THE INFLUENCE OF REWARD AND PUNISHMENT ON THE PERFORMANCE OF AVIATION SECURITY PERSONNEL AT EL TARI KUPANG AIRPORT

Mahatanti Muthia Devi[1*], Siti Fatimah[2], Meita Maharani[3]

[1,2,3)] *Surabaya Aviation Polytechnic, Jl. Jemur Andayani I/73, Surabaya 60236*
Email: mahatantimuthia@gmail.com

ABSTRACT

El Tari Kupang Airport plays a strategic role in supporting air transportation in East Nusa Tenggara. Aviation Security personnel are expected to work optimally to ensure flight security. This study aims to analyze the influence of reward and punishment on the performance of Aviation Security personnel at El Tari Kupang Airport. The study uses a quantitative method with a causal associative approach. Data collection was conducted through questionnaires distributed to 62 respondents and supported by documentation. Data analysis involved validity, reliability, normality tests, and multiple linear regression using SPSS version 26. The results show that reward has a positive and significant effect on personnel performance with a regression coefficient of 1.415 and a significance value of 0.000. Punishment also shows a positive and significant effect with a coefficient of 0.888 and a significance value of 0.000. The conclusion is that the implementation of appropriate rewards and firm punishments can improve the performance of Aviation Security personnel.

Keywords: *Reward, Punishment, Performance, Aviation Security, Airport*

1. INTRODUCTION

Air transportation has become one of the most preferred modes of travel due to its speed, efficiency, and wide accessibility. As a vital infrastructure, airports play a crucial role in ensuring the smooth, safe, and secure operation of flights. One of the key elements in maintaining aviation safety and security is the role of Aviation Security personnel, who are responsible for protecting passengers, baggage, cargo, and airport facilities from various unlawful acts.

To ensure that Aviation Security personnel perform their duties professionally, maintaining work motivation and discipline is essential. One of the strategies commonly applied in organizational management is the implementation of reward and punishment systems. Rewards function as recognition and appreciation for positive performance, while punishments are designed to enforce discipline and prevent violations of standard operating procedures. The effective application of both mechanisms is expected to strengthen motivation, ensure compliance, and ultimately improve personnel performance.

At El Tari Airport in Kupang, the reward system is applied through opportunities to participate in training programs as well as recognition for outstanding personnel. On the other hand, punishments are given in the form of verbal reprimands or written warning letters for those who commit violations. However, the effectiveness of these measures has not been scientifically examined, and it remains unclear to what extent reward and punishment influence the performance of Aviation Security personnel.

Previous studies have reported varying results. Some suggest that rewards have a significant impact on performance while punishments play a smaller role, whereas others indicate the opposite. These inconsistencies highlight a research gap that needs further exploration, particularly in the context of Aviation Security personnel whose responsibilities involve high levels of risk and strict adherence to aviation regulations.

Therefore, this study aims to analyze the influence of reward and punishment on the performance of Aviation Security personnel at El Tari Airport in Kupang. The results are expected to contribute theoretically to the field of human resource management and provide practical

insights for airport management in designing more effective strategies to enhance the performance of Aviation Security personnel.

1.1 Problem Formulation

Based on the background outlined above, the following research questions are formulated:

1. How do rewards affect the performance of Aviation Security personnel at El Tari Airport, Kupang?

2. How does punishment affect the performance of Aviation Security personnel at El Tari Airport, Kupang?

1.2 Research Objectives

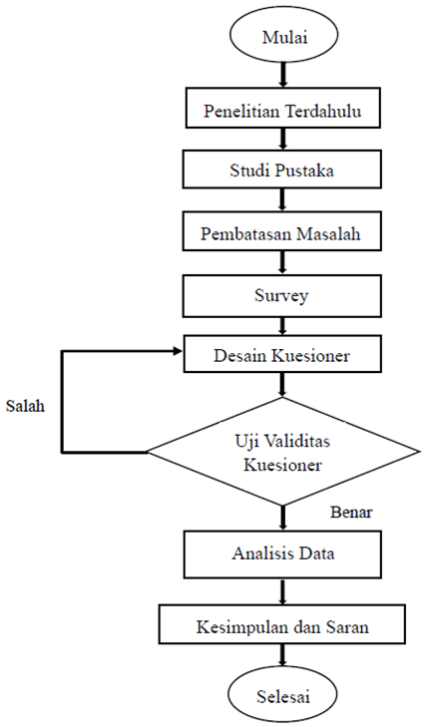
Based on the background and problem formulation outlined above, this study has the following objectives:

