

# THE ROLE OF FEED FORWARD CONTROL OF LEADERSHIP AND K3 (OCCUPATIONAL HEALTH AND SAFETY) ON PREVENTIVE DISCIPLINE (STUDIESCASE OF EMPLOYEES OF PT. BARKAH JAYA MANDIRI SUKABUMI)

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## Abstract

This research investigates the influence of leadership's feed-forward control and Occupational Health and Safety (K3) on preventative discipline among employees at PT. Barkah Jaya Mandiri Sukabumi. Quantitative methods with an associative approach were employed to analyze the relationships between variables. The results indicated that while both feed-forward control and K3 independently contribute to preventative discipline, K3 has a more significant impact. Simultaneously, the combination of feed-forward control and K3 creates a safer work environment and reinforces employee adherence to safety standards. This study highlights the importance of integrating proactive leadership with robust safety measures to cultivate a culture of preventative discipline in high-risk industries.

Keywords: *Feed Forward Control, Occupational Health and Safety (K3), Preventative Discipline, Leadership, Construction Industry*

## INTRODUCTION

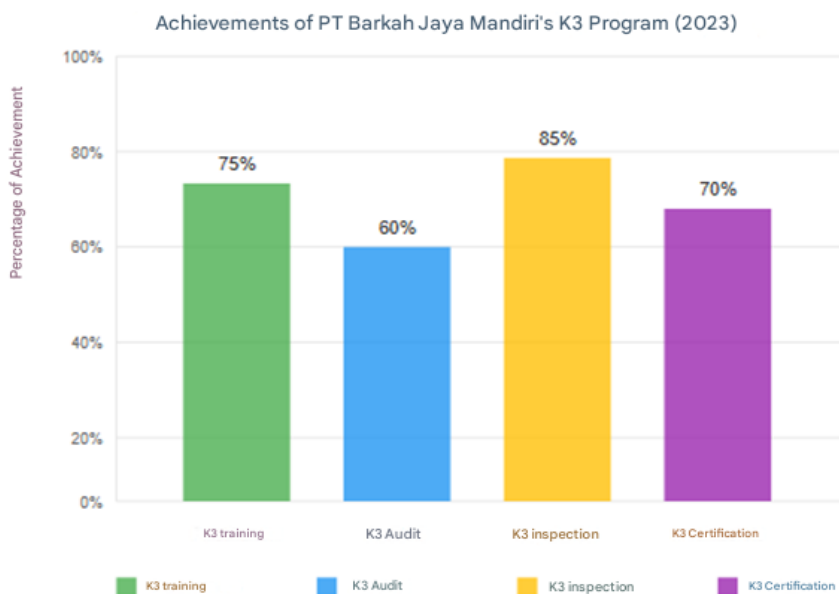
Occupational Health and Safety (OHS) is an important element in creating a safe and productive work environment. OHS is regulated by Law Number 1 of 1970 concerning Occupational Safety and is supported by various other regulations. The implementation of OHS aims to prevent work accidents, reduce the risk of work-related diseases, protect worker welfare, and increase company productivity. Although awareness of the importance of OHS is increasing, its implementation still faces various challenges that affect its effectiveness in the workplace. (Okta Kurniawan, 2023; Putri et al., 2022; Robi Rojaya Simbolon et al., 2024). Based on data from the Ministry of Manpower (Kemnaker), in 2023 Indonesia recorded around 370,747 work accidents. Meanwhile, until July 2024, the number of work accidents is estimated to reach 160,000 cases. This data shows that the implementation of K3 must continue to be strengthened to reduce incidents in the workplace. According to the 2023 Information Data System (SDI) report, Indonesia recorded 370,747 cases of work accidents, with the majority of cases occurring among wage earners at 93.83%, followed by non-wage earners at 5.37%, and participants from the construction services sector at 0.80%. These figures reveal that the risk of work accidents is still a serious threat, especially in the wage earner sector which generally includes workers in the formal sector such as the manufacturing and mining industries.



**Figure 1 Graph of Work Accidents at PT Barkah Jaya Mandiri in 2023**

Source: BPJS Employment (2023)

Judging from table 1 above, the number of work accidents in Indonesia is very high. The province with the most work accidents is West Java, which has a large number of industrial areas and factories. Based on the data, West Java has more than 4,000 factories spread across industrial areas such as Karawang, Bekasi, and Purwakarta. The high number of factories and industrial areas contributes to the high risk of work accidents in the region. When compared with BPJS Ketenagakerjaan data for 2023 and 2024, the number of work accidents in 2024 tends to increase. The following is a comparative table of the number of work accidents in the two years:



**Figure 2 K3 Performance of PT Barkah Jaya Mandiri 2023**

Source: BPJS Employment (2023) & Ministry of Manpower (2024)

\*2024 data is still provisional and is expected to increase by the end of the year.

