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The Influence Of Leadership Style, Rewards And Punishments, And Work Stress On Employee Productivity At PT Yih Quan Footwear Indonesia (Assembly Department, Building A3)

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Abstract

This study aims to examine the effects of leadership style, reward and punishment, and work stress on employee productivity at the Assembly Department of Building A3, PT Yih Quan Footwear Indonesia. This study employed a quantitative approach with a survey method. The population consisted of employees working in the Assembly Department of Building A3, with 123 respondents selected as the research sample. Data were collected using questionnaires and analyzed through descriptive statistics, validity and reliability tests, classical assumption tests, multiple linear regression analysis, t-tests, F-tests, and the coefficient of determination. The findings revealed that leadership style had a positive and significant effect on employee productivity, reward and punishment also had a positive and significant effect, while work stress had a negative and significant effect on employee productivity. Leadership style demonstrated the strongest positive influence, whereas work stress showed a substantial negative contribution. Simultaneously, leadership style, reward and punishment, and work stress significantly affected employee productivity, explaining 50.0% of its variation. The remaining 50.0% was influenced by other factors outside the research model. These findings highlight the importance of supportive leadership, effective reward systems, and proper work stress management in improving employee productivity.

Keywords: Employee Productivity; Leadership Style; Reward and Punishment; Work Stress.

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INTRODUCTION

The manufacturing industry is highly dependent on employee productivity to achieve production targets and maintain product quality. Employee productivity reflects the efficiency and effectiveness of employees in performing their tasks by utilizing available resources, including time, labor, and other organizational resources (Yani et al., 2021). In manufacturing organizations, productivity can be measured through production output, the achievement of production targets, and product quality (Fadli et al., 2023). PT Yih Quan Footwear Indonesia, a footwear manufacturing company located in the Batang Integrated Industrial Estate, Indonesia, produces footwear for international markets. As a labor-intensive manufacturing company, maintaining employee productivity is essential for supporting operational effectiveness, organizational competitiveness, and long-term business sustainability (Dadang et al., 2024; Hardianti, 2024).

One factor that may influence employee productivity is leadership style. Leadership style refers to a leader's pattern of behavior in influencing and directing employees, which may vary according to the characteristics of followers and organizational situations (Nikmat, 2022). At PT Yih Quan Footwear Indonesia, a job rotation policy was implemented by transferring employees from Building A1 to Building A3 to facilitate knowledge transfer and improve production performance. However, this organizational change revealed differences in leadership approaches between the two production units. While the leadership approach in Building A1 was perceived as more supportive and solution-oriented, the leadership in Building A3 tended to emphasize strict supervision and authoritarian practices. Employees may comply with authoritarian leadership not because of intrinsic motivation but because of fear of punishment or negative consequences (Aditya et al., 2023). Such conditions may negatively affect employee motivation, job satisfaction, and work engagement.

In addition to leadership style, reward and punishment systems may also influence employee behavior and productivity. Rewards represent forms of compensation, recognition, or appreciation provided by organizations to encourage employees and improve performance (Gunawan et al., 2023). PT Yih Quan Footwear Indonesia applies a financial reward system for production lines that achieve predetermined production targets and meet attendance requirements. Conversely, punishment is implemented to maintain discipline and minimize errors or violations in the workplace (Saraswati et al., 2023). The company also applies disciplinary measures related to violations of work regulations and the 6S system, particularly to maintain

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workplace cleanliness and product quality. Punishment is expected to create a deterrent effect and prevent employees from repeating violations (Arifuddin, 2022). Therefore, the effectiveness of reward and punishment systems is expected to contribute to employee discipline and productivity.

Work stress represents another important factor that may affect employee productivity. Work stress is a condition of tension that creates physical and psychological imbalance and may influence employees' emotions, thought processes, and overall condition (Hanoum et al., 2024). In the Assembly Division of Building A3, employees are required to perform production activities under strict quality standards and production targets. Processes such as lasting, cementing, and finishing require a high level of accuracy because errors may result in product defects and reduced output. Excessive supervision, high production demands, and harsh reprimands may create psychological pressure among employees. Work-related pressure can threaten individuals psychologically, physiologically, and behaviorally (Tulus, 2023). When work stress becomes prolonged, employees may experience reduced motivation, concentration, and accuracy, which can ultimately affect their productivity and increase the possibility of production errors.

