



The Effect of Supervision and Work Environment on Employee Work Discipline at Type a Tirtonadi Terminal Surakarta

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Abstract: *This study examines the effect of supervision and the work environment on employee work discipline at Type A Terminal Tirtonadi Surakarta. The study responds to the operational characteristics of a 24-hour public transportation terminal, where employee attendance, compliance with standard operating procedures, and continuous presence at operational posts are essential to service reliability. A quantitative survey design was employed. The population comprised 116 employees, and 90 respondents were selected using simple random sampling after the Slovin formula was applied at a 5% margin of error. Data were collected through a five-point Likert questionnaire and analyzed using descriptive statistics, validity and reliability tests, classical assumption tests, multiple linear regression, t-tests, an F-test, and the coefficient of determination. The instruments were valid and reliable, with Cronbach's alpha values of 0.906 for supervision, 0.918 for the work environment, and 0.940 for work discipline. The regression equation was $Y = -0.200 + 0.793X_1 + 0.363X_2 + e$. Supervision had a positive and significant effect on work discipline ($B = 0.793$; $t = 5.663$; $p < 0.001$), while the work environment also had a positive and significant effect ($B = 0.363$; $t = 3.042$; $p = 0.003$). Simultaneously, the model was significant ($F = 245.713$; $p < 0.001$), with an Adjusted R^2 of 0.865. These findings indicate that disciplined public service behavior at Tirtonadi Terminal is strongly associated with systematic supervisory practices and a supportive physical and social work environment.*

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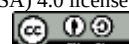
Introduction

Public service organizations depend not only on formal structures, infrastructure, and operating procedures but also on the behavioral reliability of the employees responsible for implementing them. Work discipline is therefore essential to service continuity because it reflects punctuality, compliance with organizational rules, adherence to standard operating procedures (SOPs), and responsibility in carrying out assigned duties. In transportation services, disciplinary problems may disrupt shift continuity, increase the workload of other employees, and affect the reliability of public services. These concerns are particularly relevant at Type A Terminal Tirtonadi Surakarta, which operates 24 hours a day and requires employees to maintain operational readiness across multiple service posts and shifts.

The empirical problem in this study is indicated by employee attendance records for June to October [insert year], obtained from [insert the original source, such as the employee attendance recap or personnel records of Type A Terminal Tirtonadi Surakarta]. The records report 64 cases in June, 73 in July, 46 in August, 66 in September, and 32 in October. These figures should be interpreted according to the original administrative records, specifically whether they represent individual absence incidents, the number of employees absent, or total days of absence. The fluctuations indicate variation in recorded attendance during the observation period. In a shift-based public service organization, attendance irregularities may require changes to work assignments and affect the continuity of services at operational posts. This condition provides a contextual basis for examining factors associated with employee work discipline. However, the attendance figures alone do not establish the causes of the fluctuations, making further analysis of relevant organizational factors necessary.

One factor that may be associated with employee work discipline is supervision. Supervision is a systematic managerial process that involves establishing performance standards, measuring actual activities, comparing performance with predetermined standards, identifying deviations, and taking corrective action (Handoko, 2017). At a transportation terminal, supervision helps communicate work expectations, monitor compliance with service procedures, and provide guidance when employees deviate from established requirements. Its role is particularly relevant when employees are distributed across operational posts and work under different shifts. Previous studies have reported positive relationships between supervision and work discipline in various organizational settings (Dessyarti & Oktaviana, 2023; Wiadnyana Putra & Idayanti, 2024). Nevertheless, the effectiveness of supervision may vary according to the characteristics of the organization and the nature of its operational responsibilities.

The work environment is another factor that may contribute to employee work discipline. Sedarmayanti (2017) defines the work environment as the conditions, facilities, materials, work methods, and relationships surrounding employees as they perform their duties. At Type A Terminal Tirtonadi Surakarta, employees operate amid vehicle noise, passenger movement, changing environmental conditions, shift arrangements, and the need to coordinate across service posts. Adequate lighting, air circulation, work facilities, collegial relationships, and communication between supervisors and subordinates may support employees in carrying out their responsibilities consistently. Previous studies in transportation agencies have identified positive relationships between the work environment and employee discipline (Novia Kusuma & Handayani, 2025; Utami & Mayasari, 2025). However, the implications of these relationships may differ between administrative offices and terminals that require continuous operational coverage and direct interaction with public transportation services.