1. To determine the effect of rewards on the performance of Aviation Security personnel at El Tari Airport, Kupang.

2. To determine the effect of rewards on the performance of Aviation Security personnel at El Tari Airport, Kupang.

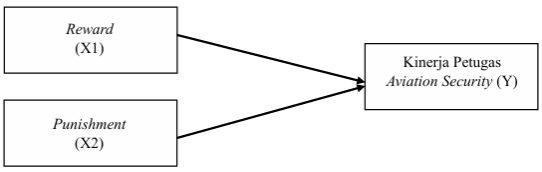
2. METHOD

In this study, a quantitative method with a causal-associative approach was employed to examine the extent to which reward and punishment influence the performance of Aviation Security personnel at El Tari Airport in Kupang.



Arikunto (2017) stated that if the number of research subjects is fewer than 100, then the entire population should be used as the sample. In this study, the sampling technique applied was saturated sampling, in which all members of the population are taken as the sample because the total number is relatively small and manageable. Based on data from airport authorities, the total number of Aviation Security personnel at El Tari Airport in Kupang is 62 individuals.

Sugiyono (2019) explained that research variables are all elements determined by the researcher to be studied and analyzed in order to obtain information and draw conclusions from the findings. In this study, two types of variables were used: independent variables, namely Reward (X1) and Punishment (X2), and the dependent variable, which is Personnel Performance (Y).



The data collection instrument used in this study was a closed-ended questionnaire with a five-point Likert scale. The statements were developed based on indicators proposed by experts and adjusted to the actual conditions in the field.

VARIABEL	INDIKATOR	SUMBER
X1 (*Reward*)	Gaji dan Bonus	Menurut Mahmudi dalam Ansory dan Indrasari (2018)
	Kesejahteraan	
	Pengembangan Karir	
	Penghargaan Psikologis dan Sosial	
X2 (*Punishment*)	*Punishment* Preventif	Menurut Purwanto dalam Indrasari & Ansory (2018)
	Punishment Represif	
Y (Kinerja)	Kualitas	Mathis & Jackson dalam Hidayat et al., (2024)
	Kuantitas	
	Ketepatan Waktu	
	Kerja sama	

All data processing was carried out using SPSS version 26, which included validity testing, reliability testing, normality testing, and multiple linear regression analysis.

3. DATA COLLECTION TECHNIQUES

Arikunto (2017) stated that data collection instruments are tools utilized by researchers in the process of obtaining data in a more systematic, structured, and efficient manner. Similarly, Ibnu Hajar in Alhamid (2019) explained that research instruments serve as measurement tools used to obtain quantitative information objectively regarding variations in the characteristics of a variable.

Based on these definitions, it can be concluded that data collection methods are procedures or techniques used as tools to gather relevant information in relation to the research problem being studied. In this study, the data collection methods were employed to obtain information concerning the influence of reward and punishment on the performance of Aviation Security personnel at El Tari Airport in Kupang. The techniques used are as follows:

1. Questionnaire
   In this study, a questionnaire was employed to collect data relevant to the research topic. The questionnaire was distributed online via Google Form, and the link was shared with 62 Aviation Security personnel at El Tari Airport in Kupang to gather the necessary data as the basis for supporting the analysis.
2. Documentation
   Through the documentation technique, the researcher accessed and collected data from existing documents. The data included the organizational structure of Aviation Security, the number of personnel on duty, attendance records, as well as documents related to the implementation of rewards and punishments for Aviation Security personnel at El Tari Airport in Kupang.

4. DATA ANALYSIS

- Validity Test

The validity test aims to determine whether a questionnaire can truly be considered valid. An item is regarded as valid if its significance value is below 0.005 (Ghozali, 2018). The technique used to measure the validity of the questionnaire involves calculating the correlation between each item and the total score using the product-moment correlation formula.

$$r_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{[N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

Notes:

r_{xy} = Validity coefficient

N = Number of research samples

X = Item of the variable being tested

Y = Total score of all items of the variable being tested

The calculations were carried out using SPSS version 26 to identify which items were valid and which items should be excluded. The results were then compared with the product-moment correlation table, using the followingcriteria:
a. If the calculated r ≥ r table (at a significance level of 5%), the questionnaire item is considered valid.
b. If the calculated r < r table (at a significance level of 5%), the questionnaire item is considered invalid.

- Reliability Test

The reliability test aims to assess the extent to which the statements in a questionnaire, serving as indicators of a variable or construct, are able to produce consistent results. A questionnaire is considered reliable if respondents' answers to the same questions remain stable or consistent when tested at different times Ghozali (2018).