Employee productivity is an important determinant of organizational performance because productive employees contribute to operational efficiency, organizational competitiveness, and the achievement of business objectives (Dadang et al., 2024; Tuwindar et al., 2024). However, production data from the Assembly Division of Building A3 at PT Yih Quan Footwear Indonesia in 2025 indicate that actual production frequently remained below the established daily target of 204 pairs, while the number of defective products fluctuated and often exceeded the expected target. These conditions indicate that employee productivity remains a managerial concern. Based on the existing workplace conditions, leadership style, reward and punishment practices, and work stress may represent important factors associated with employee productivity. Nevertheless, these variables need to be empirically examined within the specific context of a labor-intensive footwear manufacturing company.

Therefore, this study aims to examine the effects of leadership style, reward and punishment, and work stress on employee productivity among employees in the Assembly Division of Building A3 at PT Yih Quan Footwear Indonesia. Specifically, this study investigates the individual effects of leadership style, reward and punishment, and work stress on employee productivity, as well as their simultaneous effects. The findings are expected to contribute to the development of human resource management literature

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and provide practical insights for manufacturing management in developing more effective leadership practices, performance management systems, and strategies for managing employee work stress.

LITERATURE REVIEW

Literature Review and Hypothesis Development

Human resource management plays a central role in determining organizational effectiveness, particularly in labor-intensive manufacturing industries where employee performance directly affects production quantity and quality. Employee productivity is influenced not only by individual capabilities but also by organizational and managerial factors. Leadership practices can shape employees' motivation, work behavior, and engagement, while reward and punishment systems may influence employees' discipline and willingness to achieve organizational targets. In addition, work stress can affect employees' psychological conditions, concentration, and ability to perform their tasks effectively (Pranogyo & Hendro, 2023; Gibran et al., 2024).

From a behavioral perspective, organizational practices can create either positive or negative responses among employees. Effective leadership provides direction, communication, and support, whereas appropriate reward and punishment systems reinforce desirable work behavior and organizational discipline. However, excessive work demands and psychological pressure may lead to work stress, potentially reducing employee motivation and performance. Therefore, leadership style, reward and punishment, and work stress are considered important organizational factors that may influence employee productivity (Syaipudin & Amalia, 2023; Suryadinata et al., 2024; Pramono, 2024).

Leadership Style

Leadership style refers to the pattern of behavior and approach used by a leader to influence, direct, motivate, and guide employees toward the achievement of organizational objectives. Effective leadership provides employees with clear direction and helps them understand their roles and contributions to organizational success (Pranogyo & Hendro, 2023; Syaipudin & Amalia, 2023). Leadership style also includes the attitudes, actions, communication patterns, and personal characteristics demonstrated by leaders when interacting with their subordinates (Lombogia et al., 2023; Syuhada et al., 2023).

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A supportive and effective leadership style can create a positive working environment, strengthen employee motivation, and encourage greater involvement in organizational activities (Gaol, 2023; Hafidzi et al., 2023). Previous studies have also demonstrated varying relationships between leadership and employee productivity. Kumalasari (2025) found that effective leadership contributes to improved employee productivity, while Priyatna et al. (2026) reported that leadership style significantly influences employee productivity. Although Jaya et al. (2025) found that leadership style did not significantly affect productivity in their research context, the overall evidence suggests that an appropriate leadership approach has the potential to improve employee performance and productivity. Therefore, the following hypothesis is proposed:

H1: Leadership style has a positive effect on employee productivity.

Reward and Punishment

Reward refers to financial or non-financial recognition provided by an organization in response to employees' performance, contributions, or achievement of predetermined objectives. Rewards may include salaries, bonuses, welfare benefits, career development opportunities, promotions, and psychological or social recognition (Syafiq, 2021; Endang et al., 2023). An effective reward system can strengthen positive employee behavior, increase motivation, and encourage employees to maintain or improve their work performance (Ebenezer & George, 2023; Louisa & Widiyanto, 2023).

In contrast, punishment refers to sanctions or corrective actions imposed on employees who violate organizational rules or demonstrate undesirable work behavior. The primary purpose of punishment is to maintain discipline, prevent repeated violations, and encourage employees to comply with established organizational standards (Faris & Mardika, 2024; Hidayat, 2023). Previous studies have produced mixed findings regarding the effects of reward and punishment on employee productivity. Rahmawati et al. (2025) found that reward significantly influenced productivity, whereas punishment had a negative effect. Conversely, Suryadinata et al. (2024) reported that both reward and punishment had positive and significant effects on employee productivity. These findings indicate that the effectiveness of reward and punishment may depend on how these systems are implemented within the organization. Therefore, the following hypothesis is proposed:

H2: Reward and punishment have a positive effect on employee productivity.