The number of work accidents shows the urgency of implementing K3 more strictly, especially in provinces with high industrial activity such as West Java. Occupational health and safety (OHS) management is increasingly receiving special attention, especially in high-risk industries, where the work environment is often filled with potential hazards that can threaten the safety and health of employees. Effective OHS implementation not only minimizes the risk of work accidents, but also contributes to increased productivity and comfort by creating a safe work

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environment.(Nainggolan & Hendra, 2023). In an effort to improve security, one of the managerial approaches that is increasingly developing is feed forward control.

*Feed forward control* is a proactive approach to supervision that aims to prevent problems before they occur. According to (Prafista et al., (2024), this method involves process monitoring and risk analysis, providing early feedback to employees to anticipate potential deviations. In K3, feed forward control ensures that all accident prevention measures are implemented before the activity begins, thereby improving operational efficiency and work safety.(Simbolon et al., 2024). This approach enables organizations to be more responsive to risk and maintain preventive discipline. As a company in the industrial sector with high work risks, PT Barkah Jaya Mandiri faces challenges in ensuring employee safety and discipline. The 2023 internal report showed an increase in violations of Occupational Health and Safety (K3) procedures by 15% in the last two years, which is suspected to be due to minimal ongoing training and lack of proactive supervision.(Prafista et al., (2024). Passive supervision has proven to be less effective in maintaining compliance with K3. According to(Fuaddi & Febriansyah, 2023), the implementation of the feed forward control approach can reduce the rate of work accidents and increase employee preventive discipline by up to 25% in a year.

Preventive discipline is an effort to prevent violations by creating a work environment that supports compliance with safety procedures.(Marbun et al., 2024). This discipline is essential in building a work safety culture, especially in high-risk sectors. With feed forward control, leaders can identify potential deviations and provide early feedback to employees, ensuring timely preventive action is taken.(Ashari et al., 2024). According to(Dwiyanti & Fauziah, 2022), preventive discipline has a positive effect on employee performance through job satisfaction as an intervening variable. The leadership's exemplary behavior and the application of fair sanctions also strengthen discipline, so that preventive discipline functions as a strategy to build a sustainable work safety culture.(Irwanto & Melinda, 2024). Komariah and Norisanti (2019) emphasized that high motivation and employee self-confidence in carrying out their duties will contribute to compliance with OHS procedures. Nurmala (2022) stated that preventive discipline in the workplace is greatly influenced by leadership supervision and consistent implementation of OHS policies. Thus, integration between leadership control and effective OHS implementation is essential to achieving preventive discipline in the work environment.

Recent research highlights the importance of synergy between OHS systems, work discipline, and leadership approaches such as feed forward control in creating a safe and productive work environment.(Lestari et al., 2014)found that effective OHS risk management in construction projects can significantly reduce work accidents, although the feed forward control approach has not been a primary focus.(Mustovani, 2020)confirms that the implementation of K3 and good work discipline has a positive impact on employee performance, but the integration of feed forward control to support preventive discipline has not been discussed in depth. Meanwhile, research by(Ginting & Syamsuri, 2021)revealed that preventive discipline implemented with the support of proactive leadership can improve employee performance by up to 77.8%, indicating that approaches such as feed forward control have great potential in preventing violations early on.

Previous studies have shown that leadership plays an important role in implementing the OHS system to create a safe work environment. However, the feed forward control approach that aims to prevent violations before they occur has not been integrated with the OHS system to improve preventive discipline. Feed forward control allows leaders to take proactive steps, such as providing clear directions, setting safety standards, and monitoring potential risks early on. Good OHS implementation does improve compliance with safety procedures, but to build sustainable preventive discipline, a more specific leadership strategy is needed. Combining feed forward control with OHS can encourage employees to be more active in complying with the rules and create a more disciplined work culture. Therefore, further research is needed to explore the role of feed forward control-based leadership in improving preventive discipline in the workplace.

## LITERATURE REVIEW

Previous studies have examined various aspects related to the relationship between leadership feed forward control, K3 (Occupational Health and Safety), and preventive discipline. This study is entitled "The Role of Leadership Feed Forward Control and K3 (Occupational Health and Safety) on Preventive Discipline (Case Study on Employees of PT. Barkah Jaya Mandiri)". Some previous studies include:

1. Study (Linawati, 2023)entitled "The Influence of Work Discipline, Safety, and Occupational Health on the Performance of Employees of UPT Jemput Antar Kota Palopo" uses a quantitative approach and finds that work discipline, safety, and occupational health have a significant influence on employee performance. This study