If all variables X1 (Reward), X2 (Punishment), and Y (Personnel Performance) have Cronbach's Alpha values greater than 0.60, it indicates that all items are classified as reliable. The reliability test in this study was calculated using SPSS version 26 with the following formula:

$$r_{11} = \left[\frac{k}{(k-1)}\right]\left[1 - \frac{\sum \sigma_b^2}{\sigma_t^2}\right]$$

Notes:

r_{11} = Instrument reliability (Cronbach's Alpha coefficient)

k = Number of items in the instrument

$\sum \sigma b^2$ = Total variance of the items

σ^2 = Total variance

- Normality Test

The normality test is an analytical procedure used to determine whether the data in a group or variable follow a normal distribution pattern. This test is important to ensure that the data obtained come from a population with a normal distribution. Data are considered normally distributed if the significance value is greater than 0.05. Conversely, if the significance value is below 0.05, the data are considered not normally distributed.

- Multiple Linear Regression Test

Multiple linear regression analysis is a regression method applied when there is more than one independent variable in the model. This test aims to determine the direction of the relationship as well as the extent to which independent variables influence the dependent variable. The formula for multiple linear regression analysis is expressed as follows:

$Y = a + b_1X_1 + b_2X_2 + e$

Notes:

Y = Personnel Performance

a = Constant

b_1–b_2 = Regression coefficients

X_1 = Reward variable

X_2 = Punishment variable

e = Error term (disturbances)

5. RESULTS AND DISCUSSION

Results

The data in this study were obtained from 62 Aviation Security personnel who participated in completing the questionnaire. The characteristics considered in this research included gender, age range, occupation, and income level. The data were processed using IBM SPSS Statistics version 26.

Variabel	Pernyataan	Rtabel	Rhitung	Keterangan
Reward (Variabel X1)	X1-1	0,250	0,795	VALID
	X1-2	0,250	0,761	VALID
	X1-3	0,250	0,762	VALID
	X1-4	0,250	0,793	VALID
	X1-5	0,250	0,656	VALID
	X1-6	0,250	0,762	VALID
	X1-7	0,250	0,836	VALID
	X1-8	0,250	0,751	VALID
Punishment (Variabel X2)	X2-1	0,250	0,843	VALID
	X2-2	0,250	0,902	VALID
	X2-3	0,250	0,820	VALID
	X2-4	0,250	0,847	VALID
Kinerja Personel (Variabel Y)	Y-1	0,250	0,745	VALID
	Y-2	0,250	0,806	VALID
	Y-3	0,250	0,753	VALID
	Y-4	0,250	0,828	VALID
	Y-5	0,250	0,783	VALID
	Y-6	0,250	0,847	VALID
	Y-7	0,250	0,748	VALID
	Y-8	0,250	0,827	VALID

The results of the validity test showed that the correlation between the scores of each statement item for variable X1 (Reward), variable X2 (Punishment), and variable Y (Personnel Performance) had r-values greater than the r-table value (0.250). Therefore, all statement items used in measuring the variables met the validity requirements.

Variabel	*Cronbach's Alpha*	Keterangan
Reward	0,898	Reliabel
Punishment	0,874	Reliabel
Kinerja Personel *Aviation Security*	0,915	Reliabel

The results of the reliability test using Cronbach's Alpha for each variable Reward, Punishment, and Personnel Performance showed values greater than 0.60, indicating that the instrument is reliable.

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		62
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	1.38297197
Most Extreme Differences	Absolute	.097
	Positive	.090
	Negative	-.097
Test Statistic		.097
Asymp. Sig. (2-tailed)		.200[c,d]

Based on the results of the Kolmogorov-Smirnov test, the KS value was 0.097 with a significance probability of 0.200, which is greater than 0.05. Therefore, it can be concluded that the data are normally distributed.

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	.748	1.464		.511	.611		
	Reward	1.415	.105	1.347	13.495	.000	.161	6.192
	Punishment	.888	.197	.451	4.518	.000	.161	6.192

a. Dependent Variable: Kinerja Petugas

Based on the results from the Coefficients table, the multiple linear regression equation is formulated as follows:

Y = 0.748 + 1.415 X1 + 0.888 X2

a. The regression equation can be explained as follows: The constant value is 0.748. Assuming that the Reward variable (X1) and the Punishment variable (X2) are equal to zero, the Personnel Performance value (Y) is 0.748. This indicates that in the absence of reward and punishment, the baseline value of personnel performance is 0.748.

b. The coefficient value of the Reward variable is 1.415, which is positive. This shows that reward has a positive influence on the performance of Aviation Security personnel. In other words, if the Reward variable increases by one unit while the Punishment variable remains constant, the performance of Aviation Security personnel will increase by 1.415 units.

c. The coefficient value of the Punishment variable is 0.888, which is positive. This demonstrates that punishment has a positive influence on the performance of Aviation Security personnel. In other words, if the Punishment variable increases by one unit while the Reward variable remains constant, the performance of Aviation Security personnel will increase by 0.888 units.

