THE INFLUENCE OF AVIATION SECURITY PERSONNEL PERFORMANCE ON FLIGHT SECURITY AT MUTIARA SIS AL-JUFRI PALU AIRPORT

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ABSTRACT
In shaping airport aviation security that can provide passengers with comfort at the airport, it is necessary to pay attention to facilities in improving the performance of Avsec personnel. This study aims to examine the effect of aviation security personnel performance on flight security at Mutiara Sis Al-Jufri Airport Palu. The method used in this research is a quantitative method with a survey approach that distributes questionnaires to respondents as many as 150 respondents who are Avsec officers and airport passengers. Data collection was carried out using a Likert scale on a research questionnaire and research data analysis was carried out using statistical techniques and multiple linear regression analysis with the help of SPSS software ver. 26. 26. The results showed that there was an effect of aviation security personnel performance on flight security at Mutiara Sis Al- Jufri Airport Palu, indicated by the regression coefficient value of 0.655 with a significance of 0.000 ($p < 0.05$) and t count of 8.123> t table 1.976. The Pearson correlation value of 0.555 indicates a positive relationship between AVSEC performance and aviation security, although the strength of the correlation is in the low category. The percentage effect of AVSEC officer performance on aviation security is 55.5%, while the remaining 44.5% is influenced by other variables not included in this study. Aviation security at Mutiara Sis Airport

Keywords: *Keywords Personnel Performance, Aviation Security, Mutiara Sis Al-Jufri Airport Palu*

1. INTRODUCTION

Mutiara Sis Al-Jufri Palu Airport is one of the main air transportation infrastructures in Central Sulawesi Province which has an important role in supporting community mobility, logistics distribution, and economic activities. Along with the increase in flight activity, the aspect of aviation security is a major concern, given the potential threats such as smuggling, terrorism, and other security disturbances that can occur at any time.

In maintaining this security, the role of Aviation Security (Avsec) personnel is crucial. Avsec is tasked with being at the forefront of maintaining aviation security, from checking passengers and luggage, monitoring restricted areas, to early detection of potential threats. The success of Avsec's duties is highly dependent on their performance in carrying out procedures in a disciplined, professional manner, and in accordance with applicable operational standards.

According to regulations such as Law No. 1/2009 on Aviation and Minister of Transportation Regulation No. PM 51/2020 on National Aviation Security, Avsec must meet competencies, qualifications, and apply high security standards to ensure flight safety. However, in practice, Avsec's performance at several airports still faces challenges, such as limited number of personnel, high workload, and the implementation of procedures that have not been maximized.

Based on data on the number of Avsec personnel at Mutiara Sis Al-Jufri Airport in Palu, there are a total of 99 personnel divided into the categories of organic employees and outsourced employees. Organic employees consist of 3 Aviation security Inspectors, 2 Air Transport Inspectors, 1 Dangerous Goods Inspector, 14 Senior Avsec personnel, 8 Junior Avsec personnel, and 4 Basic Avsec personnel. Meanwhile, outsourced employees consist of 27 personnel who have attended Junior Avsec training and 40 personnel who have attended Basic Avsec training.

While this may seem like a large number, limitations in the number of personnel with higher certifications can affect the effectiveness of aviation security at airports. This limitation results in increased individual workload, potential fatigue, and reduced effectiveness in carrying out security duties. With a limited number of personnel, there is a possibility of less than optimal monitoring, especially during peak hours or when there is an increase in the number of passengers. This can result in a reduced level of detection of security threats and increased potential for negligence in the application of safety procedures.

This encourages the need for an evaluation of how the performance of Avsec personnel affects the level of flight security at the airport. By looking at the importance of the roles and responsibilities of Avsec personnel in maintaining flight security, the researcher is interested in conducting research with the title "The Effect of Aviation Security Personnel Performance on Aviation Security at Mutiara Sis Al-Jufri Palu Airport."

1.1. Problem Formulation

Based on the research background that has been conveyed, it can be seen that the formulation of this research problem is "How does the performance of Aviation security personnel (AVSEC) affect flight security at Mutiara Sis Al-Jufri Palu Airport?".

1.1.1. Research Objectives

This study has a research objective to determine the effect of the performance of Aviation security personnel (AVSEC) on Aviation security at Mutiara Sis Al-Jufri Palu Airport.

