

Factors Affecting The Job Performance of Employees at E-Commerce Companies in Indonesia

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Abstract

This study aims to analyze the antecedents of job performance by considering the mediating role of work engagement. The variables used in this study are transformational leadership and perceived supervisor support as the independent variables, job performance as the dependent variable, and work engagement as the mediating variable. The respondents of this study consisted of 150 employees at e-commerce companies. Data analysis was conducted using the Structural Equation Modeling (SEM) method with the assistance of AMOS software. The results of this study indicate that transformational leadership has a positive effect on job performance. Transformational leadership has a positive effect on work engagement. Perceived supervisor support has a positive effect on job performance. Perceived supervisor support has a positive effect on work engagement. Work engagement plays a mediating role in the relationship between transformational leadership and job performance, and work engagement also mediates the relationship between perceived supervisor support and job performance. Managerial implications: Management can provide recognition to high-achieving employees in the form of micro-rewards. Small but relevant rewards are often more meaningful than annual awards that are rarely given. In addition, management also needs to provide facilities in the form of professional career development for each individual employee, such as by providing opportunities for training, project rotation, or promotions. This makes employees feel valued because they are recognized as individuals with potential for development.

INTRODUCTION

Job performance has an important role in helping organizations achieve their targeted goals, so Human Resources (HR) managers continue to strive to identify the factors that affect job performance and the impact it causes. To date, various studies continue to be developed to explore the mechanisms underlying the relationship between job performance and various other important concepts (Muecke & Iseke, 2019). It is thus important to understand the variables that drive improved employee performance in the workplace (Juyumaya et al., 2024). This includes companies engaged in the e-commerce industry.

Rapid development occurred mainly in the e-commerce sector, which experienced significant growth during the COVID-19 pandemic. The opportunities arising from this sector cannot be ignored, as e-commerce plays a crucial role in absorbing the workforce in Indonesia. During 2022, the e-commerce sector absorbed 8.08% of the total existing workforce (Goodstats, 2024).

Based on data from Shopee, Blibli, Lazada, and Tokopedia compiled from Katadata (2025), the number of employees at several e-commerce companies in Indonesia has decreased from 2021 to 2025. Shopee remains the company with the largest number of employees, which

was 64,000 people in 2021, decreased to 58,000 people in 2024, and further dropped to 55,000 people in 2025. Blibli also experienced a decrease in the number of employees from 12,280 people in 2021 to 8,800 people in 2024 and 6,200 people in 2025. A similar decline occurred at Lazada, which had 11,000 employees in 2021, then dropped to 8,000 people in 2024 and 5,800 people in 2025. Meanwhile, Tokopedia had 2,900 employees in 2021, decreasing to 2,400 people in 2024 and to 2,000 people in 2025. This condition shows that there has been an adjustment in the number of workers in the e-commerce industry in Indonesia, which can be influenced by changes in business strategy, company efficiency, and the dynamics of competition in the digital industry (Yose & Suyasa, 2023; Geraldles et al., 2024).

One of the top priorities for individuals seeking a new job in the e-commerce industry is to earn respect and recognition in the workplace. It is not uncommon for employees to feel that the hard work they have done is being ignored or that the contributions they have made are underappreciated. This can encourage employees to seek work elsewhere that is more respectful of their opinions and gives recognition to team members at work. It is proven that around 89% of employees in the e-commerce industry believe that contribution is one of the things that must be appreciated by superiors in the workplace (Hall, 2018) in order to encourage employee performance at work.

It is important to understand the factors that drive improved employee performance. Among the variables that are considered to be important factors is work engagement or work attachment, which has a major role in improving and maintaining employee performance (Bakker & Demerouti, 2017). Employees with high levels of engagement are more likely to show a sense of belonging and positive emotions, while employees with low engagement are more often associated with negative emotions and a lack of belonging to the company (van Roekel et al., 2024). Observations related to work engagement and employee performance in companies are increasingly showing that employees who are actively involved have better performance compared to those who are less engaged (Inam et al., 2021).