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Work Stress

Work stress is a psychological and emotional condition that arises when employees experience an imbalance between job demands and their ability to cope with those demands. Excessive workloads, unclear roles, interpersonal conflicts, organizational structures, and leadership practices may contribute to employees' work stress (Afandi, 2018, as cited in Qoyyimah, 2019). High levels of work stress may affect employees' physical and psychological conditions, including their concentration, emotions, motivation, and ability to perform their work effectively (Aris A. W. K., 2023; Pramono, 2024).

Previous empirical studies indicate that work stress is closely associated with employee productivity. Excessive work pressure may lead to mental and emotional exhaustion, reduce concentration, and increase the likelihood of work errors, thereby negatively affecting employee performance and productivity (Gibran et al., 2024; Tulus et al., 2023). Lisdiana and Fahrani (2025) found that work stress had a negative effect on employee productivity. Similarly, Pangesti and Khairudin (2026) reported a significant negative relationship between work stress and employee productivity. Based on these theoretical and empirical findings, the following hypothesis is proposed:

H3: Work stress has a negative effect on employee productivity.

Employee Productivity

Employee productivity refers to the ability of employees to produce optimal work outcomes efficiently and effectively by utilizing available resources, including time, energy, skills, and organizational facilities. Productivity is generally reflected in the relationship between outputs achieved and the resources used to produce those outputs (Suyatno et al., 2023; Novitanti & Situmorang, 2023). In a manufacturing context, employee productivity is particularly important because it is associated with production output, the achievement of operational targets, work quality, and the efficient use of organizational resources.

Productivity can be assessed through several indicators, including employees' ability to perform their tasks, improvement in work outcomes, work enthusiasm, self-development, work quality, and efficiency (Marta, 2023). Similarly, Natania (2025) emphasized ability, improvement in work outcomes, quality, and efficiency as important dimensions of employee productivity. High employee productivity enables organizations to improve operational efficiency and competitiveness, whereas low productivity may result in reduced output, declining product quality, and increased operational costs.

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Therefore, identifying organizational factors that influence employee productivity is essential for improving organizational performance.

Simultaneous Effects of Leadership Style, Reward and Punishment, and Work Stress on Employee Productivity

Leadership style, reward and punishment, and work stress represent organizational factors that may simultaneously influence employee productivity. Leadership affects how employees receive direction, support, and motivation, while reward and punishment systems influence work behavior and discipline. At the same time, work stress may affect employees' psychological conditions, concentration, and ability to perform their tasks effectively. Previous research by Hendriani (2019) demonstrated that leadership style, reward, and punishment simultaneously had a significant effect on employee productivity. In addition, previous studies have consistently shown that leadership practices, reward systems, and work stress are associated with variations in employee productivity (Suryadinata et al., 2024; Lisdiana & Fahrani, 2025; Priyatna et al., 2026). Therefore, the following hypothesis is proposed:

H4: Leadership style, reward and punishment, and work stress simultaneously have a significant effect on employee productivity.

METHOD

This study uses a quantitative approach with a causal-associative research design. The quantitative approach is used because the research data are presented in numerical form and obtained through questionnaires distributed to respondents. The collected data are then processed and analyzed using statistical methods to obtain scientific information. According to Waruwu et al. (2025), quantitative research is a systematic and structured research method that utilizes numerical data to answer research questions. This study aims to determine and analyze the influence of Leadership Style (X1), Reward and Punishment (X2), and Work Stress (X3) on Employee Productivity (Y) among employees in the Assembly Department of Building A3 at PT Yih Quan Footwear Indonesia.

The object of this study is PT Yih Quan Footwear Indonesia, located in the Batang Integrated Industrial Estate (KITB), Banyuputih District, Batang Regency, Central Java. The population of this study consists of all employees working in the Assembly Department of Building A3, totaling 178 employees. The sample size was determined using the Slovin formula with a 5% margin of error, resulting in a sample of 123

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respondents. The sampling technique used in this study is simple random sampling, which provides every member of the population with an equal opportunity to be selected as a respondent.