1.1.1.2. Hypothesis

Based on the formulation of the problem and the research conceptual framework that has been made, the research hypothesis can be formed, as follows:

H0 : The performance of Aviation security personnel has no effect on Aviation Security at Mutiara Sis Al-Jufri Airport, Palu

H1: The performance of Aviation security personnel has a significant effect on Aviation Security at Mutiara Sis Al-Jufri Airport Palu

2. THEORETICAL FOUNDATION

According to Sitorus (2020) influence is the result of the attitude shown by a person or group because they have done and carried out their obligations without asking other parties to do so.

Aviation security is a department in the security division and ensures the safety of aviation service users in all areas of the flight, including air crew, passengers and ground personnel. Avsec main function is to safeguard and ensure the safety of passengers and crew and to support and assist the smooth running of the flight department's work program. Avsec has the primary responsibility to ensure the safety of every flight at the airport.

Avsec has a number of tasks as follows: Ensure flight safety, Conduct inspection and Conducting surveillance.

Aviatin security or Avsec has several levels of education and training as follows: Basic Aviation Security, Junior Aviation Security Senior Aviation Security.

According to Surajiyo in Lombogia et al (2023) states that performance is the result of work that is closely related to the company's strategic goals and customer pleasure and also plays a role in the economy. According to Ali & Sari (2024); Praptama & Dharasta (2023), Avsec performance can be measured by indicators: Quality, Quantity, Timeliness, Need for Supervision, Interpersonal Impact.

Aviation security is a crucial aspect of the aviation industry that aims to protect civil aviation from illegal acts, such as sabotage, hijacking, and other threats. According to the Regulation of the Minister of Transportation of the Republic of Indonesia Number PM 51 of 2020, aviation security is defined as a condition that provides protection to aviation from unlawful acts through the integrated use of human resources, facilities, and procedures (Regulation, 2020).

According to Ali & Sari (2024); Erchan et al (2024); Hendra & Astutik (2022); [2] flight safety measurement indicators are:Communication and Coordination, Passenger and Baggage Screening, Training and Technology Regulatory Compliance.

3. RESEARCH METHODS

In this study, the approach in explanatory research used with the survey method or research conducted to obtain facts about the phenomena that exist in the object of research and seek information actually and systematically.Based on the background and formulation of the problems that have been described, this research is used to examine the Effect of Aviation security Personnel Performance (X) on Aviation Security (Y) Mutiara Sis Al-Jufri Palu Airport.

Population is the overall research subject Arikunto (2019). Meanwhile, according to Sugiyono (2020), population can be defined as a generalization area consisting of objects or subjects that have certain quantities and characteristics set by researchers to study and then draw conclusions. The population in this study were Avsec personnel at Mutiara Sis Al-Jufri Palu Airport totaling 99

personnel and Passengers at Mutiara Sis Al-Jufri Palu Airport totaling 125,547 in January and February 2025.

The definition of a sample according to Sugiyono (2020) is part of the number and characteristics possessed by the population. The sample is part of the population taken through certain, clear and complete ways that are considered to represent the population. The sample used in this study was proportional random sampling. Proportional random sampling is a sampling technique that ensures each member of the population has the same opportunity to be selected as a sample, according to the proportion of its number in the population.

Sampling technique is a sampling technique to determine the sample used in research. The sampling technique used in this research is probability sampling. The definition of probability sampling is "a sampling technique that provides equal opportunities for each element (member) of the population to be selected as a sample member with the technique taken, namely saturated sampling (census). According to Sugiyono (2020). Sampling technique Saturation is a sampling technique when all members of the population are used as samples.

The number of sample members was determined using the Slovin formula with an error rate of 10% as follows:

Description:

N = Population Size

n = Sample Size

$n = N\ 1{+}N.e2$

e = Percentage (%) tolerance of inaccuracy due to errors in sampling.

Based on the sample calculation carried out, it can be seen that the number of all samples in this study was 150 respondents who were avsec personnel and passengers at Mutiara Sis Al-Jufri Airport in Palu.

3.1 Data Collection Techniques and Research Instruments

The data collection through field studies (Field Research) consists of: The questionnaire is a list of written statements that require a good response, attitude or disagreement from the respondent's attitude. The questionnaire used is a choice type, where respondents are given alternative answers to choose one of the four answers provided (Silvia, 2021) [14]. The questionnaire was administered to 50 Avsec personnel who were the research sample and 100 passengers at Mutiara Sis Al-Jufri Airport in Palu. The questionnaire in this study was aimed at finding out how the respondents' answers related to their perceptions and evaluations of the Performance of Aviation Security Personnel (AVSEC) on Aviation Security at Mutiara Sis Al-Jufri Airport Palu.