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- focuses on the relationship between these variables and employee performance, while the research to be conducted examines preventive discipline as an impact of leader feed forward control and the implementation of K3.
2. Study (Simajuntak & Manalu, 2022)entitled "The Influence of Work Discipline on Employee Performance at PT Mitra Jofer Indonesia" concluded that work discipline has a significant effect on employee performance. This study highlights the importance of work discipline in increasing productivity. This study not only measures work discipline as an independent variable, but also looks at how leader feed forward control can influence the formation of employee preventive discipline, which is the main focus of the research conducted.
  3. Study (Hadi & Danny Ramdani, 2024)entitled "The Influence of Work Discipline and Occupational Safety and Health on Employee Performance at PT United Tractors Pekanbaru Branch" found that work discipline and K3 simultaneously affect employee performance with a contribution of 57.6%. This study emphasizes more on the influence of K3 on employee performance, while this study examines how feed forward control of leaders and K3 form preventive discipline as a strategy to deal with work risks.
  4. Study (Pratikto & Ferijani, 2023)entitled "The Influence of Leadership Style, Work Motivation, and Occupational Safety and Health on Employee Performance at PT Sucofindo Semarang Branch" shows that leadership style, work motivation, and K3 have a significant influence on employee performance. This study focuses more on the leader's feed forward control as a form of proactive supervision and guidance to prevent violations of work discipline, while previous studies have linked leadership style in general to performance.
  5. Study (Putra & Lestariningsih, 2019)entitled "The Influence of Leadership Style, Supervision, and Occupational Safety and Health on Employee Performance at PT Pundarika Atma Semesta" found that leadership style, supervision, and K3 simultaneously affect employee performance. This study integrates leader feed forward control with K3 to see its impact on employee preventive discipline, in contrast to previous studies that focused on performance.

Previous research shows a significant relationship between leadership feed forward control, implementation of occupational health and safety (K3), and the formation of preventive employee discipline. Feed forward control is a form of proactive supervision carried out by leaders to prevent errors before they occur, as expressed by (Saputra & Nugroho, 2021). This proactive monitoring encourages employees to better understand their tasks and comply with existing rules. In this case, (Afridayanti, 2022)also shows that targeted leadership guidance and supervision can form disciplined behavior that is oriented towards preventing work risks. Meanwhile, research(Abdillah et al., 2024)highlighted that effective implementation of K3 creates a safe and conducive working environment, which contributes to improving employee work discipline.

This is in line with the findings (Limbe & Saerang, 2024), which reveals that work discipline and K3 have a simultaneous influence on work behavior, including the formation of preventive attitudes. The combination of proactive supervision from leaders through feed forward control and K3 implementation is a key factor in creating preventive discipline as a strategic effort to mitigate work risks. This research paradigm explains that the independent variables, namely leader feed forward control and K3, jointly influence the dependent variable, namely preventive discipline. Leader feed forward control provides proactive direction and guidance, while K3 provides a framework that ensures safety and health in the workplace, both of which play an important role in shaping employee behavior that is disciplined and aware of risk prevention.

## Conceptual Framework

This study aims to determine the extent to which proactive planning by leaders and implementation of K3 programs can increase employee awareness and compliance in preventing violations and work risks, thereby creating a safer and more productive work environment.

*Grand theory* applied in this research is organizational management. As explained by(Robbins & Coulter, 2021)that organizational management as the art and science of managing people and processes to ensure the organization runs in accordance with the specified vision and mission. Its main components include planning, organizing, directing, and controlling, all of which contribute to the organization's success in facing internal and external challenges.

*Middle Range Theory* used in this study are managerial control and safety management. Managerial control is a series of mechanisms and processes implemented by an organization to ensure that strategic objectives can be achieved by minimizing the risk of deviation from the established plan. This concept has been widely discussed in management literature, including by(Simons, 1995),(Yuana et al., 2022), And(Marsela et al., 2023), which defines managerial control as the process of integrating planning, implementing, and monitoring organizational activities to

