

Research Article

The Effect of Work Environment, Work Motivation, and Job Training on Employee Performance with Work Discipline as an Intervening Variable at PT Telkom Akses Semarang

Afra Khulud Zanuba^{1*}, Nanda Adhi Purusa²¹⁻² Dian Nuswantoro University, Indonesia; e-mail: afrakhulud@gmail.com

* Corresponding Author: Afra Khulud Zanuba

Abstract: This study aims to examine the influence of work environment, work motivation, and job training on employee performance, with work discipline as an intervening variable at PT. Telkom Akses Semarang. The population of this research consists of 400 employees of PT. Telkom Akses Semarang, which is a prominent company in the telecommunications sector. The sampling technique used was purposive sampling, and the sample size of 100 employees was determined using the Slovin formula to ensure a representative sample. Data were collected through questionnaires distributed randomly to the selected respondents to gather comprehensive and reliable information. This study employed a quantitative analysis approach, utilizing Smart PLS as the analytical tool, covering the outer model, inner model, and hypothesis testing to assess the relationships between the variables. The findings indicate that the work environment, work motivation, and job training significantly affect employee performance at PT. Telkom Akses Semarang. Furthermore, the use of work discipline as an intervening variable also mediates the influence of work environment, work motivation, and job training on employee performance, suggesting that work discipline plays a crucial role in enhancing overall employee productivity and organizational success.

Keywords: Discipline; Employees; Motivation; Performance; Training

1. Introduction

The development of Information Technology in Indonesia has progressed rapidly, requiring society to adapt to these advancements. At its early emergence, the internet was considered simple; however, it has now transformed lifestyles into a more modern form. The first footprint of the internet in Indonesia appeared in the early 1990s (Ghobadi, 2020). Since then, it has enhanced the effectiveness and efficiency of business operations as a medium of publication, communication, and information sources. Currently, internet usage in business encompasses marketing, sales, and customer service (Muhammad et al., 2022). Reliable internet provision is crucial to support various aspects of modern life, including education, business, and entertainment, while also contributing to economic growth and social progress. Internet service providers continuously innovate to improve services in line with growing demand. According to the We Are Social and Hootsuite (2023) report, internet usage in Indonesia has reached 212.9 million users, highlighting the importance of adequate internet infrastructure.

PT Telkom Akses (PTTA) is a subsidiary of PT Telekomunikasi Indonesia, Tbk (Telkom), fully owned and controlled by Telkom. PTTA operates in the construction and management of telecommunication network infrastructure. Its establishment reflects Telkom's commitment to providing unlimited connectivity and communication access that reaches all levels of Indonesian society. PT Telkom Akses strives to provide high-quality and affordable internet services to optimize human resource potential, enabling competitiveness in the global arena.

Received: July 15, 2025
Revised: September 9, 2025
Accepted: November 4, 2025
Published: December 30, 2025
Curr. Ver.: December 30, 2025



Copyright: © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>)

Human Resources (HR) are one of the most crucial components in every company worldwide. The presence of qualified HR in an organization drives company progress, enhances competitiveness, and enables adaptation to dynamic changes. In today's globalization era, competition is increasingly intense, especially in terms of employee performance. The main issue that arises is the readiness of a superior and competitive workforce, along with the ability to generate skilled, reliable, and high-quality resources to optimize employee performance within organizations (Kale et al., 2023). Performance refers to the behaviors demonstrated by employees in achieving work outcomes aligned with their responsibilities (Votto et al., 2021).

During internship observations at PT Telkom Akses Semarang, the urgency of studying work environment, motivation, and training variables became increasingly evident. A supportive work environment has been proven to enhance both performance and employee satisfaction (Rulianti & Nurpribadi, 2023). Observations showed that the availability of adequate facilities, a pleasant working atmosphere, and collaboration with colleagues and management significantly influence employee enthusiasm. Furthermore, employee motivation is a fundamental aspect in achieving optimal performance. Reward programs, recognition, and career development opportunities can strengthen both intrinsic and extrinsic motivation. Training is also an essential factor, as it equips employees with new skills and updates their knowledge in line with technological advancements and organizational needs. Research on work environment, motivation, and training at PT Telkom Akses Semarang can provide insights into formulating more effective approaches for human resource management and overall corporate performance improvement.

Based on these observations, the authors argue that PT Telkom Akses Semarang requires continuous training to improve HR quality, particularly in facing increasingly intense industry competition. Excellent human resources are vital assets that drive companies to grow, compete optimally, and adapt to dynamic changes. However, the company also faces challenges in achieving annual targets, thus requiring effective solutions and strong work discipline to overcome these issues.

One recurring obstacle is non-compliance with established Standard Operating Procedures (SOP), which hinders work efficiency and effectiveness. Good work discipline ensures SOP implementation, fosters a conducive work climate, boosts motivation, and maximizes training effectiveness. With strong work discipline, qualified human resources, and intensive training, the company can overcome these challenges, improve employee performance, and achieve annual targets.