Social Exchange Theory provides a theoretical basis for understanding the expected relationships between supervision, the work environment, and employee work discipline. Blau (1964) explains that social relationships involve exchanges in which individuals may respond to the treatment and benefits they receive from others. In an organizational context, constructive supervision can communicate managerial attention and clarify behavioral expectations, while adequate facilities and supportive workplace relationships can represent organizational resources. Employees who perceive these conditions positively may reciprocate through responsible behavior and compliance with organizational rules. At the same time, supervision has a formal control function because it enables managers to identify and address deviations from established standards. Thus, the relationship between supervision and discipline may involve both organizational support and the consistent implementation of work requirements.

Although previous research has examined supervision and work environment as factors associated with employee work discipline, further investigation is warranted in a terminal environment characterized by continuous 24-hour operations. Studies conducted in transportation agencies, government offices, and private organizations provide relevant evidence, but their findings may not fully capture the operational demands of a terminal where employees must maintain attendance, remain at designated posts, comply with service procedures, and coordinate during shift transitions. Moreover, previous findings concerning supervision have not been entirely consistent, as Idris et al. (2025), for example, reported a positive but statistically insignificant relationship in a different organizational context. This variation supports the need to examine the two factors together in a specific operational setting. The research gap addressed here is therefore contextual: the study evaluates the relationships of supervision and the work environment with employee work discipline in a continuously operating Type A transportation terminal, rather than assuming that findings from other organizational settings apply equally to this environment.

This study contributes theoretically by examining the relevance of Social Exchange Theory to employee work discipline in a public transportation terminal, where organizational support and formal supervisory control may operate simultaneously. Practically, the findings are intended to provide context-specific evidence that terminal management can use to evaluate supervisory practices and workplace conditions, particularly in relation to attendance, compliance with SOPs, and continuity of service at operational posts.

Literature Review and Hypothesis Development

Work discipline refers to an employee's willingness to respect and obey rules and norms that apply in the organization. Sutrisno (2019) emphasizes that discipline is indispensable because organizational goals are difficult to achieve when members do not comply with established provisions. Drawing on Singodimejo as cited in Sutrisno (2019), this study operationalizes discipline through four broad dimensions: compliance with time rules, compliance with organizational regulations, compliance with work-behavior rules and job responsibilities, and compliance with other applicable provisions. In the specific terminal context, these dimensions are reflected in punctual attendance and departure, remaining at the assigned work post unless permission is obtained, wearing official uniforms and complete attributes, complying with Standard Operating Procedures (SOPs), and carrying out work carefully and responsibly.

Supervision is treated as a managerial process rather than a single act of inspection. Following Handoko (2017), the measurement emphasizes four aspects that are relevant to the field setting: establishment of clear service standards and work targets, direct monitoring of employee activity, objective comparison of work results with predetermined standards, and corrective action when procedural errors occur. Effective supervision is expected to reduce ambiguity about required conduct and increase the probability that deviations are detected and corrected. Consistent monitoring also signals that institutional rules are actively enforced rather than merely documented.

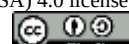
The work environment in this study includes both physical and non-physical conditions. Following Sedarmayanti (2017), the physical component covers lighting and air circulation, noise conditions, and availability of work facilities, while the non-physical component includes collegial relations and communication between supervisors and subordinates. For terminal employees, these conditions are closely connected to the practical ability to sustain attention, remain at designated posts, follow service procedures, and work cooperatively under a continuous operational schedule.

From the perspective of Social Exchange Theory, supervision and the work environment can influence discipline through reciprocal perceptions. Constructive supervision communicates organizational concern and managerial involvement, while adequate facilities and supportive relationships represent resources that make work more manageable. Employees who perceive such treatment as fair and supportive may respond with stronger adherence to organizational norms (Blau, 1964). At the same time, supervision also operates through a control mechanism by clarifying standards and correcting non-compliance. These reciprocal and control-based mechanisms jointly support the expectation that better supervision will strengthen work discipline.

Empirical research generally supports this relationship. Dessyarti and Oktaviana (2023) found that supervision contributed positively to work discipline in official motorcycle dealerships, and Wiadnyana Putra and Idayanti (2024) reported a positive and significant effect of supervision on employee discipline in the transportation agency of Bangli Regency. Anggriani et al. (2025) similarly identified supervision as an important predictor of employee discipline. However, Idris et al. (2025) reported a positive but statistically insignificant effect of supervision on discipline in an oil-and-gas project context. The inconsistency indicates that organizational setting may condition the effectiveness of supervisory practices. Accordingly, H1 states that supervision has a positive and significant effect on employee work discipline at Type A Terminal Tirtonadi Surakarta.