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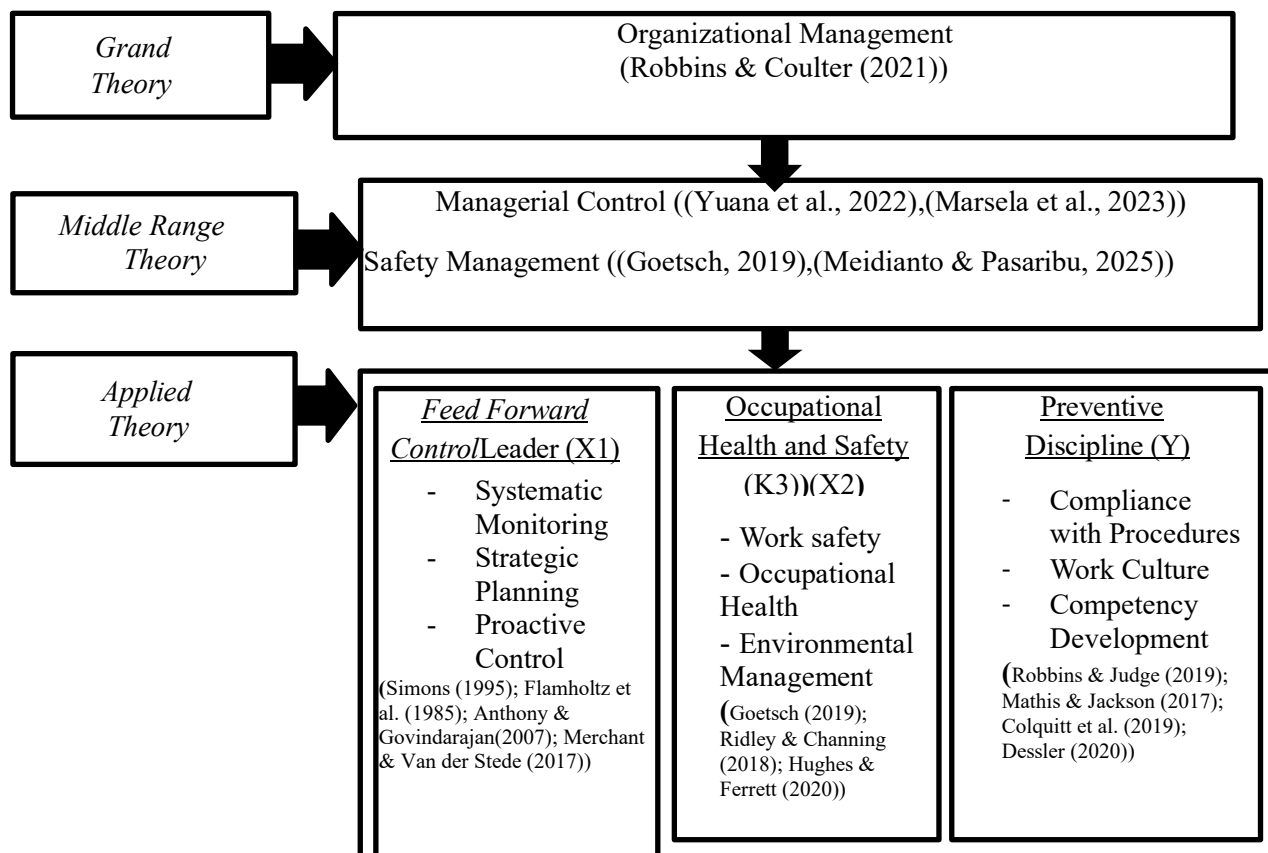
ensure operational success. And safety management is a systematic approach designed to create and maintain a safe and healthy work environment, thereby minimizing the risk of accidents and occupational diseases. This concept has been widely discussed in the literature by(Goetsch, 2019),(Meidianto & Pasaribu, 2025), which states that safety management involves the integration of safety policies, procedures and culture into all aspects of an organization's operations.

*Applied Theory* in the next dependent variable, namely preventive discipline. Preventive discipline is an approach that emphasizes the prevention of violations in the work environment by creating a culture of compliance with established regulations and procedures.(Robbins & Coulter, 2021)stated that preventive discipline aims to develop positive and proactive work behavior, so that employees not only comply with the rules but also understand the reasons behind the rules. Thus, preventive discipline becomes an important element in maintaining organizational stability, increasing productivity, and minimizing operational risks.

*Applied Theory* in other independent variables is Occupational Health and Safety (K3). Occupational Health and Safety (K3) is a systematic approach taken by organizations to protect employees from the risk of work accidents and health problems due to the work environment. According to(Goetsch, 2019)And(Ardhiansah, 2025), K3 aims to create a safe and healthy workplace, so that it can increase employee productivity and welfare. K3 is not only a legal obligation for organizations, but also an important strategy in maintaining business sustainability by reducing work incidents and increasing employee trust in the organization.

*Applied Theory* which is used in the first independent variable, namely Feed forward control of the leader. Feed-forward control is a proactive control mechanism carried out to prevent potential deviations in the work process before the problem occurs. This concept is relevant in the management of modern organizations, where operational uncertainty and complexity are increasing. Leaders utilize feed-forward control to ensure that all operational activities run in accordance with organizational standards and objectives. This mechanism involves steps such as early monitoring, risk identification, and preventive action planning(Anthony, 2020);(Merchant & Stede, 2017).

The following is an image of the framework:



**Figure 3 Conceptual Framework**

Source: Processed by the Author, 2025

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In this study, using the variables of Feed Forward Control of Leaders and Employee Occupational Health and Safety (K3) towards Preventive Discipline, according to previous research, the main objective is to determine the extent to which proactive planning of leaders and implementation of K3 programs can increase employee awareness and compliance in preventing violations and work risks, thus creating a safer and more productive work environment.

## Hypothesis

Hypothesis 1 (H1): There is a significant influence of leadership feed forward control on preventive discipline at PT Barkah Jaya Mandiri.

Hypothesis 2 (H2): There is a significant influence of the Occupational Health and Safety (K3) system on preventive discipline at PT Barkah Jaya Mandiri.

Hypothesis 3 (H3): There is a simultaneous influence between management feed forward control and the Occupational Health and Safety (K3) system on preventive discipline at PT Barkah Jaya Mandiri.