Another combination of factors that can drive employee performance at work is perceived supervisor support, or the perception of support from supervisors. Supervisor support can help address the challenges employees face in the workplace by providing guidance and direction (Garg & Dhar, 2017). In addition, employees who have a high level of engagement tend to be more loyal to the company where they work. Employee work engagement is crucial for supervisors. By encouraging personal initiative in providing rewards, appreciation, and problem-solving in the face of emerging challenges, supervisors can increase employee professionalism and engagement (Karatepe et al., 2018).

Among other factors that drive improved employee performance at work is transformational leadership style (Boccoli et al., 2024). Transformational leadership is considered more effective in managing employees in a work team, especially in times of crisis and when facing major organizational changes (Anderson, 2017).

Observations conducted by several previous studies show the mediating role of the work engagement variable. Based on the observations of Wirandini et al. (2022) in a case study of banking companies, it was found that the work engagement variable mediated the influence of transformational leadership on job performance positively and significantly. In another observation, Rahmawati and Pusparini (2023) also found that work engagement mediates the influence of perceived supervisor support variables on job performance positively and

significantly. Thus, this study examines the role of work engagement in mediating the influence of transformational leadership style and supervisor support on the performance of employees in e-commerce companies.

This study involves several variables that affect employee performance (job performance), which refers to the research of Boccoli et al. (2024), which was then modified by adding a mediating effect (indirect effect) of the work engagement variable with the aim of developing research results. The modifications made refer to the research of Wirandini et al. (2022) and the research of Rahmawati and Pusparini (2023). In addition, modifications were also made by selecting different observation subjects, where observations are made on employees working in e-commerce companies operating in Indonesia. Based on the background that has been compiled, this study is titled "Factors that Affect the Job Performance of Employees of e-Commerce Companies in Indonesia."

The urgency of this research is based on data indicating that the e-commerce sector in Indonesia absorbs 8.08% of the total workforce in 2022 (Goodstats, 2024). However, data from Katadata (2025) shows a decline in the number of employees at Shopee, Blibli, Lazada, and Tokopedia from 2021 to 2025. This condition indicates a workforce inefficiency that can impact individual performance. Therefore, understanding the factors that maintain employee performance is urgent.

The novelty of this research lies in three aspects. First, it integrates two independent variables (transformational leadership and perceived supervisor support) with one mediating variable (work engagement) in a single model. Second, the research subjects are e-commerce employees in Indonesia, a relatively understudied field. Third, this study tests the full mediation effect rather than just the direct effect.

This study aims to analyze the factors that affect job performance in employees of e-commerce companies in Indonesia, especially transformational leadership, perceived supervisor support, and work engagement. This study examines the positive influence of transformational leadership on job performance and work engagement, the effect of perceived supervisor support on job performance and work engagement, and the effect of work engagement on job performance. In addition, this study also analyzes the role of work engagement mediation in the relationship between transformational leadership and perceived supervisor support on job performance. The results of the research are expected to provide benefits to the e-commerce industry as input material in improving employee performance, as well as serving as a reference and source of insight for future researchers regarding factors that affect job performance.

METHOD

Research Design

This research design is based on and refers to previous research conducted by Boccoli et al., (2024) which was then modified by adding references to the research of Serang et al., (2024), Nguon (2022), Rahmawati & Pusparini (2023), and Wirandini et al., (2022) and adjusting observations on different research objects. This study uses a hypothesis test to test the factors that affect the job performance of employees of e-commerce companies (Shopee, Lazada, Tokopedia) operating in Indonesia.

Hypothesis testing itself is used to explain and find the final answer of the research with an appropriate method, if the hypothesis matches the facts, then the hypothesis formulated is confirmed (Sahir, 2021). The time horizon dimension used is cross sectional, meaning that data collection is only done once in a certain period of time to find answers to research questions (Sekaran and Bougie, 2016). Data collection was carried out from September 13, 2025 to December 31, 2025. Meanwhile, the unit of analysis used in this study is employees of e-commerce companies (Shopee, Lazada, Tokopedia) operating in Indonesia.