A supportive work environment can also foster discipline because employees are more able to meet organizational expectations when they work under safe, comfortable, and socially cooperative conditions. Novia Kusuma and Handayani (2025), in a study of civil servants at the Surakarta Transportation Agency, found that the work environment had a positive and significant effect on discipline. Utami and Mayasari (2025) reached a similar conclusion in the Buleleng Transportation Agency. These findings are especially relevant because transportation-service employees work under operational conditions that require concentration, punctuality, and coordinated behavior. Therefore, H2 states that the work environment has a positive and significant effect on employee work discipline at Type A Terminal Tirtonadi Surakarta.

The simultaneous hypothesis integrates the two explanatory mechanisms. Supervision establishes and enforces standards, whereas the work environment provides physical and social conditions in which employees are expected to meet those standards. Previous research reviewed in the thesis, including Anggriani et al. (2025) and Lombok et al. (2021), indicates



that supervision and the work environment can jointly contribute to discipline. Based on this logic, H3 states that supervision and the work environment simultaneously have a significant effect on employee work discipline at Type A Terminal Tirtonadi Surakarta.

Research Methods

This study used a quantitative survey approach and was conducted at Type A Terminal Tirtonadi Surakarta. The site was selected because it is a public transportation service center with high operational intensity and continuous 24-hour activity. The dependent variable was employee work discipline, while supervision and the work environment were the independent variables. Primary data were obtained directly from employees through a questionnaire distributed using Google Forms. Responses were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The population consisted of all 116 employees at Type A Terminal Tirtonadi Surakarta. The thesis states: "Sampel adalah bagian dari jumlah dan karakteristik yang dimiliki oleh populasi tersebut" (Sugiyono, 2017:215). Because the population size was known, the sample was determined using the Slovin formula with a 5% margin of error, resulting in 90 respondents. Probability sampling with a simple random sampling method was used, meaning that members of the population were selected randomly without differentiating population strata. This procedure was intended to provide each employee with an opportunity to be selected as a respondent.

The supervision variable consisted of four indicators based on the supervision process described by Handoko (2017): establishment of standards, monitoring of implementation, evaluation or comparison between performance and standards, and corrective action. The work-environment variable followed Sedarmayanti (2017) and was measured through five indicators: lighting and air circulation, noise level, availability of work facilities, relationships among co-workers, and communication between supervisors and subordinates. Work discipline was derived from the dimensions of Singodimejo in Sutrisno (2019), represented by punctual attendance and departure, remaining at the assigned post, proper use of uniform and attributes, compliance with SOPs, and careful and responsible performance of duties.

Data analysis was conducted using descriptive statistics and inferential procedures in SPSS. Descriptive analysis summarized the mean response for each indicator and classified scores into five categories based on an interval width of 0.8: 1.00-1.80 very low, 1.81-2.60 low, 2.61-3.40 moderate, 3.41-4.20 high, and 4.21-5.00 very high. Instrument validity was assessed using Pearson product-moment correlations with a significance criterion of $p < 0.05$. Reliability was evaluated using Cronbach's alpha, with values above 0.60 considered reliable in the research design (Ghozali, 2018; Sugiyono, 2019).

Before hypothesis testing, the regression model was evaluated using classical assumption tests. Multicollinearity was examined using tolerance and Variance Inflation Factor (VIF), heteroscedasticity was tested with the Glejser procedure, residual normality was assessed through the Kolmogorov-Smirnov test, and autocorrelation was evaluated using the Runs Test. Multiple linear regression was then estimated as $Y = a + b_1X_1 + b_2X_2 + e$, where Y is work discipline, X1 is supervision, and X2 is the work environment. Partial effects were tested with t-tests at a 5% significance level, simultaneous model significance was tested with the F-test, and explanatory power was evaluated through Adjusted R².