In performing tasks, employees require a supportive work environment to carry out their responsibilities in accordance with company procedures. A work environment that meets proper standards contributes to employee comfort, motivation, and focus. Research by Sembiring (2020), Hustia (2020), and Setiani & Febrian (2023) revealed that work climate significantly affects employee performance. A comfortable and supportive climate can enhance performance sustainably, whereas a poor work climate may reduce it. These studies emphasize the importance of creating a positive work climate to improve employee performance (Dolonseda & Watung, 2020).

Another key aspect for companies is maintaining and managing employee motivation to align with organizational goals. High work motivation is essential as it drives individuals to act and achieve objectives. Work motivation stimulates individuals to collaborate, perform tasks optimally, and integrate their abilities to achieve job satisfaction (Laoli & Ndrahah, 2022). Studies by Sembiring (2020) and Hustia (2020) showed that work motivation positively and significantly impacts employee performance, where motivated employees tend to be more diligent and productive. However, research by Hasmalawati et al. (2018) found that work motivation did not significantly affect employee performance, suggesting that although motivation is generally important, other factors such as quality of work life also play a role.

Training is an activity designed to strengthen attitudes, behaviors, competencies, and employee understanding in line with organizational needs. Effective training can improve productivity and meet the evolving demands of society. Setiani & Febrian (2023) emphasized that training has a positive and significant effect on employee performance, with trained employees being more capable of enhancing competencies and improving outcomes. Guan & Frenkel (2019) also argued that positive perceptions of training can increase employee performance. Optimal training prepares employees to face work challenges, improve efficiency and quality, and contribute to organizational goals. To achieve maximum performance, companies need to strengthen both employee knowledge and skills through continuous training.

Work discipline is a managerial instrument used to communicate with employees, encouraging readiness to correct behaviors and fostering awareness to comply with company regulations and social norms (Sutrisno, 2019). Positive work discipline contributes to a

supportive work atmosphere, increases motivation, and maximizes training effectiveness. As a mediating variable, work discipline links work environment, motivation, and training, thereby collectively improving employee performance.

Sustainable employee quality improvement is crucial for organizations to avoid setbacks. Through training, companies can gain strategic benefits in policymaking. Thus, productivity and performance optimization can be achieved not through staff expansion but through HR development, capacity-building, and training.

The authors chose to study work environment, work motivation, and job training on employee performance with work discipline as a mediating variable because these factors play vital roles in determining employee performance. A supportive work environment fosters comfort and productivity, high work motivation ensures focus and enthusiasm, and job training enhances skills and knowledge. By examining these three variables, this study aims to provide comprehensive insights into performance determinants at PT Telkom Akses Semarang and offer practical recommendations for HR quality improvement.

Based on previous research gaps, studies by Sembiring (2020), Hustia (2020), and Setiani & Febrian (2023) demonstrated significant effects of work environment on employee performance. However, Warongan et al. (2022) found no such influence. Similarly, while Sembiring (2020) and Hustia (2020) showed motivation had a positive impact, Hasmalawati et al. (2018) found no significant effect. Research by Setiani & Febrian (2023) indicated training positively affects performance, but Panambunan et al. (2017) reported otherwise. Mazidah (2018) suggested that work discipline influences employee performance.

This research is grounded in thorough field observation and supported by research gaps in prior studies to ensure accuracy and relevance of findings. Through in-depth analysis of these variables, this study seeks to provide a comprehensive picture of employee performance factors at PT Telkom Akses Semarang. The findings are expected to offer constructive recommendations for optimizing HR quality. Based on this discussion, the authors selected the title: "The Effect of Work Environment, Work Motivation, and Job Training on Employee Performance with Work Discipline as an Intervening Variable at PT Telkom Akses Semarang".

2. Literature Review

Work Environment

The work environment refers to the overall conditions surrounding the workplace, which may affect employees both directly and indirectly. It can also be defined as all equipment or materials used in work activities. The area around employees when carrying out methods or work procedures, whether individually or in groups, is also included in the definition of work environment (Erni et al., 2022). The work environment encompasses everything surrounding employees that may influence them in performing tasks, such as temperature, humidity, ventilation, lighting, noise levels, workplace cleanliness, as well as the adequacy of tools and equipment (Kartini & Nurhidayati, 2023).

Building a work environment that supports productivity is crucial for increasing organizational, corporate, and small business profitability. The interrelationship between tasks, workplaces, and work equipment makes the workplace an integral part of work activities. Management that focuses on optimizing employee productivity generally centers on two main aspects: personal motivation and workplace infrastructure. A conducive work environment enables employees to work comfortably, which ultimately has a positive impact on their outcomes and performance (Kusuma, 2021). Employee performance is one of the main factors in a company's success. Therefore, every organization must create a work environment that supports the continuity and improvement of employee performance. According to (Sedarmayanti, 2017) the indicators used to measure work environment variables include noise, facilities, harmonious relationships, and job safety.