Documentation conducted in this study is in the form of data on the number of Avsec personnel and photos related to the Performance of Aviation Security Personnel (AVSEC) on Aviation Security at Mutiara Sis Al-Jufri Palu Airport.

3.2 Data Analysis Technique

The research method used is quantitative research method. Sugiyono (2020) explains that quantitative research is research that gets results and data in the form of numerical values, while the descriptive method focuses on describing naturally and as it is, so due to its nature, direct involvement in the field is required in conducting observations and research (Arikunto, 2019).

Likert scale is a measurement technique used to measure the attitudes, opinions and perceptions of a person or group of people about a phenomenon or event (Sugiyono, 2020). In this study, the authors used a research guide in the form of a Likert scale to measure the performance of Aviation Security Personnel (AVSEC) on Aviation Security at Mutiara Sis Al- Jufri Palu Airport. The Likert scale used in this study is:

No	Simbol	Description	Skor
1.	SD	Strongly Disagree	1
2.	D	Disagree	2
3.	A	Agree	3
4.	SA	Strongly Agree	4

Sumber: Sugiyono (2020)

Based on the respondent's answer, the tendency and the respondent's answer are then obtained. The questionnaire distributed uses a Likert scale to obtain the overall answer from the number of respondents.

From the data obtained, then processed by transferring each answer point with a weight that has been determined by a table of value weights, the calculation of the respondent's answer is as follows, for example:

1)Respondents who answered agree (4) = 4 x n = n

2)Respondents who answered neutral (3) = 3 x n = n

3)Respondents who answered disagree (2) = 2 x n = n

4) Respondents who answered disagree strongly (1) = 1x n = n

Total Skor = n

Information:

n = the value obtained from the respondent's answer

In order to get the interpretation results, it is mandatory to first know the highest score (X) and the lowest number (Y) for the assessment item with the following formula:

X = Likert highest score x number of respondents (Highest Score 4) Y = Lowest score x number of respondents (Lowest Score 1)

Then after finding the score value, the next step is to determine the respondent's interpretation assessment using the Index % formula.

$$Rumus\ Index\ \% = \frac{Total\ Skor}{X}\ x\ 100$$

Sumber: Sugiyono (2022)

From the calculation of the number of indices above, it is then entered in the percentage value table whether it is included in the scale Strongly agree or to other parts of the scale.

Answer	Descriptio
0% - 25%	Strongly (Disagree, Bad, Poor)
26% - 50%	Disagree or Poor
51% - 75%	Agree, Good or Like
76% - 100%	Strongly (Agree, Good, Like)

Sumber: Sugiyono (2020)

3.3 Instrument Testing

According to Ghozali (2021), a good data instrument must meet two important requirements, namely valid and reliable. The validity test is used to measure whether a questionnaire is valid or not. A questionnaire is said to be valid if the statements on the questionnaire are able to reveal something that will be measured by the questionnaire.

Validity Test this calculation will be carried out using SPSS version 26 software to find valid and invalid item numbers, this calculation also needs to be consulted with the r product moment table with the validity test assessment criteria:

a. If r count ≥ r table (at the α level of 5%), it can be said that the questionnaire item is valid.

b. If r count < r table (at the α level of 5%), it can be said that the questionnaire item is not valid.

Reliability test is a fairly popular approach to address this issue is to use the alpha coefficient. The alpha value ranges from 0 to 1. The measurement measure will be said to be reliable if at least the alpha value is 0.6.

Person correlation test Correlation analysis is used to determine the closeness between two variables and to determine the direction of the relationship that occurs. In this study, a simple correlation using Pearson's Product Moment with a correlation value (r) ranging from 1 to -1. A value closer to 1 or -1 means that the relationship between the two variables is getting stronger. Conversely, a value close to 0 means that the relationship between the two variables is getting weaker. A positive value indicates a unidirectional relationship (if X goes up, then Y goes up) and a negative value indicates an inverse relationship (if X goes up, then Y goes down). To be able to provide an interpretation of the correlation coefficient found, it can be guided by the provisions for the interpretation of the correlation coefficient as follows:

Correlation Coefficient	Relationship Level
0,00 – 0,199	Very low
0,20 – 0,399	Low
0,40 – 0,599	Medium
0,60 – 0,799	Strong
0,80 – 1,000	Very strong

Sumber: Sugiyono (2020)

Simple Linear Regression Analysis Furthermore, to determine whether there is a relationship or influence between these variables, simple linear regression analysis is used. Simple linear regression analysis is a linear relationship between the independent variable (X) and the dependent variable (Y). This analysis is used to predict the value of the dependent variable (Y) if the value of the independent variable (X) has increased or decreased and to determine the relationship or influence between the independent variable and the dependent variable, whether positive or negative (Sugiyono, 2020).

