performance	0,641	0,626
Work Engagement	0,575	0,562

Path Coefficient

Hypothesis testing is done by comparing the t-count with the t-table of 1.65 (for n-2) with a standard error of 5% or a significance value below 0.05 in table 4.

Table 3 shows the test results using Bootstrapping. Overall, the variables in this study are declared significant because it is seen from the t-statistic value above 1.65 for significance <0.05. Based on these criteria, the rejected hypothesis is in the latent variable relationship between artificial intelligence competencies and employee performance. This happens because the research t-statistic has a value of less than 1.65.

Specific Indirect Effect

Specific Inderect Effect according to indirect effect aims to analyze how strong the influence of variables with other variables is either between exogenous and endogenous. Specific Inderect Effect refers to the impact that occurs as a result of an event or change, but the effect is not a direct result of the event. Table 5 show result of Specific Indirect Effect. Table 5 shows the results of the mediation function using the bootstripping method of the specifict indirect effects table. The results show that which is declared insignificant because it has a significance value of more than 0.05 and the t-count is lower than the t-table.

Table 4
Path Coefficient

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/ STDEV|)	P values
Artificial Intelligence Competencies → Government Employee Performance	0,039	0,037	0,064	0,607	0,544
Artificial Intelligence Competencies → Work Engagement	0,217	0,222	0,069	3,134	0,002
Employee Self Efficacy → Government Employee Performance	0,211	0,212	0,085	2,498	0,013
Employee Self Efficacy → Work Engagement	0,597	0,598	0,051	11,656	0,000
Organizational Support → Government Employee Performance	0,222	0,223	0,079	2,820	0,005
Organizational Support → Work Engagement	0,168	0,167	0,072	2,330	0,020
Work Engagement → Government Employee Performance	0,497	0,497	0,095	5,252	0,000

Table 5
Specific Indirect Effect

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/ STDEV|)	P values
Artificial Intelligence Competencies → Work Engagement → Government Employee Performance	0,108	0,112	0,045	2,404	0,016
Employee Self Efficacy → Work Engagement → Government Employee Performance	0,297	0,296	0,059	5,029	0,000
Organizational Support → Work Engagement → Government Employee Performance	0,083	0,081	0,036	2,302	0,021

The Influence of Artificial Intelligence (AI) Competencies on Government Employee Performance

The results show that AI competencies have a significant influence on the performance of government employees, as shown in various studies. The ability of employees to understand and apply AI-based technologies enables them to improve work efficiency, accuracy in decision-making, and innovation in public services (Kuziemski & Misuraca, 2020). Previous research shows that AI competency contributes to more effective data management, reduction of administrative burden, and optimization of work processes, which in turn increases employee productivity and job satisfaction. In addition, related studies have also highlighted that the successful implementation of AI in the government sector is highly dependent on organizational support, such as relevant training and the provision of adequate technological infrastructure (Sharma et al., 2022). Thus, AI competency development is not only a technical necessity, but also an important strategy to holistically improve performance in the government environment.

Influence Artificial Intelligence (AI) Competencies on Work Engagement

The results show that Artificial Intelligence competencies have a close relationship with employees' level of work engagement. Research shows that mastery of AI technology increases employees' confidence in completing their tasks, as AI enables more. Furthermore, AI competency also affects employees' ability to face the challenges of the digital era, such as adapting to technological changes and increasing public expectations for faster and more personalized services (Vrontis et al., 2022). Other research reveals that employees with high AI competencies tend to be more capable of delivering technology-based innovations, such as automation of administrative processes and predictive analysis for more strategic policy making(Johnson et al., 2022). This has implications for improving the efficiency of public services, saving resources, and accelerating response times to community needs.