Table 1. Operationalization of Research Variables

Variable	Operational focus	Indicators
Supervision (X1)	Managerial process used to ensure implementation is consistent with standards and to correct deviations.	Clear work/service standards; direct monitoring; objective comparison/evaluation; corrective guidance.
Work Environment (X2)	Physical and non-physical conditions surrounding employees that may affect task execution.	Lighting and air circulation; noise; work facilities; co-worker relations; supervisor-subordinate communication.
Work Discipline (Y)	Voluntary compliance with organizational time, behavioral, procedural, and other rules.	Punctuality; remaining at work post; uniform/attributes; SOP compliance; careful and responsible work.

Result and Discussion

Type A Terminal Tirtonadi is a major land-transport hub located at Jalan Ahmad Yani No. 262, Gilingan, Banjarsari, Surakarta. It operates as a technical implementation unit under the Ministry of Transportation and serves intercity-interprovince (AKAP), intercity-intraprovince (AKDP), and urban agglomeration transport. The terminal has undergone modernization, including integrated passenger facilities, digital departure information, operational posts, commercial areas, and a skybridge connection to Solo Balapan Station. These characteristics create a wide, dynamic, and continuously operating work setting in which employees must adapt to dense passenger flows, vehicle noise, shift transitions, and service demands.

The measurement model performed satisfactorily. All questionnaire items for supervision (X1.1-X1.4), the work environment (X2.1-X2.5), and work discipline (Y1.1-Y1.5) had significance values of 0.000 in the validity test and were therefore declared valid at the 0.05 level. Reliability was also high: Cronbach's alpha was 0.906 for supervision, 0.918 for the work environment, and 0.940 for work discipline. These values indicate strong internal consistency among the indicators used to represent each construct and support the use of the composite scores in subsequent regression analysis.

The classical assumption tests indicated that the model was suitable for multiple linear regression. Both independent variables had tolerance values of 0.129 and VIF values of 7.776, which were within the criteria adopted in the thesis (tolerance > 0.10 and VIF < 10). The Glejser test showed significance values of 0.294 for supervision and 0.679 for the work environment, indicating no heteroscedasticity. The Kolmogorov-Smirnov residual test produced a Monte Carlo significance value of 0.061, which exceeded 0.05 and supported residual normality. The Runs Test produced an Asymp. Sig. value of 0.672, indicating no autocorrelation.



Table 2. Instrument Reliability and Classical Assumption Tests

Test	Result	Decision
Cronbach alpha - Supervision	0.906	Reliable
Cronbach alpha - Work Environment	0.918	Reliable
Cronbach alpha - Work Discipline	0.940	Reliable
Multicollinearity	Tolerance = 0.129; VIF = 7.776 for X1 and X2	No multicollinearity under the adopted criteria
Glejser heteroscedasticity	p = 0.294 (X1); p = 0.679 (X2)	No heteroscedasticity
Kolmogorov-Smirnov normality	Monte Carlo p = 0.061	Residuals normally distributed
Runs Test	Asymp. Sig. = 0.672	No autocorrelation

Descriptively, the respondents assessed supervision at a high level, with an overall mean of 4.17. The highest mean (4.21) was found for the statement that when employees make procedural mistakes, supervisors provide reprimands and corrective guidance in an educational manner. The lowest supervision mean (4.10) concerned routine direct monitoring of activities in the field or at guard posts. This pattern is important: employees generally perceive supervision positively, but direct field monitoring appears to be the component with the greatest room for improvement. In a dispersed terminal environment, periodic physical presence by supervisors can make standards more visible and reduce opportunities for procedural neglect.

The work environment also received a high overall evaluation, with a mean of 4.08. Co-worker relationships produced the highest indicator mean (4.18), suggesting that collaboration and mutual assistance are established strengths in the terminal. The lowest indicator was the availability of work facilities (4.03), followed by noise conditions (4.04) and lighting/air circulation (4.07). Although these scores remain in the high category, they show that physical infrastructure is relatively less favorable than social relationships. This distinction is practically relevant because operational personnel depend on communication devices, desks, post equipment, adequate lighting, and ventilation to remain effective across long shifts.

Work discipline was likewise classified as high, with an overall mean of 4.09. The highest item mean (4.17) concerned not leaving the assigned work post or area without supervisor permission during operational hours. Two indicators shared the lowest mean of 4.02: punctual attendance and departure, and wearing official uniform and complete attributes. The pattern suggests that employees strongly recognize the importance of remaining at their posts, while time discipline and completeness of official appearance remain areas requiring sustained managerial attention.