## METHOD

The object of research is a variable or phenomenon that is the main focus of a study, especially to be measured and analyzed quantitatively.(Sugiyono, 2019). In this study, the objects studied are:

1. *Feed forward control* leadership as an independent variable (X1), namely initial control carried out by the leadership before the work process begins, with the aim of preventing errors or violations.
2. Occupational Health and Safety (K3) as an independent variable (X2), namely the implementation of safety policies and procedures in the workplace to create a safe and productive work environment.
3. Employee preventive discipline as a dependent variable (Y), namely the level of employee compliance with preventive work rules to avoid risks and errors.
4. PT.

PT Barkah Jaya Mandiri is a legal entity based in Sukabumi, West Java. This company is engaged in the construction business sector and development of infrastructure-related projects. PT Barkah Jaya Mandiri is located in the Sentris Complex, Block D No. 4, Jalan Siliwangi, Sukabumi. The company was founded in 1998 and employs 117 employees.

This study uses a quantitative method with an associative approach, which aims to analyze the relationship between independent variables (feed forward control and K3) with dependent variables (preventive discipline). According to (Sugiyono, 2021) Quantitative method is a research method that emphasizes the measurement of numerical data and the use of statistical analysis to answer research problems objectively. This method was chosen because it is in accordance with the needs of the research to describe the causal relationship between variables using measurable and structured data.

A research model or paradigm describes how researchers understand the issues faced in research and explains the criteria used to test and find answers to these issues. (Andini et al., 2023). In science, the term "paradigm" refers to a framework of thought or pattern. Quantitative researchers analyze relationships between variables using a cause-and-effect approach. Therefore, research usually distinguishes between independent and dependent variables. From these variables, it is then determined how much influence the independent variable has on the dependent variable. (Salman, 2024). In this study, the author took the title Feed Forward Control of Leadership and Occupational Health and Safety (K3) towards Preventive Discipline

According to (Sugiyono, 2021), population is a generalization area consisting of objects or subjects with certain characteristics determined by researchers to be studied and conclusions drawn. A sample is a part of a population selected using a certain technique to represent the population. The population in this study were all employees of PT Barkah Jaya Mandiri, Sukabumi, totaling 117 people. In this study, the author used a saturated sampling technique. The sampling technique is a technique for determining samples of all members of the population used as samples.(Sugiyono, 2019). The number of samples that the author took from this study was 117 employees of PT. Barkah Jaya Mandiri.(Sugi yono, 2021)states that data collection techniques are systematic steps to obtain information relevant to research objectives. In this study, data was obtained from primary and secondary sources. Data analysis techniques according to (Ghozali, 2021)defines data analysis as the process of organizing, processing, and interpreting data to answer research questions. This study uses a quantitative approach with statistical analysis to test the relationship between variables.

## RESULTS AND DISCUSSION

### Normality Test Results

Table 1 Normality Test Results  
**One-Sample Kolmogorov-Smirnov Test**

		Unstandardized Residual	
<b>N</b>		117	
<b>Normal Parameters<sup>a,b</sup></b>	<b>Mean</b>	.0000000	
	<b>Std. Deviation</b>	3.57230855	
<b>Most Extreme Differences</b>	<b>Absolute</b>	.104	
	<b>Positive</b>	.086	
	<b>Negative</b>	-.104	
<b>Test Statistic</b>		.104	
<b>Asymp. Sig. (2-tailed)<sup>c</sup></b>		.003	
<b>Monte Carlo Sig. (2-tailed)<sup>d</sup></b>	<b>Sig.</b>	.005	
	<b>99% Confidence Interval</b>	<b>Lower Bound</b>	.003
		<b>Upper Bound</b>	.007

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 2000000.

Source: Results of questionnaire data processing, 2025

Based on the results of the classical assumption test, it was obtained that the data was not normally distributed with a significant value of 0.003 which is less than the significant limit of 0.05. So, this result indicates that we need to be careful in drawing conclusions from the analysis carried out.

### Multicollinearity Testing

Table 2 Multicollinearity Test Results

Model		Coefficients <sup>a</sup>		t	Sig.	Collinearity Statistics	
		Unstandardized Coefficients	Standardized Coefficients			Tolerance	VIF
1	(Constant)	6.539		1.411	.161		
	feed	.283	.115	2.451	.016	.883	1.133
	k3	.548	.099	5.551	.000	.883	1.133

a. Dependent Variable: disiplin

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Source: Results of questionnaire data processing, 2025

Based on the results of the multicollinearity test, it shows that there is no multicollinearity between the independent variables, indicated by a Tolerance value of 0.883 which is greater than 0.1 and a VIF value of 1.133 which is less than 10. This indicates that each independent variable in the model has a separate influence and is not significantly correlated with each other, so that the regression analysis can be carried out validly.