However, similar research results also highlight emerging challenges, such as resistance to technological change and skills gaps among employees (Ozkan-Ozen & Kazancoglu, 2022). Therefore, a holistic approach involving continuous training, an adaptive work culture, and strong management support is required to ensure the implementation of AI competencies delivers optimal results(Kulkov et al., 2024). In this context, AI competencies are not only a tool to improve individual performance but also the foundation of digital transformation in the government sector. Efficient work, automation of routine tasks, and improved accuracy of results (Tschang & Almirall, 2021). The ability to utilize AI also promotes a sense of professional accomplishment, which is one of the important aspects of work engagement. In addition, employees who are competent in using AI are more likely to experience positive work challenges, which can increase their intrinsic motivation(Koo et al., 2021). Another study revealed that AI technologies can create opportunities for more meaningful work, as employees can focus more on strategic and creative tasks(Dwivedi et al., 2021).

When organizations support the development of AI competencies, employees feel more valued and empowered, which strengthens their engagement at work. Conversely, a lack of such support can lead to job stress, resistance to technology, and ultimately lower levels of work engagement (Molino et al., 2020). Therefore, it is important for organizations to integrate AI competency development in their human capital strategy to sustainably improve work engagement.

Influence Employee Self-Efficacy on Government Employee Performance

The results show that employee self-efficacy, or the belief in one's ability to accomplish a particular task, has a significant influence on the performance of government employees. Research shows that employees with high levels of self-efficacy tend to be more

proactive in dealing with work challenges, take initiative, and take responsibility for the results of their work(Chen & Zhang, 2019). This belief helps them overcome obstacles, both technical and interpersonal, which ultimately has a positive impact on work productivity. Other studies have also revealed that self-efficacy contributes to more confident and innovative decision-making, especially in complex work environments such as the government sector (Ji & Yoon, 2021).

In addition, self-efficacy is a predictor of intrinsic motivation, as it affects the degree to which employees set work goals for themselves and then consistently stick to them. In other related studies, self-efficacy in employees helps them to cope up from the stress at work, leading them to be emotionally strong and concentrating more on the task (Udayar et al., 2020). Moreover, self-efficacy also mediates the effect of training and development on the enhancement of performance, thereby strengthening the need for performing self-efficacy to be a focal point of organizational investment in developing employees lls as well (Yu et al., 2020). Thus, it can be an effective target to enhance performance in government sector as, through trained, positive approach to performance, work environment to improve self-efficacy.

Influence Employee Self-Efficacy on Work Engagement

The findings that employee self-efficacy has a direct correlation to employee work engagement. Studies have shown that those employees with stronger confidence in personal abilities have a greater excitement and motivation to successfully perform work tasks (Yang & Li, 2021). Self-efficacy offers the right amount of confidence which makes the employees in a better position to tackle challenges, set higher goals, and work passionately. High work engagement is characterized by individuals feeling energized and thriving while performing tasks, thus self-efficacy helps employees rock their roles, as per studies, and reduces strain against work stressors (Wang & Pan, 2023). In addition, self-efficacy can be used as an intrinsic motivation driver that increases the emotional bond between employees and work. Another study shows that self-efficacy reduces employees separation from work, and leads to higher energy, commitment and absorption of mind in work (Rai et al., 2022). Furthermore, self-efficcy helps employees view work as a self-development chance which contributes to greater meaningful work. As a result, organizations can enhance the employees' work engagements by facilitating them to develop their self-efficacy by creating a favorable environment through which relevant training, a platform for constructive feedback, and an effective managerial support can be offered.

Influence Organizational Support on Government Employee Performance

The findings indicate organizational support positively affects the performance of government employees by fostering a productive and efficient work environment. Studies indicate that when employees perceive support from the institution, meaning receiving sufficient resources along with pertinent training and acknowledgment of their efforts, their performance increases (Shanock et al., 2019). This kind of support allows staff to perform to their full potential in getting the work done better. Strong organizational support helps employees to overcome job challenges and leads to confidence and drives them to deliver quality job (Utomo et al., 2023) has also been found in related studies. Additionally, the support from the leaders of the organization is significant to enhance the employees' emotional connection/diversion with their work. Motivated employees who get support are more effective in fulfilling their duties. Studies indicate that when individuals perceive their organization to be supportive, they feel more responsible and are more committed to the attainment of institutional goals (Thompson et al., 2020). And this leads to individual and group performance improvement. For instance, providing training that is suitable for the job helps employees develop technical abilities, but also self-confidence that aids in optimal execution.