Table 3. Descriptive Summary of Main Variables

Variable	Overall Mean	Highest Indicator	Lowest Indicator	Interpretation
Supervision	4.17	Corrective guidance after procedural error (4.21)	Routine direct monitoring at field/post (4.10)	High
Work Environment	4.08	Co-worker cooperation (4.18)	Availability of work facilities (4.03)	High
Work Discipline	4.09	Not leaving post without permission (4.17)	Punctuality and complete uniform/attributes (4.02)	High

The multiple linear regression analysis produced the equation $Y = -0.200 + 0.793X_1 + 0.363X_2 + e$. The coefficient for supervision was positive at 0.793, indicating that higher supervision scores were associated with higher work-discipline scores while holding the work environment constant. The work-environment coefficient was also positive at 0.363, indicating that improved perceptions of the work environment were associated with higher discipline when supervision was held constant. The standardized coefficients further showed that supervision (Beta = 0.615) had a stronger relative association with work discipline than the work environment (Beta = 0.331) within this model.

The partial hypothesis tests supported both proposed relationships. Supervision had $t = 5.663$ with $p < 0.001$, leading to acceptance of H1. The work environment had $t = 3.042$ with $p = 0.003$, leading to acceptance of H2. The simultaneous F-test produced $F = 245.713$ with $p < 0.001$, showing that supervision and the work environment jointly formed a statistically significant model for predicting work discipline. The model summary yielded $R = 0.932$, $R^2 = 0.868$, and Adjusted $R^2 = 0.865$. Thus, 86.5% of the variation in work discipline was explained by the two independent variables in the estimated model, while 13.5% was associated with other factors not included in the study.

Table 4. Multiple Linear Regression and Hypothesis Testing

Predictor / Model	B	Std. Error	Beta	t / F	Sig.	Decision
Constant	-0.200	0.897	-	-0.222	0.824	-
Supervision (X1)	0.793	0.140	0.615	5.663	<0.001	H1 supported
Work Environment (X2)	0.363	0.119	0.331	3.042	0.003	H2 supported
Simultaneous model	-	-	-	F = 245.713	<0.001	H3 supported
Model fit	R = 0.932	R ² = 0.868	Adjusted R ² = 0.865	SEE = 1.828	-	86.5% explained variance

Effect of Supervision on Work Discipline

The positive and significant coefficient for supervision demonstrates that supervisory practices are closely related to work discipline among Tirtonadi Terminal employees. The

practical meaning of the result is consistent with the operational reality of the terminal: when standards are clear, employees are monitored, their work is compared with those standards, and deviations are followed by corrective guidance, compliance becomes more likely. The descriptive result strengthens this interpretation. Respondents gave the highest supervision score to corrective guidance after procedural errors, indicating that supervision is not perceived only as punishment but also as a mechanism for direction and improvement.

This result is consistent with the thesis's theoretical use of Social Exchange Theory. Constructive supervisory attention can be interpreted as an organizational resource; employees who perceive monitoring as fair, clear, and development-oriented may reciprocate through responsible behavior and rule compliance (Blau, 1964). At the same time, supervision has a direct control function. In public-service operations, the visibility of supervisors can reduce ambiguity over expected behavior and increase the perceived certainty that procedural deviations will be noticed. The combination of reciprocal support and control helps explain why supervision generated the largest standardized coefficient in the model.

The finding aligns with Dessyarti and Oktaviana (2023), who reported a positive contribution of supervision to work discipline, and with Wiadnyana Putra and Idayanti (2024), who found that supervision positively and significantly affected discipline among transportation-agency employees. It is also consistent with the evidence summarized in Anggriani et al. (2025). However, it differs from Idris et al. (2025), where supervision had a positive but statistically insignificant effect on discipline. The difference may be associated with organizational context. Tirtonadi Terminal has continuous operations, multiple work posts, public-facing duties, and shift transitions, making direct and systematic supervision particularly salient for maintaining discipline.

From a managerial perspective, the lowest supervision indicator - routine direct monitoring at field posts - provides a concrete priority. The regression results do not imply that all forms of control should simply be intensified. Rather, management can strengthen predictable and fair supervisory routines: direct checks at operational posts, clear service standards, documented feedback, and corrective guidance proportionate to the deviation. Such practices can reinforce employee accountability without reducing supervision to punitive inspection.