**Heteroscedasticity Testing**

**Table 3 Heteroscedasticity Test Results**

		<b>Coefficients<sup>a</sup></b>					<b>Collinearity Statistics</b>	
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
		B	Std. Error	Beta				
1	(Constant)	7.090	3.104		2.284	.024		
	feed	-.018	.077	-.023	-.236	.814	.883	1.133
	k3	-.101	.066	-.150	-1.527	.129	.883	1.133

a. Dependent Variable: ABS\_RES

Source: Results of questionnaire data processing, 2025

Based onThe results of the heteroscedasticity test show that the significance value for the Feed Forward Control (X1) variable is 0.814 and K3 (X2) is 0.129, both of which are greater than 0.05. This means that there is no heteroscedasticity in the model, which indicates that the residual variance is constant across the range of independent variable values. Thus, the assumption of homoscedasticity is met, so that the regression analysis can be considered valid.

**Linearity Testing**

The linearity test aims to determine the relationship between two variables, namely the independent variable (X) and the dependent variable (Y), which should be linear. In research, the regression model requires a relationship between the independent variable and the dependent variable. If the significance value is greater than 0.05, then the data used can be explained through linear regression(Ranti et al., 2017).

The following are the results of the linearity test using SPSS 27 between X1 and Y, namely:

**Table 4 Results of Linearity Test of X1 Against Y**

		<b>ANOVA Table</b>					
			Sum of Squares	df	Mean Square	F	Sig.
disiplin * feed	Between Groups	(Combined)	486.284	14	34.735	2.118	.017
		Linearity	278.504	1	278.504	16.984	.000
		Deviation from: Linearity	207.781	13	15.983	.975	.481
	Within Groups		1672.639	102	16.398		
Total			2158.923	116			

Source: Results of questionnaire data processing, 2025

Based on the table above, it can be seen that the results of the linearity test on the Leadership Feed Forward Control variable on Preventive Discipline show a linearity value of <0.001, therefore it is stated that there is a linear relationship, because it has a significance value of less than 0.05.

Furthermore, the linear relationship between variables X2 and Y can be seen based on the following table:

**Table 5 Results of Linearity Test of X2 Against Y**

		<b>ANOVA Table</b>					
			Sum of Squares	df	Mean Square	F	Sig.
disiplin * k3	Between Groups	(Combined)	957.235	18	53.180	4.337	.000
		Linearity	600.614	1	600.614	48.981	.000
		Deviation from: Linearity	356.621	17	20.978	1.711	.053
	Within Groups		1201.688	98	12.262		
Total			2158.923	116			

Source: Results of questionnaire data processing, 2025



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Based on the table above, it can be seen that the results of the linearity test on the K3 (Occupational Health and Safety) variable against Preventive Discipline show a linearity value of  $<0.001$ , which is stated to have a linear relationship, because it has a significance value of less than 0.05.

**Multiple Correlation Coefficient Testing**

The analysis used to measure how strong or weak the interaction is between the independent variables (Feed Forward Control of Leadership and Occupational Health and Safety (K3)) and the dependent variable (Preventive Discipline) (Napitupulu, 2016). The following are the results of the multiple correlation test using SPSS 27:

**Table 6 Multiple Correlation Coefficient Test Results**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.561 <sup>a</sup>	.314	.302	3.60351	1.920

a. Prediktors: (Constant), k3, feed

b. Dependent Variable: disiplin

Source: Results of questionnaire data processing, 2025

Based on the table above, it can be concluded that the results obtained are R numbers of 0.561. The calculation results obtained can then be interpreted by looking at the following table:

**Table 7 Coefficient Table Multiple Correlation**

Coefficient Interval	Relationship Level
0.00-0.199	Very Low
0.20-0.399	Low
0.40-0.599	Currently
0.60-0.799	Strong
0.80-1000	Very strong

Source: Sugiyono, 2023

Based on the results of the multiple correlation coefficient calculation which produces a value of 0.561, it can be concluded that there is a moderate relationship between the independent variables. This value indicates that the independent variables have a significant influence on the dependent variable, according to the categories specified in the correlation coefficient table. This indicates the relevance of the model in the analysis carried out.

**Testing the Coefficient of Determination**

**Table 7 Results of Determination Coefficient Test**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.561 <sup>a</sup>	.314	.302	3.60351	1.920