Work Motivation

Motivation can be defined as the readiness to exert maximum effort to achieve organizational goals, where such readiness is influenced by the extent to which these efforts fulfill individual needs. Work motivation has a tangible impact on performance (Nugroho et al., 2024).

Work motivation is the driving force that encourages individuals to carry out their work enthusiastically in order to achieve predetermined goals. It is an internal drive within employees to perform their tasks responsibly and to have a strong desire to achieve organizational objectives. A high level of work motivation among employees indirectly impacts their performance (Kasman, 2021). According to Mangkunegara (2018) the indicators of work motivation include hard work, high aspirations, task/goal orientation, and effective time utilization.

Job Training

Training is one method to enhance employees' knowledge and skills. It is essential to achieve efficiency and effectiveness in employee performance within companies. Training is a structured process aimed at modifying employee behavior toward improving knowledge and skills in performing specific tasks (Kasman, 2021). According to et al. (2019), training and development are organizational necessities to prevent fraudulent activities in the future. Training and development include providing courses, workshops, coaching, mentoring, and other learning opportunities to inspire, challenge, and motivate employees to carry out tasks in accordance with organizational standards.

In line with Sudianthini & Shinta (2019), training is an intervention designed to enhance individual aspects of job performance, particularly in developing skills required to achieve organizational objectives. According to Sofyandi (2019) the dimensions and indicators of effective job training provided by companies can be measured through training content, training methods, instructor attitudes and skills, and training facilities.

Work Discipline

Work discipline is a tool used by managers to communicate with employees so that they are willing to change behavior, as well as an effort to enhance awareness and willingness to comply with all company regulations and applicable social norms (Sutrisno, 2019). According to Singodimedjo in Soetrisno (2016), a good organization or company must establish rules or regulations as guidelines for all employees. The indicators of work discipline according to Singodimedjo in Soetrisno (2016) include compliance with time regulations (arrival, departure, and break times); compliance with basic rules such as proper dress codes and behavior in accordance with workplace norms; compliance with procedural and relational rules including following work procedures and maintaining good relations with other units; and compliance with other rules governing permissible and prohibited behaviors within the organization.

Employee Performance

The primary aspect expected by organizations from employees is performance that meets established standards. Performance is important because performance evaluation can capture managers' attention and increase employee motivation (Kasman, 2021). According to Mangkunegara (2017), employee performance indicators include work quality, work quantity, task execution, and responsibility.

Effect of Work Environment on Work Discipline

A conducive work environment is crucial in organizations as it can create employee satisfaction and comfort, which in turn encourages optimal work discipline. A good work environment helps employees to be more responsible in completing tasks and adhering to applicable rules.

Research by Inbar (2018) on PDAM Kota Malang employees revealed that a conducive work environment contributes to shaping disciplined behavior and enhancing work enthusiasm. A comfortable and supportive environment encourages employees to be more disciplined in carrying out their duties.

Additionally, research on Puskesmas Lau employees in Maros Regency also indicated that work environment has a positive and significant effect on work discipline. Statistical tests showed that the work environment explains 56.3% of variations in work discipline, while the remainder is influenced by other factors outside the study.

Other research at PT Sawit Graha Manunggal – Bumi Borneo Estate further supports these findings, where work environment was proven to have a positive and significant effect on employee work discipline. This means that the better the work environment provided by the company, the higher the employees' level of discipline. H1: Work Environment has a positive and significant effect on Work Discipline.

Effect of Work Motivation on Work Discipline

Work motivation is a drive or desire that arises within individuals to perform tasks well and achieve intended goals. High motivation can encourage employees to work diligently, comply with rules, and complete tasks on time. Employees with high work motivation tend to demonstrate strong work discipline, such as punctual attendance, adherence to company rules, and accountability for their tasks. Conversely, low work motivation may result in poor discipline, frequent absenteeism, or rule violations.

Research by Fadilah et al. (2022) indicated that work motivation positively and significantly affects work discipline. The findings show that the higher the employees' motivation, the higher their level of discipline. This confirms that work motivation is a key factor in shaping work discipline within organizations. H2: Work Motivation has a positive and significant effect on Work Discipline.

Effect of Job Training on Work Discipline

Job training is one of the main factors influencing employee discipline levels in organizations. It is a process of enhancing employees' knowledge, skills, and attitudes to enable them to perform tasks well and in accordance with established standards. Through structured training, employees better understand rules, procedures, and responsibilities in their work.