Effect of the Work Environment on Work Discipline

The work environment also had a positive and significant effect on work discipline. This result indicates that employee compliance is not determined solely by managerial control; it is also associated with the conditions under which employees are expected to perform. Terminal operations expose employees to noise, passenger density, physical movement, shift schedules, and the need to coordinate with colleagues and supervisors. Adequate lighting and ventilation, usable work facilities, and constructive relationships can reduce unnecessary strain and support consistent adherence to schedules and procedures.

The descriptive findings provide additional detail. The highest score was recorded for co-worker relationships, indicating strong mutual support, while work facilities received the lowest mean. This pattern suggests that the terminal already possesses useful social capital among employees, but the physical environment can be improved further. When work posts have reliable communication equipment, appropriate furniture, adequate lighting, and sufficient air circulation, employees are better able to remain at their posts, maintain attention, and perform

service tasks in accordance with SOPs.

The result is consistent with Novia Kusuma and Handayani (2025), whose study of civil servants at the Surakarta Transportation Agency found a positive and significant effect of the work environment on discipline. It also supports Utami and Mayasari (2025) in the Buleleng Transportation Agency. The convergence is noteworthy because these studies share a public transportation context, although the present research focuses on an operational terminal rather than an administrative agency office. The operational setting strengthens the importance of physical facilities and environmental comfort because employees interact directly with service infrastructure and passenger flows throughout the workday.

In Social Exchange Theory terms, a supportive environment may be interpreted as organizational investment in employees. When the organization provides reasonable physical conditions and encourages respectful communication, employees may perceive greater organizational support and reciprocate through adherence to expected behavior. The result should not be interpreted as implying that comfort alone creates discipline. Rather, environmental support reduces obstacles to disciplined behavior and complements the standard-setting and corrective functions of supervision.

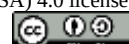
Simultaneous Effect and Practical Implications

The simultaneous model confirms that supervision and the work environment jointly explain a substantial share of work-discipline variation. An Adjusted R^2 of 0.865 indicates strong explanatory power within the observed sample. The result supports the argument that discipline should be managed through an integrated approach: employees require clear standards and consistent monitoring, but they also need physical and social conditions that enable them to comply with those standards. The two factors therefore operate as complementary rather than competing managerial instruments.

For Type A Terminal Tirtanadi Surakarta, the findings point to several practical priorities already suggested by the thesis. Management should strengthen direct and measurable supervision through more regular visits to operational posts, attendance checks, and uniform-completeness inspection during briefings. Corrective action should remain educational and proportional, because the highest supervision score indicates that employees respond positively to guidance following procedural errors. At the same time, management should prioritize the renewal of operational facilities, especially communication equipment and basic post furniture, while maintaining good lighting, ventilation, and supportive communication.

The findings also clarify which discipline indicators deserve attention. Punctual attendance and complete use of uniforms/attributes had the lowest discipline means, even though they remained within the high category. These areas can be monitored through clear shift handover procedures, attendance verification, and routine briefing. Meanwhile, the strong score for remaining at the work post without permission should be maintained through fair scheduling and communication between team members. The strong co-worker relationship score suggests that peer support can be used as a positive mechanism for maintaining service continuity during busy operational periods.

Despite the high explanatory power of the model, the study does not claim that supervision and the work environment are the only determinants of discipline. The remaining 13.5% indicates the potential relevance of factors such as motivation, leadership style, compensation or performance allowances, and bureaucratic culture. The result is therefore best interpreted as evidence that these two variables are major predictors in the observed setting, not as a complete causal account of employee discipline.



Theoretical and Organizational Implications

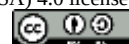
The statistical dominance of supervision in the model provides an important theoretical implication. Social Exchange Theory is frequently used to explain positive employee reactions to supportive organizational treatment, but the Tirtonadi setting shows that reciprocal exchange can operate together with formal managerial control. Employees in a public transportation terminal do not work in an environment where compliance can be left entirely to individual discretion. Their activities are tied to shifts, service standards, safety-related routines, public interaction, and the continuity of operational posts. Consequently, supervision can be experienced simultaneously as organizational attention and as a formal mechanism that reduces uncertainty about acceptable conduct. This dual character helps explain why supervision was strongly associated with discipline without eliminating the contribution of the work environment.