a. Prediktors: (Constant), k3, feed

b. Dependent Variable: disiplin

Source: Results of questionnaire data processing, 2025

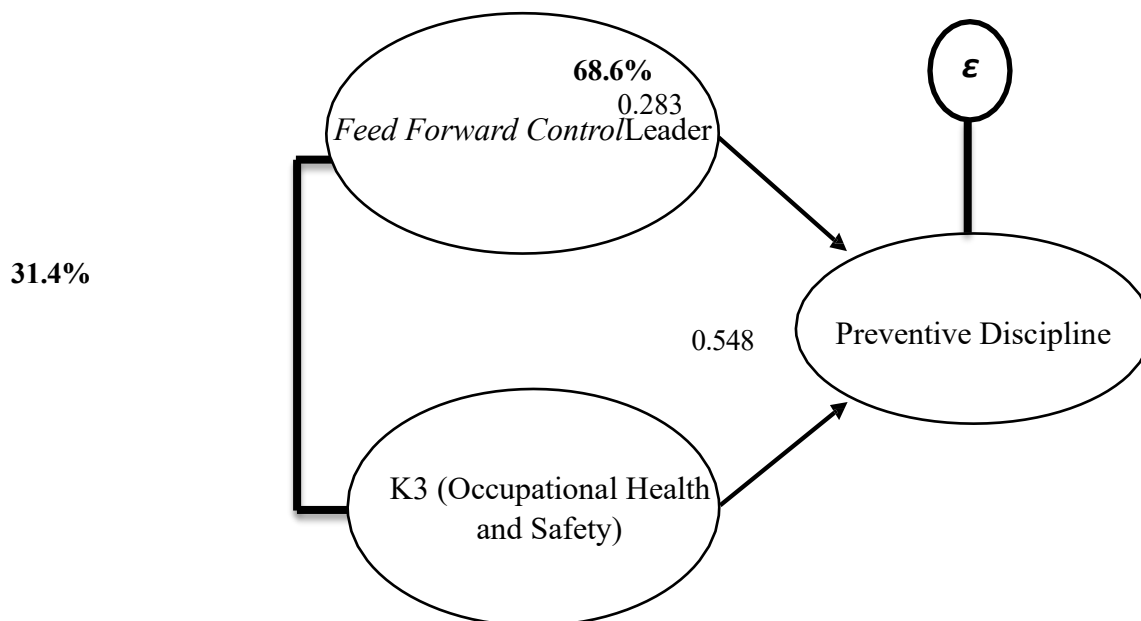
Based on the calculation of the coefficient of determination ( $R^2$ ) value of 0.314, it shows that around 31.4% of the variation in the dependent variable can be explained by the independent variable. Although not close to 1, this

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value still shows a fairly strong influence between these variables. This indicates that the model used has good ability to explain the relationship between variables.

Based on these calculations, the research model calculations can be formulated as follows:



Source: Processed by Researchers, 2025

**Figure 4 Research Model Calculation**

Information:

$r^2_{x1y} = 0.283$

$r^2_{x2y} = 0.548$

$\epsilon = 31.4\%$

Based on the Figure above, it can be seen that the correlation between the variables of Feed Forward Control of the Leader to Preventive Discipline is 0.283. And the relationship between K3 (Occupational Health and Safety) and Preventive Discipline is 0.548. And the contribution of Feed Forward Control of the Leader and K3 (Occupational Health and Safety) in influencing Preventive Discipline is 31.4% while the remaining 68.6% is influenced by other variables outside the study.

**Multiple Linear Regression Analysis Testing**

**Table 8 Results of Multiple Linear Regression Calculations**

Coefficients <sup>a</sup>								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	{Constant}	6.539	4.635		1.411	.161		
	feed	.283	.115	.202	2.451	.016	.883	1.133
	k3	.548	.099	.458	5.551	.000	.883	1.133

a. Dependent Variable: disiplin

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Source: Results of questionnaire data processing, 2025

Based on the table above, it can be seen that the value of the multiple linear regression equation is as follows:

$$a = 6.539$$

$$b1 = 0.283$$

$$b2 = 0.548$$

so that a multiple linear regression equation is obtained (Feed Forward Control of Leadership and K3 (Occupational Health and Safety) towards Preventive Discipline), namely:

$$Y^* = 6.539 + 0.283 X_1 + 0.548 X_2$$

1. The positive constant value shows that without the addition of the Leadership Feed Forward Control and K3 (Occupational Health and Safety) variables, the Preventive Discipline variable increased by 6,539.
2. If the Leadership Feed Forward Control variable experiences an increase or rise of (1) unit, assuming the self-confidence variable remains constant, then Preventive Discipline will experience an increase of 0.283.
3. If the K3 (Occupational Health and Safety) variable experiences an increase or rise of (1) unit, assuming the K3 (Occupational Health and Safety) variable remains constant, then Preventive Discipline will experience an increase of 0.548.

**Simultaneous Significance Test (F-Test)**

**Table 9 Calculation Results (F-Test)**

<b>ANOVA<sup>a</sup></b>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	<b>Regression</b>	<b>678.602</b>	<b>2</b>	<b>339.301</b>	<b>26.130</b>	<b>.000<sup>b</sup></b>
	<b>Residual</b>	<b>1480.321</b>	<b>114</b>	<b>12.985</b>		
	<b>Total</b>	<b>2158.923</b>	<b>116</b>			

a. Dependent Variable: disiplin

b. Predictors: (Constant), k3, feed

Source: Results of questionnaire data processing, 2025

Based on the SPSS calculation, the simultaneous test results (F) show that F count of 26.130 is greater than F table 3.08, so the alternative hypothesis is accepted. This means that simultaneously, the independent variables have a significant influence on the dependent variable in the analyzed model, confirming the relevance of the regression model used.