Data Collection Methods

This study uses primary data obtained directly from respondents. Primary data was obtained from questionnaires distributed online through google forms. The statement list contains respondent data and perception answers related to transformational leadership variables, perceived supervisor support, work engagement, and job performance with the aim of obtaining data relevant to the purpose of this study. The data collection method used is non-probability sampling which refers to the sample selection method that does not provide the same opportunity for each member of the population to be selected and made part of the research sample, so that the sample is not randomly selected. The sampling technique used is purposive sampling, which is limited sample withdrawal for specific people who can provide the necessary information because it meets the criteria set by the research (Sekaran & Bougie, 2016). The details of the sample criteria taken in this study are employees of e-commerce companies operating in Indonesia.

The number of samples used in the study refers to the theory of Hair et al., (2019) which states that the minimum number of samples required is at least 5 to 10 times the number of indicators used. The number of indicators used in this study is 25 items. The minimum number of samples in this study is determined to be 25 (x6), so the number of samples that must be collected is at least 150 respondents. Based on the data collected and meeting the sample criteria in this study, a sample of 150 respondents was used as research data.

Data Analysis Methods

The data analysis method used is a descriptive statistical test that aims to explain respondents' perceptions by calculating the average (mean) of respondents' answers to analyze the variables of transformational leadership, perceived supervisor support, work engagement, and job performance. In addition, to test the influence of transformational leadership, perceived supervisor support on job performance, the influence of transformational leadership, perceived supervisor support on work engagement, the effect of work engagement on job performance, and the mediating role of work engagement variables in the influence of transformational leadership and perceived supervisor support on job performance using structural equation modelling (SEM) analysis with AMOS version 23 software.

RESULTS AND DISCUSSION

Hypothesis Testing Results

Testing of the appropriate hypothesis for this study is by statistical method using structural equation model (SEM) analysis. Hypothesis test decision making was carried out by comparing the p-value with the level of significance determined in this study. The level of significance used was 0.05 (error rate $\alpha = 5\%$) and the confidence level was 95%. The basis for making decisions for testing the hypothesis of this study is as follows:

1. If the p-value ≤ 0.05 then there is a significant influence or a supported hypothesis.
2. If the p-value > 0.05 then there is no influence or the hypothesis is not supported.

Table 1. Hypothesis Test Results 1

Hipotesis	Estimate	p-Value	Verdict
H1: Transformational leadership Influential Positive against job performance	0,597	0,000	Supported

Source: AMOS data processing results (2025)

Table 1 shows the results of the first hypothesis test with a p-value of $0.000 < 0.05$, which means that the transformational leadership variable has a positive influence on job performance with an estimated value of 0.597 so that it means that there is a positive influence. Based on the results of the first hypothesis testing, it can be concluded that the hypothesis is supported.

Table 2. Hypothesis Test Results 2

Hipotesis	Estimate	p-Value	Verdict
H2: Transformational leadership Positive effect on work engagement	0,673	0,000	Supported

Source: AMOS data processing results (2025)

Table 2 shows the results of the second hypothesis test with a p-value of $0.000 < 0.05$, meaning that the transformational leadership variable has an influence on work engagement with an estimated value of 0.673 so as to mean a positive influence. Based on the results of the testing of the second hypothesis, it can be concluded that the hypothesis is supported.

Table 3. Hypothesis Test Results 3

Hipotesis	Estimate	p-Value	Verdict
H3: Perceived supervisor support Influential positive against job performance	0.192	0.042	Supported

Source: AMOS data processing results (2025)

Based on table 3, the results of the third hypothesis test with a p-value of $0.042 < 0.05$ mean that the perceived supervisor support variable has an influence on job performance with an estimated value of 0.192 so that it implies a positive influence. Based on the results of testing the third hypothesis, it can be concluded that the hypothesis is supported.