The type of data used in this study is quantitative data, consisting of both primary and secondary data. Primary data are obtained directly by distributing questionnaires to 123 employees in the Assembly Department of Building A3 using a five-point Likert scale, ranging from Strongly Disagree to Strongly Agree. Meanwhile, secondary data are obtained from relevant company documents, records, and other supporting information, such as employee data, attendance records, and production or productivity data. Before conducting the main analysis, the research instruments are tested using validity and reliability tests to ensure that the questionnaire items accurately and consistently measure the variables under investigation.

The collected data are analyzed using multiple linear regression analysis with the assistance of SPSS version 26. Before conducting the regression analysis, the data are tested using the classical assumption tests, including normality, multicollinearity, and heteroscedasticity tests. Furthermore, the F-test is conducted to determine the simultaneous effect of the independent variables, while the t-test is used to examine the partial effect of each independent variable on employee productivity. Finally, the coefficient of determination (Adjusted R^2) is used to measure the extent to which Leadership Style, Reward and Punishment, and Work Stress explain the variation in Employee Productivity. Through these analytical methods, this study is expected to provide an objective explanation of the relationships and effects among the variables being investigated.

RESULT AND DISCUSSION

RESULT

Respondent Characteristics

This study involved 123 respondents who were employees working in the Assembly Department of Building A3 at PT Yih Quan Footwear Indonesia. The respondents were classified based on gender, age, educational background, and length of service. The demographic characteristics of the respondents are presented in Table 1.

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Table 1. Respondent Characteristics

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	58	47.2
	Female	65	52.8
Age	18–22 years	65	52.5
	23–27 years	49	38.5
	28–33 years	6	4.9
	33–37 years	4	3.3
Educational Background	Junior High School	5	4.1
	Senior High School/Vocational High School	76	61.8
	Diploma	19	15.4
	Bachelor's Degree	23	18.7
Length of Service	Less than 1 year	20	16.4
	1–2 years	77	63.1
	3–4 years	16	13.1
	More than 5 years	9	7.4

Source: Researcher, 2026

Based on Table 1, the respondents were predominantly female, accounting for 65 respondents or 52.8%, while male respondents accounted for 58 respondents or 47.2%. In terms of age, most respondents were between 18 and 22 years old, followed by those aged 23–27 years. Regarding educational background, the majority of respondents had completed Senior High School or Vocational High School, representing 61.8% of the total respondents. In terms of length of service, most respondents had worked at the company for one to two years, accounting for 77 respondents or 63.1%. Overall, these findings indicate that the respondents were predominantly young employees with a secondary educational background and relatively short to moderate working experience at PT Yih Quan Footwear Indonesia.

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Note: Please recheck the age data before finalizing the thesis because the frequencies shown in the original data add up to 124 respondents, while the total sample is stated as 123 respondents.

Descriptive Analysis of Research Variables

This section presents the descriptive analysis of the respondents' answers for each research variable, namely Leadership Style (X1), Reward and Punishment (X2), Work Stress (X3), and Employee Productivity (Y). The analysis is intended to provide an overview of the respondents' general perceptions of each variable based on the responses of 123 employees in the Assembly Department of Building A3 at PT Yih Quan Footwear Indonesia.

Table 2. Descriptive Statistics of Research Variables

Variable	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Leadership Style (X1)	123	12	19	1,971	16.02	1.822
Reward and Punishment (X2)	123	23	39	3,924	31.90	3.640
Work Stress (X3)	123	15	25	2,565	20.85	2.314
Employee Productivity (Y)	123	11	20	1,941	15.78	1.957

Source: Primary data processed, 2026

Based on Table 2, Leadership Style (X1) had a mean value of 16.02 with a standard deviation of 1.822, indicating that respondents generally perceived the leadership style implemented in the company positively. Reward and Punishment (X2) had a mean value of 31.90 and a standard deviation of 3.640, suggesting that the implementation of reward and punishment was generally perceived favorably by the respondents. Meanwhile, Work Stress (X3) had a mean value of 20.85 with a standard deviation of 2.314, indicating a relatively high level of work stress among employees. Employee Productivity (Y) had a mean value of 15.78 and a standard deviation of 1.957, suggesting that employee productivity was generally at a relatively good level, although variations in respondents' perceptions were still observed.

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Instrument Testing Results

Validity Test

The validity test was conducted to determine whether each questionnaire item was capable of measuring the intended research variable. The test was performed by comparing the calculated correlation coefficient (r-calculated) of each item with the r-table value at a significance level of 5%. With 123 respondents, the degree of freedom was calculated as df = n − 2 = 121, resulting in an r-table value of 0.177. An item was considered valid when its r-calculated value was greater than the r-table value and its significance value was less than 0.05. The results of the validity test are presented in Table 3.