**Partial Significance Test (T-Test)**

The Partial Significance Test (T-Test) is used to determine the partial strength of the variables, namely X1 against Y and X2 against Y. The following is a table of partial hypothesis testing results:

**Table 10 T-Test Results**

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	<b>(Constant)</b>	<b>6.539</b>	<b>4.635</b>		<b>1.411</b>	<b>.161</b>
	<b>feed</b>	<b>.283</b>	<b>.115</b>	<b>.202</b>	<b>2.451</b>	<b>.016</b>
	<b>k3</b>	<b>.548</b>	<b>.099</b>	<b>.458</b>	<b>5.551</b>	<b>.000</b>

a. Dependent Variable: disiplin

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Source: Results of questionnaire data processing, 2025

The partial test result (T) shows that the calculated T value for the Leadership Feed Forward Control variable is 2.451, which is greater than 1.658, indicating no significant influence on Preventive Discipline (X1 – Y). On the other hand, the calculated T value for K3 (Occupational Health and Safety) is 5.551, which is also greater than 1.658, indicating that there is a significant influence of the K3 variable on Preventive Discipline (X2 – Y). This confirms the relevance of K3 in influencing discipline.

## Discussion

### *Feed Forward Control* Leader (X1)

Based on the calculation results, the level *Feed Forward Control* The leadership at PT. Barkah Jaya Mandiri is in the high category, which indicates that the company's leadership has implemented effective control in the decision-making and supervision process. This reflects management's commitment to improving work performance and discipline, as well as the ability to facilitate good communication among teams. Thus, the existence of this high control can contribute positively to the achievement of organizational goals and the company's operational effectiveness.

### K3 (Occupational Health and Safety) (X2)

Based on the calculation results, the level of K3 (Occupational Health and Safety) at PT. Barkah Jaya Mandiri is in the high category, which indicates that the company has successfully implemented good occupational health and safety standards. This reflects management's commitment to employee protection and the provision of a safe and healthy work environment. With high implementation of K3, the company not only protects employee welfare, but also increases productivity and reduces the risk of work accidents, thus contributing to the overall performance of the organization.

### Preventive Discipline (Y)

Based on the calculation results, the level of Preventive Discipline at PT. Barkah Jaya Mandiri is in the high category, which indicates that employees have a high awareness of the importance of complying with established work procedures and rules. This shows that the company has succeeded in creating a strong culture of discipline, where employees actively participate in maintaining the safety and smoothness of operations. With a high level of discipline, it is expected to reduce the risk of errors and accidents, as well as increase efficiency and productivity in the work environment.

### *Feed Forward Control* Leadership Towards Preventive Discipline

Based on the results of the partial hypothesis test (T), the calculated T value of 2.451 is greater than the T table value of 1.658. This shows that *Feed Forward Control* Leadership (X1) has a positive and significant effect on Preventive Discipline (Y) on employees of PT. Barkah Jaya Mandiri Sukabumi. Thus, H<sub>0</sub> is rejected and H<sub>1</sub> is accepted. This means that the higher the Feed Forward Control of the Leader, the higher the Preventive Discipline.

### K3 (Occupational Health and Safety) Against Preventive Discipline

Based on the results of the partial hypothesis test (T) shows that the calculated T is 5.551 which is greater than the T table value of 1.658. This shows that K3 (Occupational Health and Safety) (X2) has a positive and significant effect on Preventive Discipline (Y) on employees of PT. Barkah Jaya Mandiri Sukabumi. Thus, H<sub>0</sub> is rejected and H<sub>2</sub> is accepted. This means that the higher the K3 (Occupational Health and Safety) the more you have, the more your Preventive Discipline will increase.

## CONCLUSION

Based on the results of research and discussion that have been conducted related to the influence of feed forward control of leaders and K3 (Occupational Health and Safety) on preventive discipline of case studies at PT. Barkah Jaya Mandiri Sukabumi, it can be concluded as follows:

1. **General description:** At PT Barkah Jaya Mandiri, the leadership feed forward control, Occupational Health and Safety (OHS) system, and preventive discipline show a close relationship. Proactive and communicative leaders create a work environment that supports the implementation of OHS and employee discipline.

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2. **Leadership Influence:** There is a significant positive influence between leader feed forward control and employee preventive discipline. Good leadership encourages employees to comply with safety procedures, which leads to increased discipline.
3. **K3 Impact:** A well-implemented K3 system also contributes to preventive discipline. Employees who are well-trained and have a good understanding of K3 tend to be more disciplined in following safety procedures.
4. **Collective Influence:** Together, the management feed forward control and the OHS system have a significant impact on preventive discipline. The combination of the two creates a safer work environment, increasing employee compliance with safety standards.



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