Table 4. Hypothesis Test Results 4

Hipotesis	Estimate	p-Value	Verdict
H4: Perceived supervisor support has a positive effect on work engagement	0,339	0,000	Supported

Source: AMOS data processing results (attached)

Table 4 shows the results of the fourth hypothesis test with a p-value of $0.000 < 0.05$, meaning that the perceived supervisor support variable has an influence on work engagement with an estimated value of 0.339 so that it implies a positive influence. Based on the results of testing the fourth hypothesis, it can be concluded that the hypothesis is supported.

Table 5. Hypothesis Test Results 5

Hipotesis	Estimate	p-Value	Verdict
H5: Work engagement Influential positive on job performance	0,179	0,047	Supported

Source: AMOS data processing results (2025)

Table 5 shows the results of the fifth hypothesis test with a p-value of $0.047 < 0.05$ indicating that the work engagement variable has an influence on job performance with an estimated value of 0.179 so that it implies a positive influence. Based on the results of the fifth hypothesis test, it can be concluded that the hypothesis is supported or proven that work engagement has a positive and significant effect on job performance.

Table 6. Hypothesis Test Results 6

Hipotesis	Estimate	p-Value	Verdict
H6: There is a role of work engagement in Influence transformational leadership against job performance	0,121	0,026	Supported

Source: AMOS data processing results (2025)

Table 6 shows the results of the sixth hypothesis test with a p-value of $0.026 < 0.05$ indicating that the work engagement variable mimics the influence of transformational leadership on job performance with an estimated value of 0.121. Based on the results of testing the sixth hypothesis, it can be concluded that the hypothesis is supported.

Table 7. Hypothesis Test Results 7

Hipotesis	Estimate	p-Value	Verdict
H7: There is a role of work engagement in the influence of perceived supervisor support on job performance	0,061	0,031	Supported

Source: AMOS data processing results (2025)

Table 7 shows the results of the seventh hypothesis test with a p-value of $0.031 < 0.05$ indicating that work engagement mediates the influence of perceived supervisor support on job performance with an estimated value of 0.061. Based on the results of the testing of the seventh hypothesis, it can be concluded that the hypothesis is supported.

Hypothesis 1 (Transformational Leadership has a positive effect on Job Performance)

The leadership style in running an e-commerce company can have a positive influence on employee Job Performance because this leadership style model can have an impact on individual development and workers' creativity in supporting their work effectively and efficiently and which can ultimately improve the company's performance. The results of this study are in accordance with a study conducted by Huang et al., (2025) on 584 ICU nurses in China which stated that there is a positive influence of transformational leadership on job performance. In a study conducted by Boccoli et al., (2024) on 410 consultants in Milan, Italy, it showed that the better the transformational leadership in the company where employees work, the higher the level of employee job performance. Research conducted by (S. Ahmed et al., 2024), states that Transformational Leadership has a positive influence on Job

Performance. Previous research also stated by Sulhan et al. (2023) on 110 ASN employees in Pasuruan city proves that transformational leadership has a positive effect on job performance.

The results of research and observations in the field conducted by the researcher are known that the leadership style applied by the leadership of e-commerce companies with a transformational leadership motto that communicates a clear and positive vision of the future to employees is proven to be able to have a great influence on improving employee performance. Transformational leaders are able to place each worker as an individual with their own characteristics so that there is a need for support, encouragement, and motivation for each worker to achieve the maximum potential possessed by each employee so that workers can provide the best performance for the company. Leaders who have a transformational leadership style realize the importance of teamwork and a sense of belonging between individuals so that in addition to support for individuals, it is also very important to foster trust, involvement and cooperation in a company to have a maximum impact in achieving company goals. The transformational leadership style provides the widest possible space for individual workers to provide their opinions and ideas in achieving goals because it is in line with the principles of good corporate governance that guarantees freedom of opinion for employees. The freedom of opinion given by the company to employees is a real step in terms of improving employee performance.

Hypothesis 2 (Transformational Leadership has a positive effect on Work Engagement)

Transformational leadership style is important to apply in a company, one of the applications of transformational leadership is to provide motivation and support for individual workers. The purpose of providing motivation and support is so that individual workers have enthusiasm, dedication, focus and enthusiasm in carrying out their work. The results of this study are in accordance with research conducted by Adadan (S. Ahmed et al., 2024) which examined 450 private bank staff in Bangladesh and also shows that transformational leadership has a positive effect on work engagement. A study by Huang et al., (2025) on 584 ICU nurses in China also showed a positive influence of transformational leadership on work engagement.