Table 3. Validity Test Results

Variable	Item	r-calculated	r-table	Significance	Result
Leadership Style (X1)	X1.1	0.707	0.177	0.000	Valid
	X1.2	0.653	0.177	0.000	Valid
	X1.3	0.763	0.177	0.000	Valid
	X1.4	0.771	0.177	0.000	Valid
Reward and Punishment (X2)	X2.1	0.633	0.177	0.000	Valid
	X2.2	0.741	0.177	0.000	Valid
	X2.3	0.728	0.177	0.000	Valid
	X2.4	0.695	0.177	0.000	Valid
	X2.5	0.686	0.177	0.000	Valid
	X2.6	0.711	0.177	0.000	Valid
	X2.7	0.692	0.177	0.000	Valid
	X2.8	0.761	0.177	0.000	Valid
Work Stress (X3)	X3.1	0.654	0.177	0.000	Valid
	X3.2	0.758	0.177	0.000	Valid
	X3.3	0.811	0.177	0.000	Valid
	X3.4	0.760	0.177	0.000	Valid

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Variable	Item	r-calculated	r-table	Significance	Result
	X3.5	0.692	0.177	0.000	Valid
Employee Productivity (Y)	Y1	0.765	0.177	0.000	Valid
	Y2	0.750	0.177	0.000	Valid
	Y3	0.771	0.177	0.000	Valid
	Y4	0.730	0.177	0.000	Valid

Source: Primary data processed, 2026

Based on Table 3, all questionnaire items for Leadership Style (X1), Reward and Punishment (X2), Work Stress (X3), and Employee Productivity (Y) had r-calculated values greater than the r-table value of 0.177. In addition, all significance values were below 0.05. Therefore, all questionnaire items were declared valid and were considered appropriate for measuring the variables examined in this study.

Reliability Test

The reliability test was conducted to determine the consistency of the research instrument. This study used Cronbach's Alpha to measure the reliability of each variable. According to the applied criterion, an instrument is considered reliable when the Cronbach's Alpha value is greater than 0.60. The results of the reliability test are presented in Table 4.

Table 4. Reliability Test Results

Variable	Cronbach's Alpha	Number of Items	Result
Leadership Style (X1)	0.696	4	Reliable
Reward and Punishment (X2)	0.854	8	Reliable
Work Stress (X3)	0.787	5	Reliable
Employee Productivity (Y)	0.744	4	Reliable

Source: Primary data processed, 2026

Based on Table 4, all variables had Cronbach's Alpha values greater than 0.60. Leadership Style had a Cronbach's Alpha value of 0.696, Reward and Punishment had

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a value of 0.854, Work Stress had a value of 0.787, and Employee Productivity had a value of 0.744. Therefore, all research instruments were considered reliable and capable of producing consistent measurements.

Classical Assumption Test Results

Normality Test

The normality test was conducted to determine whether the residual data in the regression model were normally distributed. This study used the One-Sample Kolmogorov-Smirnov test with the Lilliefors significance correction. The residual data are considered normally distributed when the significance value is greater than 0.05. The results of the normality test are presented in Table 5.

Table 5. Kolmogorov-Smirnov Normality Test Results

Statistic	Value
N	123
Mean	0.0000000
Std. Deviation	1.38424524
Most Extreme Difference – Absolute	0.062
Most Extreme Difference – Positive	0.036
Most Extreme Difference – Negative	-0.062
Test Statistic	0.062
Asymp. Sig. (2-tailed)	0.200
Monte Carlo Sig. (2-tailed)	0.293

Source: Primary data processed, 2026

Based on Table 5, the Kolmogorov-Smirnov test produced an Asymp. Sig. (2-tailed) value of 0.200, which was greater than the significance level of 0.05. Therefore, it can be concluded that the regression residuals were normally distributed. Thus, the regression model fulfilled the normality assumption and was appropriate for further statistical analysis.

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Multicollinearity Test

The multicollinearity test was conducted to determine whether a high correlation existed among the independent variables in the regression model. A regression model is considered free from multicollinearity when the Tolerance value is greater than 0.10 and the Variance Inflation Factor (VIF) value is less than 10. The results of the multicollinearity test are presented in Table 6.