Employees who regularly undergo training tend to exhibit better work discipline, such as adhering to working hours, completing tasks on time, and complying with workplace rules. Training also boosts employee motivation and confidence, encouraging them to work in a disciplined and professional manner. Research by Suryani & Prasetyo (2021) confirmed that job training positively and significantly affects employee work discipline. The findings suggest that the more effective the training provided, the higher the level of employee discipline. Thus, training is a key effort to build and improve work discipline in organizations. H3: Job Training has a positive and significant effect on Work Discipline.

Effect of Work Discipline on Employee Performance

Work discipline is an important aspect influencing employee performance in organizations. It reflects the extent to which employees comply with rules, regulations, and responsibilities in carrying out tasks. Employees with high discipline levels tend to complete tasks on time, follow procedures, and display professionalism in the workplace. Good work discipline creates an orderly and focused work environment, supporting more efficient achievement of company goals. Conversely, lack of discipline may disrupt workflows and lower productivity. Hence, organizations must instill a culture of discipline to improve both individual and team performance.

Research by Maulidiyah & Sudibyo (2022) indicated that work discipline positively and significantly affects employee performance. Their findings revealed that employees with higher levels of discipline tend to produce better performance outcomes than those with lower discipline. H4: Work Discipline has a positive and significant effect on Employee Performance.

Effect of Work Environment on Employee Performance

Creating a supportive work environment is essential to boost organizational, corporate, and small business productivity. The relationship among tasks, workplaces, and work equipment makes the workplace an integral part of job activities. Effective management to maximize employee productivity generally focuses on two key aspects: personal motivation and workplace infrastructure. A conducive work environment enables employees to work comfortably, positively affecting job outcomes and overall performance (Kusuma, 2021).

Employee performance is one of the primary determinants of company success. Therefore, every organization must establish a work environment that sustains and enhances employee performance. This is supported by studies by Sembiring (2020) and Hustia (2020) which showed that work environment positively and significantly affects employee performance. H5: Work Environment has a positive and significant effect on Employee Performance.

Effect of Work Motivation on Employee Performance

Motivation is defined as the readiness to exert maximum effort to achieve organizational goals, where such readiness depends on the ability of these efforts to fulfill individual needs. Work motivation has a real impact on performance (Nugroho et al., 2024). If individuals are driven by strong determination, either internally or externally (such as through their workplace), they are motivated to achieve optimal performance. H6: Work Motivation has a positive and significant effect on Employee Performance.

Effect of Job Training on Employee Performance

Training is one method to enhance employees' knowledge and skills. It is essential to achieve efficiency and effectiveness in employee performance within companies. Training is a systematic process aimed at modifying employee behavior toward improving knowledge and skills in performing specific tasks (Sari Pascariati Kasman, 2021). Planned and systematic training seeks to develop knowledge, skills, and attitudes through learning processes, thereby improving organizational activity effectiveness (Priansa, 2019).

Training is a form of learning provided by companies with the goal of enhancing employee performance in assigned tasks. This is supported by Hustia (2020) who found that job training positively and significantly affects employee performance. H7: Job Training has a positive and significant effect on Employee Performance.

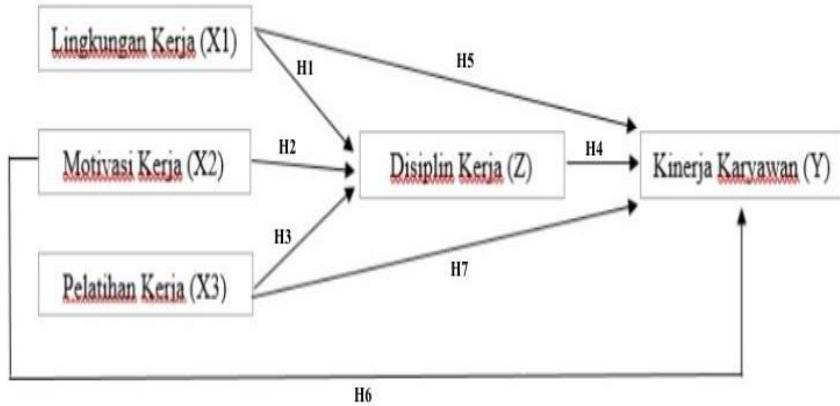


Figure 1. Conceptual Framework

3. Research Method

The focus of research may encompass various aspects such as business, business groups, workforce in the business context, or other elements. In this study, the focus is PT Telkom Akses Semarang. The data collected in this research are numerical, measurable, and can be processed in detail. The sampling method applied is purposive sampling, in which respondents are selected based on specific criteria, namely employees of PT Telkom Akses Semarang. Population, as defined by (Sekaran 2017:53) refers to a group of individuals, events, or objects of interest that become the focus of a researcher's investigation.