The findings also refine the role of the work environment in a public-service context. A supportive environment does not merely increase comfort; it can improve the feasibility of disciplined behavior. Employees are more capable of following SOPs and remaining attentive when lighting, ventilation, communication equipment, and operational facilities are adequate. Likewise, constructive relationships among co-workers reduce coordination problems during busy periods and shift transitions. In this sense, the work environment functions as an enabling condition: it may not replace formal supervision, but it can reduce practical barriers that otherwise make compliance more difficult. The positive coefficient for the work environment therefore complements, rather than competes with, the stronger coefficient for supervision.

A further organizational implication concerns the distinction between formal rules and their implementation. Public institutions often possess written attendance rules, uniform requirements, service standards, and SOPs. The present results suggest that the existence of these rules alone is insufficient. Their behavioral effect becomes stronger when supervisors actively communicate standards, observe implementation, compare performance with expectations, and provide corrective feedback. The descriptive evidence that corrective guidance received the highest supervision score supports this interpretation. Employees appear to value supervision that is clear and developmental, whereas the lower score for direct monitoring indicates that managerial presence across operational posts can still be strengthened.

The study also contributes to understanding discipline in a shift-based service system. Punctuality and complete use of official attributes were the lowest-rated discipline indicators, although both remained in the high category. Shift-based operations create a particular dependence between employees because lateness can delay handovers and increase the burden on personnel whose shifts should have ended. Uniform and attribute compliance also has a public-service dimension because official appearance signals role clarity, authority, and institutional professionalism to passengers. Management can therefore treat these indicators not as cosmetic administrative requirements but as part of operational reliability and public trust.

The strong score for co-worker relationships provides a useful counterpoint to the physical-environment findings. Social support among employees may help preserve service continuity when operational demands fluctuate, but it should not become an informal substitute for adequate staffing, equipment, or supervision. A cooperative team can compensate temporarily for absences or workload spikes, yet persistent reliance on peer substitution may create fatigue and inequity. Accordingly, the management implication is to preserve collegial cooperation while ensuring that formal staffing, facilities, and supervisory systems remain



sufficiently robust to support employees rather than transferring institutional deficiencies onto peer networks.

The comparison with prior studies indicates that sectoral context deserves attention in future discipline research. The positive supervision finding is consistent with Dessyarti and Oktaviana (2023) and Wiadnyana Putra and Idayanti (2024), but contrasts with the insignificant result reported by Idris et al. (2025). One plausible explanation, within the limits of the available thesis evidence, is that supervision becomes more behaviorally salient when work is highly visible, standardized, and directly connected to public service continuity. Similarly, the positive work-environment result is consistent with Novia Kusuma and Handayani (2025) and Utami and Mayasari (2025). The present study extends that pattern into a technical field unit where physical work conditions are more directly experienced than in a conventional administrative office.

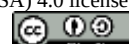
The high Adjusted R^2 should be interpreted carefully. It demonstrates that supervision and the work environment jointly account for a large share of observed variation in work discipline in this sample, but it does not establish that the model exhausts all relevant causes or that the relationships will be identical in other terminals. The thesis itself identifies a remaining 13.5% of unexplained variation and suggests factors such as performance allowances and leadership style. Motivation, organizational culture, perceived fairness, workload, and shift design may also be relevant subjects for future testing. Thus, the model offers a strong context-specific explanation while still leaving room for broader organizational research.

Taken together, the results support an integrated discipline-management framework for Tirtanadi Terminal. The first pillar is supervisory clarity: standards, field monitoring, objective evaluation, and corrective guidance. The second pillar is environmental support: adequate physical facilities, manageable workplace conditions, cooperative peer relationships, and respectful supervisor-subordinate communication. The third pillar is behavioral reinforcement: consistent attention to punctuality, post presence, uniform compliance, SOP adherence, and responsible task completion. Managing these pillars together is more consistent with the empirical results than relying on sanctions alone or assuming that a comfortable workplace will automatically produce disciplined behavior.

Conclusion and Recommendation

This study concludes that supervision has a positive and significant effect on the work discipline of employees at Type A Terminal Tirtanadi Surakarta, and the work environment also has a positive and significant effect. Simultaneously, both variables significantly predict work discipline, with the model explaining 86.5% of its variation. Supervision showed the stronger standardized effect, indicating that the clarity of standards, direct monitoring, objective evaluation, and corrective action are especially important in a 24-hour public transportation setting. Nevertheless, the work environment remains a meaningful contributor because physical facilities, environmental comfort, collegial relations, and supervisor-subordinate communication support employees' ability to comply consistently with organizational requirements.