Table 6. Multicollinearity Test Results

Variable	Tolerance	VIF	Result
Leadership Style (X1)	0.990	1.010	No Multicollinearity
Reward and Punishment (X2)	0.987	1.013	No Multicollinearity
Work Stress (X3)	0.997	1.003	No Multicollinearity

Source: Primary data processed, 2026

Based on Table 6, all independent variables had Tolerance values greater than 0.10 and VIF values below 10. Leadership Style had a Tolerance value of 0.990 and a VIF of 1.010, Reward and Punishment had a Tolerance value of 0.987 and a VIF of 1.013, while Work Stress had a Tolerance value of 0.997 and a VIF of 1.003. Therefore, it can be concluded that the regression model was free from multicollinearity.

Heteroscedasticity Test

The heteroscedasticity test was conducted using the Glejser test to determine whether the variance of the residuals was consistent across observations. The model is considered free from heteroscedasticity when the significance value of each independent variable is greater than 0.05. The results of the heteroscedasticity test are presented in Table 7.

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Table 7. Heteroscedasticity Test Results Using the Glejser Test

Variable	B	Std. Error	Beta	t	Sig.
Constant	1.281	1.067	–	1.200	0.233
Leadership Style (X1)	0.016	0.040	0.036	0.388	0.699
Reward and Punishment (X2)	-0.014	0.020	-0.063	-0.682	0.496
Work Stress (X3)	0.002	0.032	0.005	0.050	0.960

Dependent Variable: ABS_RES
Source: Primary data processed, 2026

Based on Table 7, the significance values for Leadership Style, Reward and Punishment, and Work Stress were 0.699, 0.496, and 0.960, respectively. All of these values were greater than 0.05. Therefore, it can be concluded that the regression model did not experience heteroscedasticity and fulfilled the homoscedasticity assumption.

Multiple Linear Regression Analysis

Multiple linear regression analysis was conducted to determine the effect of Leadership Style (X1), Reward and Punishment (X2), and Work Stress (X3) on Employee Productivity (Y). This analysis was used to examine the direction and magnitude of the relationship between each independent variable and the dependent variable. The results of the multiple linear regression analysis are presented in Table 8.

Table 8. Multiple Linear Regression Analysis Results

Variable	B	Std. Error	Beta	t	Sig.
Constant	9.474	1.848	–	5.127	0.000
Leadership Style (X1)	0.574	0.070	0.535	8.206	0.000
Reward and Punishment (X2)	0.125	0.035	0.232	3.559	0.001
Work Stress (X3)	-0.330	0.055	-0.390	-6.009	0.000

Dependent Variable: Employee Productivity (Y)
Source: Primary data processed, 2026

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Based on Table 8, the multiple linear regression equation can be formulated as follows:

$$Y = 9.474 + 0.574X_1 + 0.125X_2 - 0.330X_3 + e$$

The constant value of 9.474 indicates the estimated value of Employee Productivity when Leadership Style, Reward and Punishment, and Work Stress are assumed to be constant. The regression coefficient of Leadership Style was 0.574, indicating that an increase of one unit in Leadership Style would increase Employee Productivity by 0.574 units, assuming the other variables remained constant. Reward and Punishment had a positive regression coefficient of 0.125, indicating that an improvement of one unit would increase Employee Productivity by 0.125 units. In contrast, Work Stress had a negative coefficient of -0.330, indicating that an increase in Work Stress would decrease Employee Productivity by 0.330 units, assuming that the other variables remained constant.

Hypothesis Testing Results

Partial Test (t-Test)

The partial t-test was conducted to determine the individual effect of each independent variable on Employee Productivity. The test was performed by comparing the calculated t-value with the t-table value at a significance level of 5%. With df = n − k − 1 = 123 − 3 − 1 = 119, the t-table value was 1.980. A hypothesis was accepted when the calculated t-value exceeded the t-table value and the significance value was less than 0.05. The results of the partial hypothesis testing are presented in Table 9.