In this study, the population consists of 400 employees of PT Telkom Akses Semarang. The sample refers to a subset of individuals selected from the population and considered to represent a portion of the whole. The number of samples was determined using the Slovin formula:

$$n = \frac{N}{1+n(e^2)}$$

Where:

n = sample size

N = population size (400 employees)

e = margin of error (10% or 0.1)

400

$$n = \frac{400}{1 + 400 (0,1^2)}$$

$$n = \frac{400}{1 + 400 (0,01)}$$

$$n = \frac{400}{1 + 4}$$

$$n = \frac{5}{80}$$

$$n = 80$$

The calculation results indicate that the minimum sample size required is 80. However, this study uses 100 respondents to minimize residual data. Sample collection in this study employed purposive sampling, where individuals selected as samples were PT Telkom Akses Semarang employees who met the criteria of being division heads or staff and had previously received training. The type of data collected in this study is primary data, referring to information obtained through questionnaires distributed to PT Telkom Akses Semarang employees.

This study adopts a quantitative analysis approach using Smart PLS as the analytical tool, which includes the outer model, inner model, and hypothesis testing. The measurement model evaluation involves validity testing through AVE, Composite Reliability, and significance testing using *t*-statistics.

4. Results and Discussion

Measurement Model Evaluation (Outer Model)

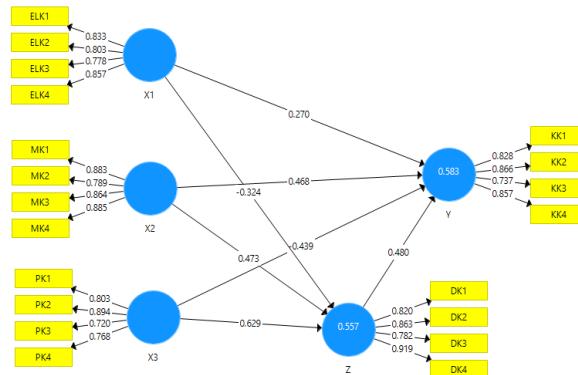


Figure 2. Measurement Model Evaluation (Outer Model).

Source: SmartPLS

Convergent Validity Test

Outer Loading

To test data validity, the outer loading approach was employed. This approach aims to determine the significance of variable factors on variable indicators. As an assessment of the validity of questionnaire statements, the *outer loading* value is used. In this study, the criteria are considered valid if the outer loading value exceeds 0.70. The results of the outer loading test are as follows:

Table 1. Outer Loading Test Results

	X1	X2	X3	Y	Z
DK1					0.820
DK2					0.863
DK3					0.782
DK4					0.919
ELK1	0.833				
ELK2	0.803				
ELK3	0.778				
ELK4	0.857				
KK1				0.828	
KK2				0.866	
KK3				0.737	
KK4				0.857	
MK1		0.883			
MK2		0.789			
MK3		0.864			
MK4		0.885			
PK1			0.629	0.803	
PK2				0.894	
PK3				0.720	
PK4				0.768	

Source: SmartPLS

Based on the table above, all items of the research variables have *outer loading* values > 0.70 , indicating validity.

AVE (Average Variance Extracted)

The AVE test ensures the validity of relationships between variables. According to Hair et al (2019), if the AVE value exceeds 0.50, it meets the criteria for convergent validity. The AVE results are as follows:

Table 2. AVE Test Results

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
X1	0.853	1.014	0.890	0.670
X2	0.878	0.889	0.916	0.732
X3	0.817	0.854	0.875	0.638
Y	0.841	0.855	0.894	0.678
Z	0.868	0.885	0.910	0.718

Source: SmartPLS

The table shows that the AVE values for all four variables are > 0.50 . Thus, all variables meet the requirements for convergent validity.

Discriminant Validity Test

Discriminant validity ensures that constructs provide contributions that are significantly stronger compared to indicators within a construct.

Cross Loadings

This test identifies the relationship between each indicator and its construct. The criterion is that indicator values across variables should be > 0.70 . The results are as follows:

Table 3. Cross Loading Test Results

	X1	X2	X3	Y	Z
DK1	0.364	0.566	0.519	0.505	0.820
DK2	0.472	0.458	0.607	0.461	0.863
DK3	0.410	0.399	0.563	0.464	0.782
DK4	0.437	0.697	0.562	0.653	0.919
ELK1	0.833	0.424	0.674	0.241	0.341
ELK2	0.803	0.414	0.670	0.190	0.317
ELK3	0.778	0.349	0.679	0.197	0.292
ELK4	0.857	0.776	0.635	0.639	0.533
KK1	0.487	0.568	0.405	0.828	0.557
KK2	0.309	0.569	0.249	0.866	0.612
KK3	0.358	0.491	0.275	0.737	0.364
KK4	0.417	0.635	0.322	0.857	0.488
MK1	0.622	0.883	0.593	0.536	0.546
MK2	0.608	0.789	0.496	0.480	0.492
MK3	0.491	0.864	0.441	0.634	0.509
MK4	0.597	0.885	0.560	0.681	0.626
PK1	0.675	0.717	0.803	0.474	0.626
PK2	0.738	0.533	0.894	0.324	0.546
PK3	0.526	0.243	0.720	0.161	0.369
PK4	0.555	0.289	0.768	0.134	0.499

Source: SmartPLS

The table indicates that all indicator values exceed 0.70, meeting discriminant validity criteria.