Nonetheless, the result of similar studies indicated that the absence of organizational support can be an inhibiting factor for employee performance (Astuty & Udin, 2020). The absence of adequate work facilities, lack of recognition, or ineffective communication from management can decrease work motivation and increase stress. Therefore, organizations need to consistently provide support through fair policies, a healthy work climate, and investment in employee development to encourage optimal performance (Faeni, 2024). By building a supportive work culture, organizations can ensure the sustainability of performance improvement in the government sector.

Influence Organizational Support on Work Engagement

The results show that organizational support has a significant influence on employee work engagement. According to (Rasool et al., 2021) employees are more adaptive and focused on their work when they feel

supported by the organization (e.g. with good facilities, regular training, and attention from managers to individual needs). This kind of support creates a sense of security and comfort, such that workers can concentrate on the tasks at hand without worrying about outside issues.

Such support provides a sense of security and comfort, allowing employees to focus on tasks without being distracted by external concerns. Related studies reveal that organizational support increases employees' energy, dedication and concentration towards their work, which are key dimensions of work engagement (Aldabbas et al., 2023). When employees feel supported, they tend to see work as part of contributing to a larger goal, rather than just an obligation. Other research shows that recognition of individual contributions, career development opportunities, and transparent communication from management create a positive relationship between employees and the organization (Thelen & Formanchuk, 2022). This reinforces a sense of belonging which in turn increases overall work engagement.

However, research results also show that a lack of organizational support can lower levels of work engagement. Role ambiguity, lack of recognition for achievements, and lack of adequate facilities can cause employees to feel unappreciated and demotivated. Therefore, organizations need to ensure that the support provided is not only material but also emotional and strategic (Graham et al., 2020). By creating a supportive and empowering work environment, organizations can sustainably increase employee work engagement, which ultimately contributes to the achievement of institutional goals.

Influence Work Engagement on Government Employee Performance

The results showed that work engagement has a significant influence on the performance of government employees. Research shows that employees with high levels of work engagement tend to be more motivated, dedicated and focused in completing their tasks (Shkoler & Kimura, 2020). Dimensions of work engagement, such as energy, commitment and perseverance, help employees carry out their responsibilities effectively even under challenging working conditions. Related studies have also revealed that employees who are engaged in their work are more productive because they have a strong sense of responsibility for the outcomes of their work, which directly impacts on improving the quality of public services(Meynhardt et al., 2020). In addition, work engagement contributes to the achievement of organizational goals by improving teamwork efficiency and collaboration among employees. Other research shows that highly engaged employees often exhibit proactive behaviors, such as providing innovative ideas or taking initiative in solving problems(Alikaj et al., 2021). This is important in a government context that faces bureaucratic complexity and ever-increasing public expectations. With strong work engagement, employees are able to adapt to change and make greater contributions towards achieving the institution's mission.

However, a lack of work engagement can have a negative impact on employee performance. Research shows employees who do not feel connected to their work tend to experience decreased productivity, lose motivation, and exhibit low levels of absenteeism (Primadi Candra Susanto et al., 2023). Therefore, organizations need to create an environment that supports work engagement, such as rewarding achievements, creating positive work challenges, and ensuring a balance between work demands and employee well-being.

Conclusions and Implications

This research conclusion that Artificial Intelligence (AI) competencies, employee self-efficacy, work engagement, and organizational support proved to have an important contribution to improving the performance of government employees. AI competence drives efficiency and innovation in public services, self-efficacy increases confidence and productivity, while work engagement strengthens employee motivation and dedication. In addition, organizational support is an important foundation that strengthens the influence of other variables, by providing resources, training, and a supportive work environment.