Table 9. Partial Hypothesis Testing Results (t-Test)

Hypothesis	Relationship	t-calculated	Sig.	Result
H1	Leadership Style → Employee Productivity	8.206	0.000	Accepted
H2	Reward and Punishment → Employee Productivity	3.559	0.001	Accepted
H3	Work Stress → Employee Productivity	-6.009	0.000	Accepted

Source: Primary data processed, 2026

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Based on Table 9, all three independent variables had a statistically significant effect on Employee Productivity. Leadership Style had a positive and significant effect on Employee Productivity, with a t-calculated value of 8.206 and a significance value of 0.000. Therefore, H1 was accepted, indicating that better leadership practices were associated with higher employee productivity. Reward and Punishment also had a positive and significant effect, with a t-calculated value of 3.559 and a significance value of 0.001. Therefore, H2 was accepted. Meanwhile, Work Stress had a negative and significant effect on Employee Productivity, with a t-calculated value of -6.009 and a significance value of 0.000. Thus, H3 was also accepted, indicating that higher levels of work stress were associated with lower employee productivity.

Simultaneous Test (F-Test)

The F-test was conducted to determine whether Leadership Style, Reward and Punishment, and Work Stress simultaneously influenced Employee Productivity. The test was conducted at a significance level of 5%, with df1 = 3 and df2 = 119. The results of the simultaneous hypothesis test are presented in Table 10.

Table 10. Simultaneous Hypothesis Testing Results (F-Test)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	233.305	3	77.768	39.588	0.000
Residual	233.768	119	1.964	–	–
Total	467.073	122	–	–	–

Dependent Variable: Employee Productivity (Y)
Source: Primary data processed, 2026

Based on Table 10, the calculated F-value was 39.588, which was greater than the F-tabl e value of 2.68. In addition, the significance value was 0.000, which was less than 0.05. Therefore, H4 was accepted. This result indicates that Leadership Style, Reward and Punishment, and Work Stress simultaneously had a significant effect on Employee Productivity. Thus, the regression model was considered statistically appropriate for explaining variations in employee productivity among employees in the Assembly Department of Building A3 at PT Yih Quan Footwear Indonesia.

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Coefficient of Determination (R^2)

The coefficient of determination was used to measure the extent to which the independent variables could explain variations in the dependent variable. In this study, the R Square value was used to determine the combined explanatory power of Leadership Style, Reward and Punishment, and Work Stress toward Employee Productivity. The results are presented in Table 11.

Table 11. Coefficient of Determination Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.707	0.500	0.487	1.402	2.311

Predictors: Leadership Style (X1), Reward and Punishment (X2), and Work Stress (X3)
Dependent Variable: Employee Productivity (Y)
Source: Primary data processed, 2026

Based on Table 11, the R Square value was 0.500, indicating that Leadership Style, Reward and Punishment, and Work Stress jointly explained 50.0% of the variation in Employee Productivity. The remaining 50.0% was explained by other variables not included in this research model. These factors may include organizational culture, work environment, non-financial compensation, motivation, employee competence, or other factors that may influence employee productivity.

DISCUSSION

The findings of this study demonstrate that leadership style, reward and punishment, and work stress are important factors influencing employee productivity among employees in the Assembly Department of Building A3 at PT Yih Quan Footwear Indonesia. Among the three independent variables, leadership style showed the strongest positive influence on employee productivity, as indicated by the standardized beta coefficient of 0.535. This result suggests that the way production managers lead, communicate with, supervise, and provide direction to employees plays a substantial role in determining their ability to perform productively. A leadership approach that provides support, encourages communication, and assists employees in resolving technical problems may create a more positive working environment and encourage

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employees to perform their duties more effectively. Conversely, an excessively authoritarian leadership style and excessive supervision may create psychological pressure that negatively affects employees' work performance. This finding supports the phenomenon identified in the background of the study, particularly the differences in leadership practices between Building A1 and Building A3, and confirms that improvements in leadership practices may contribute significantly to enhancing employee productivity.

Reward and punishment were also found to have a positive and significant effect on employee productivity, although the magnitude of their influence was smaller than that of leadership style, as reflected in the standardized beta coefficient of 0.232. This finding indicates that an appropriate system of rewards and disciplinary consequences can encourage employees to improve their work performance and maintain compliance with organizational standards. In the context of PT Yih Quan Footwear Indonesia, financial incentives provided to production lines that achieve their targets may serve as a motivation for employees to improve their performance, while disciplinary measures related to violations of work rules, including compliance with the 6S system, may encourage employees to maintain discipline. Nevertheless, the relatively smaller contribution of this variable suggests that reward and punishment alone may not be sufficient to achieve optimal productivity. Therefore, the company should consider developing a more balanced and comprehensive reward system that incorporates both financial and non-financial recognition, such as opportunities for career development, appreciation from supervisors, and recognition of individual or team achievements.