The equation form of this simple linear regression is:

$$Y = a + b\ X + \varepsilon$$

Description:

Y = Aviation Security

X = Performance of Aviation Security Personnel (AVSEC)

a = Constant (if the value of X = 0)

b = Simple regression coefficient

ε = standard error

Hypothesis Test (t test) At this stage, the influence of each independent variable contained in the formed model is tested to determine whether all independent variables in the model individually have a significant effect on the model individually. If the calculation results show that the probability value (P value) < alpha 0.05, then Ho is rejected and H1 is accepted. Thus the independent variable can explain the dependent variable partially.

4. RESULTS AND DISCUSSION

This Final Project research was carried out using primary data obtained by researchers through distributing questionnaires to obtain data related to the performance of avsec personnel and flight security at Mutiara Sis Al-Jufri Airport Palu. The sample in this study amounted to 150 respondents which included 50 avsec officers and

100 passengers at Mutiara Sis Al-Jufri Airport Palu. The research results obtained are as follows:

Research Questionnaire data collection in this study was obtained through the collection of questionnaires to 50 avsec officers and 100 airport passengers. Data collection on respondents was carried out randomly with the aim of knowing the responses of avsec officers and airport passengers regarding the performance of avsec personnel and flight security at Mutiara Sis Al-Jufri Airport Palu. Based on the questionnaire obtained, it can be seen

Tabel 4. 1 AVSEC Personnel Performance Variable Instrument Percentage Results (X)

Variabel Item	Data				Total Skor	Total Indeks (%)
	1	2	3	4		
KP1	11	39	61	39	428	71.33
KP2	5	47	58	40	433	72.17
KP3	15	35	73	27	412	68.67
KP4	15	35	67	33	418	69.67
KP5	12	40	73	25	411	68.50
KP6	8	31	70	41	444	74.00
KP7	10	34	77	29	425	70.83
KP8	7	48	63	32	420	70.00
Rata - Rata						70.65

Source: Processed by researchers (2025)

the distribution of respondents' answers as follows:

In table 4.1, the results of the questionnaire tabulation regarding the performance of AVSEC personnel (X) are shown. Data was obtained from 150 respondents, consisting of 50 AVSEC officers and 100 passengers of Mutiara Sis Al-Jufri Palu Airport. Respondents provided responses to 8 statement items using a 4-point Likert scale, where the highest value given by respondents was "Strongly Agree" (score 4) and the lowest was "Strongly Disagree" (score 1) for each questionnaire statement. From the results of the analysis, it can be seen that the average total performance index of AVSEC personnel is 70.65%, which indicates that overall, the performance of AVSEC personnel at Mutiara Sis Al-Jufri Airport Palu can be said to be good.

Tabel 4. 2 Percentage Results of Aviation Security Variable Instrument (Y)

Variabel Item	Data				Total Skor	Total Indeks (%)
	1	2	3	4		
KA1	11	39	76	24	413	68.83
KA2	8	54	62	26	406	67.67
KA3	16	42	66	26	402	67.00
KA4	11	45	58	36	419	69.83
KA5	8	36	82	24	422	70.33
KA6	8	65	46	31	400	66.67
KA7	7	54	60	29	411	68.50
Rata - Rata						68.40

Source: Data processed by researchers (2025)

In table 4.2, the results of the questionnaire tabulation regarding the aviation security variable (Y) are shown. Data was obtained from 150 respondents who responded to 7 statement items using a 4-point Likert scale, where the highest value given by the respondent was "Strongly Agree" (score 4) and the lowest was "Strongly Disagree" (score 1) for each questionnaire statement. From the results of the analysis, it can be seen that the total average aviation security index is 68.40%, which shows that overall, the level of aviation security at Mutiara Sis Al-Jufri Airport Palu can be said to be good, but there are still some areas that need improvement to achieve higher standards.