The implications of this study show the importance of a holistic approach to human resource management in the government sector. In addition, ensuring the sustainability of employee performance requires the integration of technology-based training and strategic support from management. This research emphasizes that optimizing these factors not only improves employee performance, but also strengthens organizational readiness to face the challenges of the digital era.

To improve the performance of government employees in the digital era, a holistic and technology-based HR management policy is needed. Strengthening AI competencies is a strategic step by developing training and certification oriented to the needs of the public sector, as well as integrating AI technology in work systems to improve efficiency and service innovation. In addition, increasing employee self-

efficacy can be done through mentoring, coaching, and job rotation opportunities that expand their skills and confidence. Work engagement also needs to be strengthened with performance-based incentive systems, work-life balance policies, and increased employee involvement in decision-making. Optimal organizational support is an important foundation with adequate resource allocation for training, provision of digital infrastructure, and a collaborative and innovative work environment.

Technology integration in HR management should be strengthened with AI-based systems that support recruitment, performance evaluation, and talent management, as well as continuous learning programs to dynamically upskill employees. In addition, the government needs to develop a long-term strategy to deal with digital transformation by building a work ecosystem that supports innovation, conducting regular evaluations of HR policies, and ensuring employee readiness for change. With this approach, employee performance will not only improve, but also strengthen the organization's readiness to face future digital challenges.

References

Abun, D., Asuncion, S. B., Lazaro, J. R., Magallanes, T., & Nimfa, C. C. (2021). The effect of educational attainment, length of work experience on the self-efficacy of teachers and employees. *International Journal of Business Ecosystem & Strategy (2687-2293)*, *3*(2), 16–28. https://doi.org/10.36096/ijbes.v3i2.258

Agung Yuswono, T., & Hartijasti, Y. (2018). Employees' whistleblowing intention in public sector: the role of perceived organizational support as moderating variable. *Journal of Accounting and Investment*, *19*(2). https://doi.org/10.18196/jai.190296

Al-Asadi, R., Muhammed, S., Abidi, O., & Dzenopoljac, V. (2019). Impact of servant leadership on intrinsic and extrinsic job satisfaction. *Leadership & Organization Development Journal*, *40*(4), 472–484. https://doi.org/10.1108/LODJ-09-2018-0337

Aldabbas, H., Pinnington, A., & Lahrech, A. (2023). The influence of perceived organizational support on employee creativity: The mediating role of work engagement. *Current Psychology*, *42*(8), 6501–6515. https://doi.org/10.1007/s12144-021-01992-1

Alikaj, A., Ning, W., & Wu, B. (2021). Proactive personality and creative behavior: examining the role of thriving at work and high-involvement HR practices. *Journal of Business and Psychology*, *36*(5), 857–869. https://doi.org/10.1007/s10869-020-09704-5

Alsheibani, S., Messom, C., & Cheung, Y. (2020). *Re-thinking the Competitive Landscape of Artificial Intelligence*. https://doi.org/10.24251/HICSS.2020.718

Amit Dubey, et al. (2024). A novel conceptualization of AI literacy and empowering employee experience at digital workplace using generative AI and Augmented analytics: a survey. *Journal of Electrical Systems*, *20*(2), 2582–2603. https://doi.org/10.52783/jes.2031

Ariawan, A., Emba, Daud, I., Novrianto, A., & Kurniawan, M. S. (2023). The unleashing competence: exploring the influence of organizational culture, emotional intelligence and learning organization. *Jurnal Informatika Ekonomi Bisnis*. https://doi.org/10.37034/infeb.v5i3.615

Arnold, R., Edwards, T., & Rees, T. (2018). Organizational stressors, social support, and implications for subjective performance in high-level sport. *Psychology of Sport and Exercise*, *39*, 204–212. https://doi.org/10.1016/j.psychsport.2018.08.010