Prabowo & Muafi (2021) research conducted on 75 employees of the Data and Information Systems Center of the Ministry of Agriculture shows that transformational leadership has a positive effect on work engagement, which means that the better transformational leadership, the higher the work engagement of employees at the Data Center and Information Systems of the Ministry of Agriculture of the Republic of Indonesia. Research by Wirandini et al., (2022) on 120 employees of PT Bank Mandiri in the Medan city area shows that transformational leadership has a positive effect on work engagement. In a study by Dararina & Yulianti (2022) on 114 employees who are included in the millennial generation category who work in the port sector, transformational leadership has a positive effect on work engagement. A study conducted by Jiatong et al., (2022) also on 845 hotel employees in China proved that transformational leadership has a positive effect on work engagement.

The results of research and observations in the field conducted by researchers show that transformational leaders in carrying out their leadership are able to provide encouragement, support, and motivation to individual workers. The output resulting from the implementation

of this is that workers have maximum external support, so that this makes employees have a high sense of enthusiasm and fighting power in carrying out their work. The external support and motivation of the transformational leader to the individual workers results in a sense of pride in the work done. A transformational leadership style that provides encouragement and recognition to staff can provide a strong sense of enthusiasm for individual workers in carrying out their work routines.

Hypothesis 3 (Perceived Supervisor Support has a positive effect on Job Performance)

The success of the implementation of transformational leadership also depends on perceived supervisor support where this is feedback from employees' perceptions of the contribution of superiors in appreciating performance, providing support and providing welfare care to workers. Perceived supervisory support has benefits in reducing work stress levels and supporting employee career development. The results of this study are in accordance with research conducted by Purdiarini & Warsindah (2024) on employees at the Population and Civil Registration Office (DUKCAPIL) of DKI Jakarta Province proves that perceived supervisor support has a positive and significant effect on job performance. A study by Alvianita et al., (2023) on employees classified as Generation Z who work in a service company in Jakarta shows a positive influence of perceived supervisor support on job performance.

Khan and Lakshmi's (2022) study of 100 employees at Delhi University on the influence of perceived supervisor support on job performance, found a positive and significant influence. In a study by Prabowo & Muafi (2021) on 75 employees of the Data Center and Information System of the Ministry of Agriculture of the Republic of Indonesia, it also showed a positive influence of perceived supervisor support on job performance. The results of previous research from (Semana et al., 2024) to 157 academic employees at Indian Universities have results, namely perceived supervisor support has a significant effect on job performance. In a study by Chatterjee et al., (2023) showed that 335 staff at digital companies in India had research results that perceived supervisor support had a positive and significant effect on job performance.

The results of research and observations in the field conducted by the researcher are known that the actualization of perceived supervisor support is the concern of the superior for the opinion of each individual worker. The concern from the boss encourages workers to be satisfied with the company system or organization which can later improve the performance of each employee. The support and motivation of the superiors for the values and goals possessed by workers can foster the integrity and honesty of workers in carrying out their work so that it can improve the job performance of individual workers.

Hypothesis 4 (Perceived Supervisor Support has a positive effect on Work Engagement)

Perceived supervisor support emphasizes the role of the boss in providing support to employees as a representative of the organization. This support arises through positive interactions between superiors and subordinates, which is able to strengthen the perception of such support. The theory that is often used in this case is Social Exchange Theory, which explains that when employees receive support, they will "reciprocate" with a positive attitude, including increasing work engagement. These results are in accordance with a study

conducted by Boccoli et al., (2024) which examined the effect of perceived supervisor support on work engagement on 410 consultants in Italy who worked remotely during the pandemic, showing that perceived supervisor support had a positive effect on work engagement.