Discussion of Research Findings

1. The Influence of Reward on the Performance of Aviation Security Personnel

   Based on the data analysis using multiple linear regression, it was found that the Reward variable has a positive and significant effect on the performance of Aviation Security personnel at El Tari Airport in Kupang. This is evidenced by the regression coefficient value of 1.415 and a significance value of 0.000. Since the significance value is smaller than the threshold of 0.05, it can be concluded that reward plays an important role in improving personnel performance.

Theoretically, this finding is in line with the statement of Moorhead and Griffin (2018), who explained that providing rewards is a form of organizational appreciation to employees for their achievements and contributions, which can stimulate greater work motivation. A well-implemented reward system can foster enthusiasm, a sense of responsibility, and loyalty among personnel in carrying out their duties and responsibilities.

This research is also supported by a previous study conducted by Mamik et al. (2016), which demonstrated that rewards are effective in enhancing employee performance, particularly in work environments with high service standards. Therefore, the implementation of rewards at El Tari Airport has contributed positively to improving the performance of Aviation Security personnel.

2. The Influence of Punishment on the Performance of Aviation Security Personnel

The results of the regression analysis in this study also indicate that the Punishment variable has a positive and significant effect on the performance of Aviation Security personnel at El Tari Airport in Kupang. This is demonstrated by the regression coefficient value of 0.888 and a significance value of 0.000. Since the significance value is below 0.05, it can be concluded that punishment plays an important role in influencing personnel performance.

Conceptually, this result is supported by the theory proposed by Mangkunegara in Abdullah, (2021), which states that the application of punishment, when carried out according to regulations and enforced firmly and objectively, can serve as a behavioral control mechanism in the workplace. Appropriate sanctions or penalties are capable of fostering discipline among personnel and encouraging greater compliance with established rules and operational procedures.

In addition, this finding is consistent with the study conducted by Meyrina and Susana (2017), which demonstrated that punishment has a significant effect on improving employee performance, provided that its implementation is fair, educational, and proportional. Therefore, the implementation of punishment at El Tari Airport plays an important role in maintaining work discipline and enhancing the overall performance of Aviation Security personnel.

CLOSING

Conclusion

Based on the findings of the study on the influence of reward and punishment on the performance of Aviation Security personnel at El Tari Airport in Kupang, several conclusions can be drawn as follows:

1. Based on the questionnaire results using the Likert scale, the majority of statements under the reward and punishment variables obtained a percentage index above 80%, which falls into the “strongly agree” category. This indicates that respondents perceive the reward and punishment system implemented by the management at El Tari Airport in Kupang as effective and positively received.

2. The results of the multiple linear regression analysis show that reward has a positive and significant effect on the performance of Aviation Security personnel at El Tari Airport in Kupang, with a regression coefficient value of 1.415 and a significance level of 0.000. This demonstrates that an appropriately implemented reward system can optimally enhance motivation, work enthusiasm, and personnel performance.

3. Punishment also has a positive and significant effect on the performance of Aviation Security personnel, with a regression coefficient value of 0.888 and a significance level of 0.000. The findings further indicate that reward has a stronger influence compared to punishment, suggesting that performance improvement strategies should primarily emphasize the provision of rewards. Nevertheless, punishment remains essential as a mechanism to strengthen work discipline and behavioral control, supporting the development of consistent and professional performance.

SUGGESTION

Based on the conclusions of this study, the author provides several recommendations for the management of El Tari Airport, particularly the Aviation Security unit, as follows:

1. Optimize the reward system to be more relevant to the needs of personnel, both financial and non-financial, in order to enhance motivation and loyalty.

2. Strengthen the implementation of punishment by applying fair and consistent standards that are regularly communicated to all personnel.

3. Position reward as the primary strategy for improving performance through achievement-based programs, training opportunities, and career development pathways.

4. Conduct regular evaluations and provide opportunities for feedback regarding the effectiveness of the reward and punishment system.
5. For future researchers, it is recommended to include additional variables such as leadership, intrinsic motivation, or organizational culture to broaden the scope of studies on the performance of Aviation Security personnel.

(Indrasari & Ansory, 2018)

(Hidayat et al., 2024)

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