Astuty, I., & Udin, U. (2020). The effect of perceived organizational support and transformational leadership on affective commitment and employee performance. *The Journal of Asian Finance, Economics and Business*, *7*(10), 401–411. https://doi.org/10.13106/jafeb.2020.vol7.no10.401

Bessing, B., Claflin, S. B., Taylor, B. V, Blizzard, L., Honan, C. A., van Dijk, P., Kirk-Brown, A., & van der Mei, I. (2022). Estimating the impact of work difficulties, work self-efficacy and work psychological safety on MS-related work productivity loss. *Multiple Sclerosis Journal*, *28*(12), 1983–1996. https://doi.org/10.1177/13524585221097573

Bobitan, N., Dumitrescu, D., Popa, A. F., Sahlian, D. N., & Turlea, I. C. (2024). Shaping tomorrow: anticipating skills requirements based on the integration of artificial intelligence in business organizations—a foresight analysis using the scenario method. *Electronics*, *13*(11), 2198. https://doi.org/10.3390/electronics13112198

Braganza, A., Chen, W., Canhoto, A., & Sap, S. (2021). Productive employment and decent work: The impact of AI adoption on psychological contracts, job engagement and employee trust. *Journal of Business Research*, *131*, 485–494.

https://doi.org/10.1016/j.jbusres.2020.08.018

Chen, Y., & Zhang, L. (2019). Be creative as proactive? The impact of creative self-efficacy on employee creativity: A proactive perspective. *Current Psychology*, *38*(2), 589–598. https://doi.org/10.1007/s12144-017-9721-6

ÇOLAK, O. (2023). The impact of artificial intelligence on the employment structure of the tourism industry: an interview with ChatGPT. *İktisadi İdari ve Siyasal Araştırmalar Dergisi*, *8*(22), 919–939. https://doi.org/10.25204/iktisad.1347642

De Clercq, D., Haq, I. U., & Azeem, M. U. (2019). Workplace ostracism and job performance: roles of self-efficacy and job level. *Personnel Review*, *48*(1), 184–203. https://doi.org/10.1108/PR-02-2017-0039

Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., Duan, Y., Dwivedi, R., Edwards, J., Eirug, A., Galanos, V., Ilavarasan, P. V., Janssen, M., Jones, P., Kar, A. K., Kizgin, H., Kronemann, B., Lal, B., Lucini, B., … Williams, M. D. (2021). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, *57*, 101994. https://doi.org/10.1016/j.ijinfomgt.2019.08.002

Faeni, D. P. (2024). Green practices and employees' performance: The mediating roles of green human resources management policies and knowledge development. *Journal of Infrastructure, Policy and Development*, *8*(8), 4924. https://doi.org/10.24294/jipd.v8i8.4924

Ferawati, N. (2023). The influence of perceived organizational support and self efficacy on employee engagement in generation z DKI Jakarta. *Growth: Journal Management and Business*, *1*(01), 26–32. https://doi.org/10.59422/growth.v1i01.166

Gong, Y., Wu, Y., Huang, P., Yan, X., & Luo, Z. (2020). Psychological empowerment and work engagement as mediating roles between trait emotional intelligence and job satisfaction. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.00232

Graham, A. K., Lattie, E. G., Powell, B. J., Lyon, A. R., Smith, J. D., Schueller, S. M., Stadnick, N. A., Brown, C. H., & Mohr, D. C. (2020). Implementation strategies for digital mental health interventions in health care settings. *American Psychologist*, *75*(8), 1080–1092. https://doi.org/10.1037/amp0000686

Hadian, D. (2022). Effect of employee engagement and continuance commitment on employee performance. *JURNAL COMPUTECH & BISNIS*, *16*(1), 35. https://doi.org/10.56447/jcb.v16i1.269

Harits, B., & Bhagya, T. G. (2021). *The influence of civil servant competence and bureaucratic reform on organizational performance at the government offices in Cianjur*. https://doi.org/10.2991/assehr.k.210312.003

Hultman, K. (2020). Building a culture of employee optimization. *Organization Development Journal*, *38*(2), 35–48.