In a study by Kissi et al., (2023) on 144 employees working in construction in South Africa showed that perceived supervisor support had a positive effect on work engagement. The study conducted by Rahmawati & Pusparini (2023) on 321 civil servants in Indonesian government financial institutions revealed that perceived supervisor support has a positive influence on work engagement. The study of Khan and Lakshmi (2022) on 100 employees at Delhi University also proved the positive influence of perceived supervisor support on work engagement. The results of a previous study conducted by Prabowo & Muafi (2021) related to the effect of perceived supervisor support on work engagement in 75 employees of the Ministry of Agriculture's Data Center and Information System, also showed that there was a positive influence of perceived supervisor support on work engagement.

The results of research and observations in the field conducted by the researcher are known that bosses who care about the welfare of their workers can have a positive and significant influence on the work engagement of each employee because this can provide a high reciprocal contribution for each worker in order to increase the sense of pleasure, pride and enthusiasm when working. Superiors who have perceived supervisor support by showing attention, appreciation, being willing to listen to problems or ideas, providing constructive feedback and being fair and appreciative of this can affect the work engagement of workers. Individual employees in this case can feel the boss who supports them wholeheartedly, so the reward given by the individual employee when doing work is to complete the work more enthusiastically, enthusiastically, and also proud of the work done so that it can be carried into a positive atmosphere and can dissolve in their work. In every work that is being done by them, they can also provide inspiration and can create high creativity for the sustainability of the company.

Hypothesis 5 (Work Engagement has a positive effect on Job Performance)

Employees who have a high level of attachment or involvement in work will tend to have a closer relationship with the company environment. A comfortable work environment is one of the factors that can affect work engagement. This can also make employee job performance increase. Individual employees who have high commitment, are always focused, enthusiastic and proud of every job they do, will create positive work engagement and this can affect employee job performance.

These results are in accordance with a study conducted by Juyumaya et al., (2024) which analyzed the effect of work engagement on job performance in 210 workers with various types of work in the Santiago region and the Talca region which showed that work engagement has a positive effect on job performance. Serang et al., (2024) on 670 civil servants in Indonesia proved that work engagement has a positive effect on job performance. Research by Rahmawati & Pusparini (2023) on 321 civil servants at the Indonesian Government Financial Institution shows that work engagement has a positive influence on job performance. A study by Jiatong et al., (2022) on 845 hotel employees in China proved that work engagement positively and significantly affects job performance.

The results of research and observations in the field conducted by researchers show that an atmosphere in the workplace full of passion, enthusiasm and determination will be able to help employees to achieve achievements and work targets. The sense of pride possessed by employees when doing their work is one of the characteristics and indicators of employees who are satisfied with the system run by the company so that the combination of the pride possessed by employees and the management system implemented by the company has an impact on improving employee performance in all parts. The momentum of waking up in the morning is one of the things that workers are waiting for because they want to go to work immediately and give the best performance to achieve achievements at work. Employees who have high motivation and enthusiasm for the work done can be reflected in the integrity and values of honesty applied in carrying out their work and this can affect the job performance of each worker.

Hypothesis 6 (There is a role of Work Engagement in the influence of Transformational Leadership on Job Performance)

A company can be said to be successful if it is able to manage all the potential resources it has. These resources include the competence of human resources owned by both from the supervisory level to ordinary employees, then the existence of adequate supporting facilities and infrastructure as well as work culture values that are upheld together. Good transformational leadership can have a direct effect on character formation for workers. These characters include having high motivation, confidence and enthusiasm in work and having great pride and love for the work done. The value of work engagement owned by employees can be an important role for the influence of transformational leadership on the achievement of maximum job performance.

These results are in line with a study conducted by Huang et al., (2025) who examined 584 ICU nurses in China and also observed the role of work engagement mediation in the influence of transformational leadership on job performance and found a positive and significant influence. In a study by Johan & Satrya, (2024) on 215 lecturers at the Faculty of Economics and Business, Syiah Kuala University, it was found that work engagement strengthens the influence of transformational leadership on job performance. Research conducted by Jiatong et al. (2022) on 845 hotel employees in China proves that transformational leadership has a positive and significant influence on job performance mediated by work engagement variables. In a study by Sulhan et al., (2023) on 110 employees of ASN in Pasuruan city, transformational leadership has a positive effect on job performance mediated by work engagement.