In contrast, work stress was found to have a negative and significant effect on employee productivity, with a standardized beta coefficient of -0.390. This result indicates that increasing levels of work stress are associated with decreasing levels of employee productivity. The relatively strong influence of work stress suggests that psychological and work-related pressures constitute an important issue within the Assembly Department of Building A3. Stress may arise from several conditions, including excessive supervision, strict communication patterns, pressure to achieve production targets, and harsh reprimands when employees make technical mistakes during production processes such as cementing and lasting. When employees experience excessive stress, their concentration, motivation, and ability to perform their tasks effectively may decline, potentially resulting in lower productivity and a greater possibility of production errors. This finding therefore emphasizes the importance of

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managing work stress as part of the company's broader strategy to improve employee performance and maintain stable production outcomes.

Taken together, the results of the simultaneous analysis indicate that leadership style, reward and punishment, and work stress jointly have a significant effect on employee productivity. The coefficient of determination shows that these three variables explain 50.0% of the variation in employee productivity, while the remaining 50.0% is influenced by other factors not included in the present research model. These findings suggest that improving employee productivity should not rely on a single managerial intervention. Instead, the company needs to adopt a comprehensive human resource management approach that simultaneously promotes more supportive leadership practices, develops an effective and balanced reward and punishment system, and reduces excessive levels of work stress. Such an integrated approach may help create a more positive working environment, improve employee motivation and discipline, and ultimately support more consistent productivity among employees in the Assembly Department of Building A3 at PT Yih Quan Footwear Indonesia.

CONCLUSION

Based on the findings and discussion of this study, it can be concluded that leadership style, reward and punishment, and work stress significantly influence employee productivity in the Assembly Department of Building A3 at PT Yih Quan Footwear Indonesia. Leadership style has a positive and significant effect on employee productivity, as indicated by a regression coefficient of 0.574 and a significance value of 0.000. Reward and punishment also have a positive and significant effect, with a regression coefficient of 0.125 and a significance value of 0.001. Meanwhile, work stress has a negative and significant effect on employee productivity, with a regression coefficient of -0.330 and a significance value of 0.000. These findings indicate that better leadership practices and an effective reward and punishment system can contribute to higher employee productivity, whereas increasing levels of work stress may reduce employees' ability to perform productively.

The simultaneous analysis further confirms that leadership style, reward and punishment, and work stress collectively have a significant effect on employee productivity. The model produced an F-value of 39.588 with a significance value of 0.000, while the coefficient of determination (R Square) was 0.500. This means that the three independent variables examined in this study explain 50.0% of the variation in employee productivity. From a practical perspective, these findings imply that PT Yih

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Quan Footwear Indonesia should not focus solely on production targets or disciplinary mechanisms when seeking to improve productivity. Instead, the company should adopt an integrated human resource management strategy by promoting more supportive and communicative leadership, improving the effectiveness and fairness of the reward and punishment system, and implementing appropriate measures to reduce excessive work stress among employees.

Despite these findings, this study has several limitations. First, the research only examined three independent variables, meaning that the remaining 50.0% of the variation in employee productivity may be influenced by other factors that were not included in the research model, such as work environment, organizational culture, motivation, job satisfaction, workload, training, and compensation. Second, the study was limited to 123 employees in the Assembly Department of Building A3 at PT Yih Quan Footwear Indonesia; therefore, the findings may not be directly generalized to employees in other buildings, departments, or manufacturing companies with different organizational characteristics and working conditions. In addition, the use of a self-report questionnaire may have created the possibility of response bias, particularly because employees may have provided answers influenced by personal perceptions or concerns regarding confidentiality. The cross-sectional design of the study also limited the ability to observe changes in employee productivity and work-related conditions over a longer period.

Therefore, future researchers are encouraged to expand the research model by including additional variables that may influence employee productivity, such as organizational culture, work environment, motivation, job satisfaction, workload, compensation, work-life balance, and employee training and development. Future studies may also broaden the research population by involving employees from other buildings or departments within PT Yih Quan Footwear Indonesia or by conducting comparative studies across different manufacturing companies. Furthermore, the use of a mixed-method approach combining quantitative analysis with in-depth interviews and workplace observations may provide a deeper understanding of the underlying causes of leadership-related issues, reward and punishment practices, and employee work stress. Longitudinal research is also recommended to examine changes in employee productivity over time and to evaluate the long-term effectiveness of managerial interventions, such as leadership coaching programs, improvements in the reward system, or stress management initiatives.

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