4.1 Research Analysis

Validity Test

Tabel 4. 3 AVSEC Officer Performance Variable Validity Results (X)

Correlations

		KP1	KP2	KP3	KP4	KP5	KP6	KP7	KP8	Kinerja Petugas AVSEC
KP1	Pearson Correlation	1	.273**	.462**	.386**	.446**	.379**	.345**	.478**	.725**
	Sig. (2-tailed)		.001	.000	.000	.000	.000	.000	.000	.000
	N	150	150	150	150	150	150	150	150	150
KP2	Pearson Correlation	.273**	1	.172*	.402**	.429**	.290**	.325**	.286**	.604**
	Sig. (2-tailed)	.001		.035	.000	.000	.000	.000	.000	.000
	N	150	150	150	150	150	150	150	150	150
KP3	Pearson Correlation	.462**	.172*	1	.325**	.336**	.329**	.272**	.293**	.613**
	Sig. (2-tailed)	.000	.035		.000	.000	.000	.001	.000	.000
	N	150	150	150	150	150	150	150	150	150
KP4	Pearson Correlation	.386**	.402**	.325**	1	.355**	.345**	.445**	.293**	.685**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000
	N	150	150	150	150	150	150	150	150	150
KP5	Pearson Correlation	.446**	.429**	.336**	.355**	1	.256**	.501**	.461**	.718**
	Sig. (2-tailed)	.000	.000	.000	.000		.002	.000	.000	.000
	N	150	150	150	150	150	150	150	150	150
KP6	Pearson Correlation	.379**	.290**	.329**	.345**	.256**	1	.217**	.377**	.609**
	Sig. (2-tailed)	.000	.000	.000	.000	.002		.008	.000	.000
	N	150	150	150	150	150	150	150	150	150
KP7	Pearson Correlation	.345**	.325**	.272**	.445**	.501**	.217**	1	.229**	.632**
	Sig. (2-tailed)	.000	.000	.001	.000	.000	.008		.005	.000
	N	150	150	150	150	150	150	150	150	150
KP8	Pearson Correlation	.478**	.286**	.293**	.293**	.461**	.377**	.229**	1	.649**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.005		.000
	N	150	150	150	150	150	150	150	150	150
Kinerja Petugas AVSEC	Pearson Correlation	.725**	.604**	.613**	.685**	.718**	.609**	.632**	.649**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	
	N	150	150	150	150	150	150	150	150	150

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Source: SPSS Data Processing (2025)

r table 5% (N-2) = r table 5% (150-2) = r table 5% (148) The validity of each instrument is considered valid, if r count> r table 5% (148) = 0.1603

In the avsec officer performance variable (X) in this study, it shows that 10 variable instruments are declared valid with a value of r count> r table (0.1603).

Tabel 4. 4 Aviation Security Variable Validity Results (Y)

Correlations

		KA1	KA2	KA3	KA4	KA5	KA6	KA7	Keamanan Penerbangan
KA1	Pearson Correlation	1	.448**	.610**	.523**	.630**	.495**	.537**	.767**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000
	N	150	150	150	150	150	150	150	150
KA2	Pearson Correlation	.448**	1	.604**	.682**	.483**	.612**	.566**	.800**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000
	N	150	150	150	150	150	150	150	150
KA3	Pearson Correlation	.610**	.604**	1	.502**	.617**	.553**	.530**	.804**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000
	N	150	150	150	150	150	150	150	150
KA4	Pearson Correlation	.523**	.682**	.502**	1	.436**	.641**	.603**	.803**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000
	N	150	150	150	150	150	150	150	150
KA5	Pearson Correlation	.630**	.483**	.617**	.436**	1	.414**	.510**	.734**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000
	N	150	150	150	150	150	150	150	150
KA6	Pearson Correlation	.495**	.612**	.553**	.641**	.414**	1	.623**	.794**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000
	N	150	150	150	150	150	150	150	150
KA7	Pearson Correlation	.537**	.566**	.530**	.603**	.510**	.623**	1	.794**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000
	N	150	150	150	150	150	150	150	150
Keamanan Penerbangan	Pearson Correlation	.767**	.800**	.804**	.803**	.734**	.794**	.794**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	N	150	150	150	150	150	150	150	150

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Data Processing (2025)

r table 5% (N-2) = r table 5% (150-2) = r table 5% (148) The validity of each instrument is considered valid, if r count> r table 5% (148) = 0.1603

In the aviation security variable (Y) in this study, 10 instruments of the variable were declared valid with the value of r count> r table (0.1603).