The results of research and observations in the field conducted by researchers show that the role of leaders who treat workers by providing support and encouragement can make workers feel a happy and comfortable work environment so that they can work hard. The result of the combination of these two factors is the emergence of integrity and honesty as work culture values that must be applied in the company. The results of measurements conducted by the company show that employees feel inspired by the transformational leadership model in the form of openness and work values instilled by the company's leaders. This shows that employees are satisfied with the system implemented by the company.

Hypothesis 7 (There is a role of Work Engagement in the influence of Perceived Supervisor Support on Job Performance)

Supervisors who provide consistent support are able to increase employee work engagement levels. When employees feel cared for and supported, they can be more motivated to engage emotionally and cognitively in work. The support provided by the boss can also create a comfortable and conducive work environment so that employees feel meaningful in their work. Increasing work engagement can have an impact on improving job performance. Engaged employees tend to work more focused, productive, disciplined, and have high initiative in completing tasks. They are also better able to deal with work pressure and try to provide the best work results for the company. So it can be concluded that support from supervisors can increase employee work attachment, which then has an impact on improving work performance. The higher the support felt from the boss, the higher the level of employee work engagement, so that the performance produced will also be more optimal.

This result is in line with a previous study conducted by Khan & Lakshmi (2022) on 100 employees at Delhi University regarding the role of work engagement mediation in the influence of perceived supervisor support on job performance proves that perceived supervisor support has a positive and significant influence on job performance when mediated by work engagement. Research by Rahmawati & Pusparini (2023) also observed the role of work engagement mediation in the influence of perceived supervisor support on job performance carried out to 321 civil servants at the Government of Indonesia Financial Institution and it was proven that work engagement played a role as a variable that mediated the influence of perceived supervisor support on job performance positively and significantly in the case of civil servants at the Government of Indonesia Financial Institution. In the study (Hooi & Chan, 2024), the results of his research on 256 management-level executives at the Federation of Malaysian Manufacturers (FMM) showed that work engagement has a strong influence as a mediating variable in the influence of perceived supervisor support on job performance. The results of a previous study from (Semana et al, 2024) to 157 academic employees at Indian Universities stated that perceived supervisor support had a significant effect on job performance through work engagement.

The results of research and field observations conducted by researchers show that supervisors' high concern for employees in terms of improving welfare can have an influence on career promotions for employees. This can be achieved by increasing enthusiasm and high work ethic in completing work. The attention and moral support given by supervisors to workers can increase energy and enthusiasm in work so that performance achievements can be achieved properly and optimally. The leadership pattern applied by supervisors to workers in the form of appreciation for the goals and values that guide employees makes them enthusiastic about their work. So integrity and honesty in the workplace can still be maintained even though workers must still achieve the targets set by the company.

CONCLUSION

This study was conducted on employees of e-commerce companies in Indonesia with respondent characteristics dominated by women aged 25–33 years, with bachelor's degree (S1) education, 5–10 years of service, and mostly serving as company staff. The results of the study show that all hypotheses submitted are accepted, where transformational leadership, perceived

supervisor support, and work engagement are proven to have a positive effect on employee job performance. In addition, work engagement has also been proven to fully mediate the influence of transformational leadership and perceived supervisor support on job performance. These findings suggest that transformational leadership—which is able to provide vision, encouragement, and rewards to employees—as well as the support of superiors who pay attention to career development and employee needs, can optimally improve work engagement and employee performance. Based on these results, e-commerce companies are advised to improve the reward system, provide career development support through training and periodic evaluation sessions, and build a positive work environment through team-building activities to improve employee relationships and organizational performance. This study still has limitations because it only involves 150 respondents and focuses on several specific variables. Therefore, future studies are recommended to expand the number of respondents and add other variables such as innovative behavior so that the results are more comprehensive.

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