Ji, Y., & Yoon, H. J. (2021). The effect of servant leadership on self-efficacy and innovative behaviour: verification of the moderated mediating effect of vocational calling. *Administrative Sciences*, *11*(2), 39. https://doi.org/10.3390/admsci11020039

Johnson, P. C., Laurell, C., Ots, M., & Sandström, C. (2022). Digital innovation and the effects of artificial intelligence on firms' research and development – Automation or augmentation, exploration or exploitation? *Technological Forecasting and Social Change*, *179*, 121636. https://doi.org/10.1016/j.techfore.2022.121636

Jumanne, A. S., & Njoroge (PhD), D. J. (2019). Cultural change management and performance of employees of the parliamentary service commission in kenya. *American Journal of Public Policy and Administration*, *4*(1). https://doi.org/10.47672/ajppa.392

Kaur, P. (2018). Mediator analysis of job satisfaction: relationship between servant leadership and employee engagement. *Metamorphosis: A Journal of Management Research*, *17*(2), 76–85. https://doi.org/10.1177/0972622518804025

Koo, B., Curtis, C., & Ryan, B. (2021). Examining the impact of artificial intelligence on hotel employees through job insecurity perspectives. *International Journal of Hospitality Management*, *95*, 102763. https://doi.org/10.1016/j.ijhm.2020.102763

Kulkov, I., Kulkova, J., Rohrbeck, R., Menvielle, L., Kaartemo, V., & Makkonen, H. (2024). Artificial intelligence - driven sustainable development: Examining organizational, technical, and processing approaches to achieving global goals. *Sustainable Development*, *32*(3), 2253–2267. https://doi.org/10.1002/sd.2773

Kuziemski, M., & Misuraca, G. (2020). AI governance in the public sector: Three tales from the frontiers of automated decision-making in democratic settings. *Telecommunications Policy*, *44*(6), 101976. https://doi.org/10.1016/j.telpol.2020.101976

Ludviga, I., & Kalvina, A. (2024). Organizational agility during crisis: do employees' perceptions of public sector organizations' strategic agility foster employees' work engagement and well-being? *Employee Responsibilities and Rights Journal*, *36*(2), 209–229. https://doi.org/10.1007/s10672-023-09442-9

Mahat, D. (2024). Readiness for Artificial Intelligence integration in government services: perspectives from ramechhap district employees. *Jurnal Multidisiplin Madani*, *4*(4), 486–495. https://doi.org/10.55927/mudima.v4i4.8435

Marhuri, S., & Karneli, O. (2023). The effect of talent management on employee performance with self-efficacy as mediation variables. *Almana : Jurnal Manajemen Dan Bisnis*, *7*(1), 39–48. https://doi.org/10.36555/almana.v7i1.2076

Meynhardt, T., Brieger, S. A., & Hermann, C. (2020). Organizational public value and employee life satisfaction: the mediating roles of work engagement and organizational citizenship behavior. *The International Journal of Human Resource Management*, *31*(12), 1560–1593. https://doi.org/10.1080/09585192.2017.1416653

Molino, M., Cortese, C. G., & Ghislieri, C. (2020). The promotion of technology acceptance and work engagement in industry 4.0: from personal resources to information and training. *International Journal of Environmental Research and Public Health*, *17*(7), 2438. https://doi.org/10.3390/ijerph17072438

Muchlish, M. (2020). Antecedents of perceived organizational support to improve organizational commitment in the public sector institutions. *Journal of Accounting Research, Organization and Economics*, *3*(2), 163–171. https://doi.org/10.24815/jaroe.v3i2.17244