Reliability Test

The reliability test evaluates whether an instrument is accurate and dependable for data collection. This test uses Cronbach's Alpha. The results are:

Table 4. Reliability Test Results

	Cronbach's Alpha	Composite Reliability	Information
X1	0.853	0.890	Valid
X2	0.878	0.916	Valid
X3	0.817	0.875	Valid
Y	0.841	0.894	Valid
Z	0.868	0.910	Valid

Source: SmartPLS

Based on the table, Cronbach's Alpha and Composite Reliability values exceed 0.70, showing that all constructs demonstrate good reliability.

Structural Model Assessment (Inner Model)

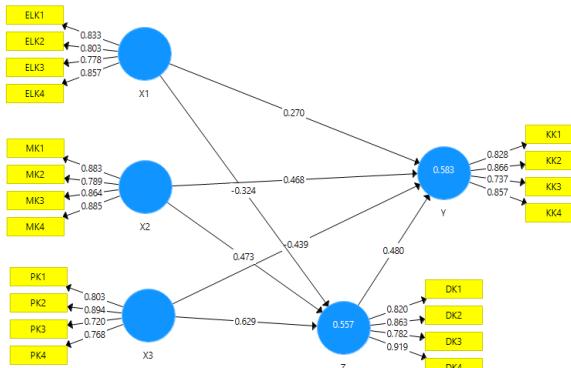


Figure 3. Structural Model (Inner Model)

Source: SmartPLS

R-Square (R^2)

The R^2 test evaluates how well the model explains variations in dependent variables using Adjusted R^2 . The closer the value is to 1, the stronger the effect. The results are:

Table 5. R-Square Test Results

	R Square	R Square Adjusted
Y	0.583	0.566
Z	0.557	0.543

Source: SmartPLS

The table shows Adjusted R² values of 0.566 for variable Y and 0.543 for variable Z. This means Y is influenced by 56.6% and Z by 54.3% in this study, with the remainder influenced by other factors.

Predictive Relevance (Q²)

This test validates the model's predictive ability. Exogenous variables with Q² > 0 indicate strong predictive relevance. Results are:

Table 6. Q² Test Results

	Q ²	Information
Y	0.378	Strong
Z	0.385	Strong

Source: SmartPLS

The table shows Q² values greater than 0 for both variables, indicating the model has adequate predictive relevance.

Hypothesis Testing

Hypothesis testing determines whether assumptions in this study are significant. Two tests are used: direct effect and indirect effect tests.

Direct Effect Test

Results of direct effect hypothesis testing are shown below:

Table 7. Path Coefficient Test Results

C	O	M	SD	T	P
X1-> Y	0.270	0.263	0.108	2.506	0.013
X1-> Z	-0.324	-0.310	0.118	2.757	0.006
X2-> Y	0.468	0.469	0.089	5.237	0.000
X2-> Z	0.473	0.477	0.085	5.534	0.000
X3-> Y	-0.439	-0.427	0.124	3.547	0.000
X3-> Z	0.629	0.614	0.108	5.828	0.000
Z-> Y	0.480	0.476	0.092	5.194	0.000

Source: SmartPLS

a. Effect of Work Environment on Work Discipline

The T-value for X1 → Z is 2.757 with a significance value of 0.006 < 0.05, meaning H1 is accepted. The original sample shows a negative value of -0.324, indicating an inverse relationship. Thus, the work environment significantly affects work discipline, but in a negative direction.

This finding contrasts with previous studies (e.g., Inbar, 2018) that reported a positive impact, suggesting contextual differences such as organizational culture, individual perceptions, or workplace conditions.

b. Effect of Work Motivation on Work Discipline

The T-value for X2 → Z is 5.534 with a significance of 0.000 < 0.05, meaning H2 is accepted. The original sample value of 0.473 indicates a positive relationship. Thus, work motivation significantly affects work discipline, supporting findings by Fadilah et al. (2022).

c. Effect of Job Training on Work Discipline

The T-value for X3 → Z is 5.828 with a significance of 0.000 < 0.05, meaning H3 is accepted. The original sample value of 0.629 indicates a positive relationship. Thus, job training significantly affects work discipline, consistent with Suryani & Prasetyo (2021).

d. Effect of Work Discipline on Employee Performance

The T-value for Z → Y is 5.194 with a significance of 0.000 < 0.05, meaning H4 is accepted. The original sample value of 0.480 indicates a positive relationship. Thus, work discipline significantly affects employee performance, supporting Maulidiyah & Sudibyo (2022).