Management is recommended to strengthen routine supervision at operational posts, maintain objective and educational corrective practices, improve monitoring of punctuality and complete work attributes, and prioritize renewal of communication devices and basic operational facilities. Employees should maintain their strong practice of remaining at assigned posts and preserve supportive co-worker relationships. Future studies may incorporate other



variables such as motivation, leadership style, performance allowances, or bureaucratic culture and may use qualitative or mixed-method designs to explore the psychological and organizational reasons behind disciplinary behavior in greater depth.

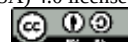
The study has two primary limitations. First, the model includes only supervision and the work environment, leaving other determinants of discipline outside the analysis. Second, the questionnaire was distributed through Google Forms to civil servants working in a high-mobility, 24-hour operational environment. Some respondents may have completed the questionnaire between field duties, which creates the possibility of limited concentration and social-desirability responses. These limitations should be considered when interpreting and generalizing the results.

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References

- Anggriani, F., Robain, W., & Kholik, A. (2025). Analysis of work supervision, work motivation and work environment on work discipline of employees at the Binjai Barat District Office. *International Journal of Integrative Sciences*, 4(2), 419-432. <https://doi.org/10.55927/ijis.v4i2.4>
- Blau, P. M. (1964). *Exchange and power in social life*. John Wiley & Sons.
- Dessyarti, R. S., & Oktaviana, P. (2023). The effect of organizational culture, supervision, and punishment on work discipline (Case study on official motorcycle dealers in Madiun City). *Asian Management and Business Review*, 3(2), 184-198. <https://doi.org/10.20885/ambr.vol3.iss2.art6>
- Ghozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS*. Badan Penerbit Universitas Diponegoro.
- Handoko, T. H. (2017). *Manajemen* (2nd ed.). BPFE.
- Hasibuan, M. S. P. (2016). *Manajemen sumber daya manusia*. PT Bumi Aksara.
- Idris, M., Sukman, R., & Djazuli, A. (2025). The influence of leadership and supervision on work discipline and its impact on employee performance at PT Elnusa Tbk Project Operation & Maintenance Talang Akar Pendopo (TAP). *International Journal of Computational and Experimental Science and Engineering*, 11(2). <https://doi.org/10.22399/ijcesen.2635>
- Lombok, A. S., Masengei, E., & Pangkey, I. (2021). The effect of inherent supervision and work environment on employee work discipline at the Manado State University Head Office. *Technium Social Sciences Journal*.
- Novia Kusuma, F., & Handayani, A. (2025). Pengaruh motivasi kerja, kepemimpinan dan lingkungan kerja terhadap disiplin kerja Aparatur Sipil Negara pada Dinas Perhubungan Kota Surakarta. *PENG: Jurnal Ekonomi dan Manajemen*, 2(3), 3214-3234.



<https://doi.org/10.62710/gdsb7j63>

- Nurul, F., Abas, H., Agus, M., Monoarfa, S., Tantawi, R., & Asi, L. L. (2025). Pengaruh lingkungan kerja terhadap disiplin kerja pegawai di Dinas Tenaga Kerja dan Transmigrasi Kabupaten Pohuwato. *JAMBURA*, 8(1).
- Sedarmayanti. (2017). *Manajemen sumber daya manusia: Reformasi birokrasi dan manajemen pegawai negeri sipil*. Refika Aditama.
- Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Sururama, R., & Amalia, R. (2020). *Pengawasan pemerintahan*. CV Cendekia Press.
- Sutrisno, E. (2019). *Manajemen sumber daya manusia* (11th ed.). Kencana Prenada Media Group.
- Utami, N. K. D. N., & Mayasari, N. M. D. A. (2025). Pengaruh lingkungan kerja dan gaya kepemimpinan terhadap disiplin kerja pada Dinas Perhubungan Kabupaten Buleleng. *Jurnal Manajemen dan Bisnis*, 7(2).
- Wiadnyana Putra, I. W., & Idayanti, I. D. A. A. E. (2024). Pengaruh pengawasan dan kepuasan kerja terhadap disiplin kerja pegawai pada Dinas Perhubungan Kabupaten Bangli. *Jurnal Manajemen dan Bisnis Equilibrium*, 10(1), 47-63. https://doi.org/10.47329/jurnal_mbe.v10i1.1269