Mutonyi, B. R., Slåtten, T., & Lien, G. (2020). Organizational climate and creative performance in the public sector. *European Business Review*, *32*(4), 615–631. https://doi.org/10.1108/EBR-02-2019-0021

Obeng, A. F., Quansah, P. E., Cobbinah, E., & DANSO, S. A. (2020). Organizational climate and employee performance: examining the mediating role of organizational commitment and moderating role of perceived organizational support. *International Journal of Human Resource Studies*, *10*(3), 238. https://doi.org/10.5296/ijhrs.v10i3.17395

Ogbuanya, T. C., & Chukwuedo, S. O. (2017). Job crafting-satisfaction relationship in electrical/electronic technology education programme: Do work engagement and commitment matter? *Revista de Psicología Del Trabajo y de Las Organizaciones*, *33*(3), 165–174. https://doi.org/10.1016/j.rpto.2017.09.003

Olan, F., Ogiemwonyi Arakpogun, E., Suklan, J., Nakpodia, F., Damij, N., & Jayawickrama, U. (2022). Artificial intelligence and knowledge sharing: Contributing factors to organizational performance. *Journal of Business Research*, *145*, 605–615. https://doi.org/10.1016/j.jbusres.2022.03.008

Olufunmilayo, A. A., & Hannah, O. O. (2018). Effect of internal control system on employee performance of small-scale manufacturing enterprises in Ondo State, Nigeria. *Human Resource Research*, *2*(1), 48. https://doi.org/10.5296/hrr.v2i1.13016

Ozkan-Ozen, Y. D., & Kazancoglu, Y. (2022). Analysing workforce development challenges in the Industry 4.0. *International Journal of Manpower*, *43*(2), 310–333. https://doi.org/10.1108/IJM-03-2021-0167

Primadi Candra Susanto, Siera Syailendra, & Ryan Firdiansyah Suryawan. (2023). Determination of motivation and performance: analysis of job satisfaction, employee engagement and leadership. *International Journal of Business and Applied Economics*, *2*(2), 59–68. https://doi.org/10.55927/ijbae.v2i2.2135

Rai, A., Patyal, V. S., & Maheshwari, S. (2022). The mediating role of self-efficacy between job challenges and work engagement: evidence from indian power sector employees. *Journal of Public Affairs*, *22*(3). https://doi.org/10.1002/pa.2494

Rasool, S. F., Wang, M., Tang, M., Saeed, A., & Iqbal, J. (2021). How toxic workplace environment effects the employee engagement: the mediating role of organizational support and employee wellbeing. *International Journal of Environmental Research and Public Health*, *18*(5), 2294. https://doi.org/10.3390/ijerph18052294

Riyono, B., & Rezki, G. (2022). Burnout among working mothers: The role of work-life balance and perceived organizational support. *Humanitas: Indonesian Psychological Journal*, 109–121. https://doi.org/10.26555/humanitas.v19i2.31

Rožman, M., Oreški, D., & Tominc, P. (2022). Integrating artificial intelligence into a talent management model to increase the work engagement and performance of enterprises. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.1014434

Shanock, L. R., Eisenberger, R., Heggestad, E. D., Malone, G., Clark, L., Dunn, A. M., Kirkland, J., & Woznyj, H. (2019). Treating employees well: The value of organizational support theory in

human resource management. *The Psychologist-Manager Journal*, *22*(3–4), 168–191. https://doi.org/10.1037/mgr0000088

Shantini Rumbi, Ferdinandus Christian, & Suparti. (2021). The effects of motivation, leadership, and work environment on employee's performance: a case of local government agency in emerging country. *Britain International of Humanities and Social Sciences (BIoHS) Journal*, *3*(2), 347–360. https://doi.org/10.33258/biohs.v3i2.455

Sharma, M., Luthra, S., Joshi, S., & Kumar, A. (2022). Implementing challenges of artificial intelligence: Evidence from public manufacturing sector of an emerging economy. *Government Information Quarterly*, *39*(4), 101624. https://doi.org/10.1016/j.giq.2021.101624