e. Effect of Work Environment on Employee Performance

The T-value for X1 → Y is 2.506 with a significance of 0.013 < 0.05, meaning H5 is accepted. The original sample value of 0.270 indicates a positive relationship. Thus, the work environment significantly affects employee performance, supporting Sembiring (2020) and Hustia (2020).

f. Effect of Work Motivation on Employee Performance

The T-value for X2 → Y is 5.237 with a significance of 0.000 < 0.05, meaning H6 is accepted. The original sample value of 0.468 indicates a positive relationship. Thus, work motivation significantly affects employee performance.

g. Effect of Job Training on Employee Performance

The T-value for $X3 \rightarrow Y$ is 3.547 with a significance of $0.000 < 0.05$, meaning H7 is accepted. The original sample shows a negative value of -0.439, indicating an inverse relationship. Thus, job training significantly but negatively affects employee performance. This aligns with Atawirudi, Firdaus, and Rachmatullailly (2023), who found that training does not directly improve performance unless supported by organizational culture.

Indirect Effect Test

Indirect effect testing using SmartPLS Bootstrapping on Specific Indirect Effects yields the following results:

Table 8. Specific Indirect Effect Test Results

	O	M	SD	T	P
X1 -> Z -> Y	-0.156	-0.150	0.069	2.244	0.025
X2 -> Z -> Y	0.227	0.227	0.060	3.786	0.000
X3 -> Z -> Y	0.302	0.294	0.084	3.590	0.000

Source: SmartPLS

a. Work Environment affects Employee Performance through Work Discipline

The indirect effect shows a T-value of 2.244 and a P-value of $0.025 < 0.05$, with an original sample value of -0.156, indicating significance but with a negative direction.

b. Work Motivation affects Employee Performance through Work Discipline

The indirect effect shows a T-value of 3.786 and a P-value of $0.000 < 0.05$, with an original sample value of 0.227, indicating a positive and significant effect.

c. Job Training affects Employee Performance through Work Discipline

The indirect effect shows a T-value of 3.590 and a P-value of $0.000 < 0.05$, with an original sample value of 0.302, indicating a positive and significant effect.

5. Conclusion

Based on the analysis conducted in the previous chapter, the following conclusions can be drawn: The work environment has a significant effect on employee performance at PT Telkom Akses Semarang, as does work motivation, which also has a significant impact on employee performance. Additionally, job training plays a significant role in enhancing employee performance at PT Telkom Akses Semarang. Furthermore, work discipline mediates the effect of the work environment, work motivation, and job training on employee performance, suggesting that work discipline acts as a crucial intermediary in strengthening the influence of these factors on employee performance at the company.

In this study, the researcher suggests continuously improving employee performance by providing a comfortable work environment, motivation from supervisors, and adequate job training so that employees can deliver optimal performance to the company. In addition, the presence of work discipline within a company can influence the work environment and work activities, thereby contributing to better overall performance.

For future researchers, since this study has several limitations, it is expected that subsequent studies will be conducted more thoroughly. Future researchers may consider employing other variables that support employee performance and expanding the population to cover a broader range of occupational fields.

References

Al-Haddad, H. S.-J. (2020). Pengaruh motivasi dan lingkungan kerja terhadap kinerja karyawan pada Bank Sinarmas Medan. *Jurnal Akuntansi*, 13(1), 1–15. <https://doi.org/10.36355/jms.v1i1.475>

Ghobadi, A. (2020). *Akianno Ghobadi* - Google Scholar. Retrieved June 28, 2024.

Dolonseda, H. P., & Watung, S. R. (2020). Dampak lingkungan kerja dan etos kerja terhadap kinerja pegawai. *PUBLIC POLICY: Jurnal Aplikasi Kebijakan Publik & Bisnis*, 1(2), 288–297. <https://doi.org/10.51135/PublicPolicy.v1.i2.p288-297>

Maharani Rivai, E. S., & others. (n.d.). Pengaruh lingkungan kerja terhadap disiplin kerja pegawai Puskesmas Lau Kabupaten Maros. *Unpublished manuscript*.

Erni, M., FoEh, J. E., & Silalahi, E. (2022). Pengaruh motivasi, disiplin, dan lingkungan kerja terhadap kinerja guru (Deskripsi kajian studi literatur kinerja guru). *Jurnal Ekonomi Manajemen Sistem Informasi*, 4(1), 71–81.

Hasmalawati, N., Abstrak, I. A., & Psikologi, F. (2018). Pengaruh kualitas kehidupan kerja dan motivasi kerja terhadap kinerja karyawan. *Journal.Unnes.Ac.Id*.

Hustia, A. (2020). Pengaruh motivasi kerja, lingkungan kerja, dan disiplin kerja terhadap kinerja karyawan pada perusahaan WFO masa pandemi. *Jurnal Ilmu Manajemen*, 10(1), 81. <https://doi.org/10.32502/jimn.v10i1.2929>

JEMA. (n.d.). Pengaruh lingkungan kerja, kepuasan kompensasi, dan motivasi kerja terhadap disiplin kerja karyawan pada PT. Sawit Graha Manunggal-Bumi Borneo Estate. *Jurnal*.