Shaumi, D. R., Ma'arif, S., & Taryana, A. (2023). The effect of organizational change on enhancing government employee performance. *International Journal of Research and Review*, *10*(11), 475–482. https://doi.org/10.52403/ijrr.20231155

Shkoler, O., & Kimura, T. (2020). How does work motivation impact employees' investment at work and their job engagement? a moderated-moderation perspective through an international lens. *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.00038

Sudarmo, Suhartanti, P. D., & Prasetyanto, W. E. (2022). Servant leadership and employee productivity: a mediating and moderating role. *International Journal of Productivity and Performance Management*, *71*(8), 3488–3506. https://doi.org/10.1108/IJPPM-12-2020-0658

Thelen, P. D., & Formanchuk, A. (2022). Culture and internal communication in Chile: Linking ethical organizational culture, transparent communication, and employee advocacy. *Public Relations Review*, *48*(1), 102137. https://doi.org/10.1016/j.pubrev.2021.102137

Thompson, P. S., Bergeron, D. M., & Bolino, M. C. (2020). No obligation? How gender influences the relationship between perceived organizational support and organizational citizenship behavior. *Journal of Applied Psychology*, *105*(11), 1338–1350. https://doi.org/10.1037/apl0000481

Tschang, F. T., & Almirall, E. (2021). Artificial Intelligence as augmenting automation: implications for employment. *Academy of Management Perspectives*, *35*(4), 642–659. https://doi.org/10.5465/amp.2019.0062

Udayar, S., Fiori, M., & Bausseron, E. (2020). Emotional intelligence and performance in a stressful task: The mediating role of self-efficacy. *Personality and Individual Differences*, *156*, 109790. https://doi.org/10.1016/j.paid.2019.109790

Utomo, H. J. N., Irwantoro, I., Wasesa, S., Purwati, T., Sembiring, R., & Purwanto, A. (2023). Investigating the role of innovative work behavior, organizational trust, perceived organizational support: an empirical study on SMEs Performance. *Journal of Law and Sustainable Development*, *11*(2), e417. https://doi.org/10.55908/sdgs.v11i2.417

Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, advanced technologies and human resource management: a systematic review. *International Journal of Human Resource Management*, *33*(6), 1237–1266. https://doi.org/10.1080/09585192.2020.1871398

Wahyuningrum, D., & Aisyah, S. (2023). Do government policies and socioeconomic conditions affect income inequality? *Economics Development Analysis Journal*, *12*(1), 13–25. https://doi.org/10.15294/edaj.v12i1.63464

Wang, Y., & Pan, Z. (2023). Modeling the effect of Chinese EFL teachers' self-efficacy and resilience on their work engagement: a structural equation modeling analysis. *Sage Open*, *13*(4). https://doi.org/10.1177/21582440231214329

White, L., Lockett, A., & Currie, G. (2020). How does the availability and use of flexible leave influence the employer–employee relationship? *Human Resource Management*, *59*(5), 445–461. https://doi.org/10.1002/hrm.22004

Wu, C., Zhang, L., Zhang, X., Du, Y., He, S., Yu, L., Chen, H., Shang, L., & Lang, H. (2022). Factors influencing career success of clinical nurses in northwestern China based on Kaleidoscope Career Model: Structural equation model. *Journal of Nursing Management*, *30*(2), 428–438. https://doi.org/10.1111/jonm.13499

Yang, Y., & Li, X. (2021). The impact of challenge and hindrance stressors on thriving at work double mediation based on affect and motivation. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.613871

Yu, J., Ariza-Montes, A., Giorgi, G., Lee, A., & Han, H. (2020). Sustainable relationship development between hotel company and its employees: linking job embeddedness, job satisfaction, self-efficacy, job performance, work engagement, and turnover. *Sustainability*, *12*(17), 7168. https://doi.org/10.3390/su12177168