Kale, J. D., FoEh, J. E., & Niha, S. S. (2023). Pengaruh gaya kepemimpinan, disiplin kerja, motivasi kerja, dan lingkungan kerja terhadap kinerja karyawan. *Jurnal Dimensi*, 12(1), 202–211. <https://doi.org/10.33373/dms.v12i1.5067>

Kartini, S. D. A., & Nurhidayati, A. (2023). Pengaruh disiplin kerja, lingkungan kerja, dan pelatihan terhadap kinerja pegawai penyuluh pertanian Dinas Pertanian dan Pangan. *JIIP - Jurnal Ilmiah Ilmu Pendidikan*, 6(3), 1783–1788. <https://doi.org/10.54371/jiip.v6i3.1640>

Kusuma, A. A. (2021). Literature study: The effect of the working environment on employee performance. *Business and Entrepreneurial Review*, 21(1), 1–10. <https://doi.org/10.25105/ber.v21i1.8239>

Mazidah, N. (2018). Pengaruh pelatihan dan motivasi terhadap kinerja karyawan dengan disiplin kerja sebagai variabel intervening (Studi kasus di Fakultas Ekonomi Universitas Islam). *Unpublished manuscript*.

Anshori, M. F., & Nurohman, D. (2022). Efektivitas penyediaan internet desa untuk peningkatan promosi UMKM di Temenggungan Udanawu Blitar. *Jurnal Cakrawala Ilmiah*, 1(9), 2245–2258. <https://doi.org/10.53625/jcijurnalcakrawalilmiah.v1i9.2191>

Inbar, N. R. D. (2018). Pengaruh lingkungan kerja terhadap disiplin kerja dan semangat kerja karyawan (Studi pada karyawan PDAM Kota Malang). *Unpublished manuscript*.

Fadilah, N., Suryani, N., & Lestari, D. (2022). Pengaruh motivasi kerja terhadap disiplin kerja karyawan pada PT. XYZ. *Jurnal Ilmiah Manajemen dan Bisnis*, 9(2), 2022.

Panambunan, O., Tewal, B., & Trang, I. (2017). Pengalaman kerja, pelatihan kerja, iklim organisasi dan pengaruhnya terhadap kinerja pegawai PT. PLN (Persero) Wilayah Suluttenggo. *Jurnal EMB4*, 5(2), 2183–2192.

Rulianti, E., & Nurpribadi, G. (2023). Pengaruh motivasi kerja, lingkungan kerja, dan pengembangan karir terhadap kepuasan kerja karyawan. *Jesya*, 6(1), 849–858. <https://doi.org/10.36778/jesya.v6i1.1011>

Kasman, P. S. (2021). Faktor-faktor yang mempengaruhi kinerja Bank Syariah Indonesia: Pemberdayaan sumber daya manusia, motivasi kerja dan perubahan organisasi (Literature review manajemen). *Jurnal Manajemen Pendidikan dan Ilmu Sosial*, 2(2), 689–696. <https://doi.org/10.38035/jmpis.v2i2.625>

Sari, R. P., & Wibowo, A. (2020). Pengaruh pelatihan kerja terhadap disiplin kerja pegawai. *Jurnal Manajemen dan Organisasi*, 11(1), 1–10.

Sedarmayanti, S. (2017). *Manajemen sumber daya manusia* (4th ed.).

Setiani, Y., & Febrian, W. D. (2023). Pengaruh pelatihan kerja, lingkungan kerja, dan kepuasan kerja terhadap kinerja karyawan PT Indomarco Prismatama Jakarta. *Nerava: Jurnal Ekonomi, Manajemen dan Akuntansi*, 1(1), 279–292.

Soetrisno, E. (2016). *Manajemen sumber daya manusia*.

Suryani, N., & Prasetyo, A. (2021). Pengaruh pelatihan kerja terhadap disiplin kerja karyawan pada PT. XYZ. *Jurnal Ilmiah Manajemen dan Bisnis*, 8(2), 1–13.

Votto, A. M., Valecha, R., Najafirad, P., & Rao, H. R. (2021). Artificial intelligence in tactical human resource management: A systematic literature review. *International Journal of Information Management Data Insights*, 1(2). <https://doi.org/10.1016/ijimci.2021.100047>

Warongan, B., & L. D.-J. E. J. (2022). Pengaruh lingkungan kerja dan stres kerja terhadap kinerja karyawan pada PT Jordan Bakery Tomohon. *Ejurnal.Unsrat.Ac.Id*, 10(1).

Yuliana, S. (2021). Pengaruh motivasi kerja terhadap disiplin kerja pegawai. *Jurnal Ilmiah Ekonomi dan Bisnis*, 7(1), 1–10.