Reliability Test

Reliability is a fairly popular approach to overcoming this problem is to use the alpha coefficient (Sugiyono, 2020). The purpose of the reliability test is to obtain an instrument that can really be trusted. The reliability test

was carried out by calculating the Cronbach's alpha value of the indicators on each variable with the following levels of reliability:

Tabel 4. 6 Reliability Level

Alpha	Reliability Level
0,000 – 0,200	Less Reliable
0,201 – 0,400	Somewhat Reliable
0,401 – 0,600	Moderately Reliable
0,601 – 0,800	Reliabel
0,801 – 1,00	Very Reliable

The research variable instrument is said to be reliable if the alpha value is greater than ≥ 0.60.

Tabel 4. 7 AVSEC Officer Performance Variable Reliability Results (X)

Reliability Statistics

Cronbach's Alpha	N of Items
.810	8

Source: SPSS Data Processing (2025)

Based on the results of this output using the SPSS application, the results of the reliability test on variable X can be seen that the Cronbach's Alpha value on this variable is greater than the alpha value of 0.810> 0.60. From these results it can be concluded that all statements or instruments in the variable X questionnaire are declared reliable.

Tabel 4. 8 Aviation Security Variable Reliability Results (Y)

Reliability Statistics

Cronbach's Alpha	N of Items
.897	7

Source: SPSS Data Processing (2025)

Based on the results of this output using the SPSS application, the results of the reliability test on variable Y can be seen that the Cronbach's Alpha value on this variable is greater than the alpha value of 0.897> 0.60. From these results it can be concluded that all statements or instruments in the Y variable questionnaire are declared reliable.

Pearson Correlation Test

Tabel 4. 9 Pearson Correlation Test

Correlations

		Kinerja Petugas AVSEC	Keamanan Penerbangan
Kinerja Petugas AVSEC	Pearson Correlation	1	.555**
	Sig. (2-tailed)		.000
	N	150	150
Keamanan Penerbangan	Pearson Correlation	.555**	1
	Sig. (2-tailed)	.000	
	N	150	150

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Data Processing (2025)

The correlation test results show that there is a significant positive relationship between AVSEC Officer Performance and Aviation Security, with a Pearson correlation coefficient value of 0.555 and a significance level of 0.000 (p < 0.01). This shows that the better the performance of AVSEC officers, the higher the level of flight safety. The correlation value of 0.555 is included in the medium or strong correlation category and is statistically significant at the 99% confidence level (p < 0.01).

Simple Linear Regression

Tabel 4. 11 Simple Linear Regression

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	.885	.232		3.808	.000		
	Kinerja Petugas AVSEC	.655	.081	.555	8.123	.000	1.000	1.000

a. Dependent Variable: Keamanan Penerbangan

Source: SPSS Data Processing (2025)

Y = a + bX

Y= 0,885 +0,655

The conclusion from the simple linear regression equation above is:

a.The constant value (α) of 0.885 indicates that if there is no contribution from the performance of AVSEC officers (X=0), then the level of flight safety (Y) is predicted to be 0.885 units.

b.The regression coefficient value of variable X (AVSEC personal performance) of 0.655 shows that every one unit increase in variable X will increase variable Y (flight safety) by 0.655 units.

Hypothesis Test (t Test)

Tabel 4.12 Hypothesis Test (t Test)

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	.885	.232		3.808	.000		
	Kinerja Petugas AVSEC	.655	.081	.555	8.123	.000	1.000	1.000

a. Dependent Variable: Keamanan Penerbangan

Based on the t test results in Table 4.12, the t value is 8.123 and the significance value (p-value) is 0.000. With a sample size of 150 respondents, the degree of freedom (df = 150 - 2 = 148), and the t table value at the 0.05 (two-sided) significance level is 1.976.

Because t count (8.123) > t table (1.976) and p-value (0.000) < 0.05, H_0 is rejected and H_1 is accepted. Thus, it can be concluded that there is a significant influence between the performance of AVSEC officers (X) on flight safety (Y) by 55.5%.

4.2 Discussion of Research Results

This study shows that the performance of AVSEC officers at Mutiara Sis Al-Jufri Airport in Palu has a positive effect on flight security by 55.5%. Although the performance of AVSEC officers is good, there are still aspects

that need to be improved, such as efficiency in inspection. The results of the SPSS analysis show a calculated t value of 8.123, which is greater than the t table of 1.976, with a p value of 0.000 which is smaller than 0.05. This indicates that the performance of AVSEC officers has a significant effect on aviation security. The Pearson correlation of 0.555 also indicates a significant positive relationship between the two variables.

This finding is in line with Ali & Sari's (2024) research which found that AVSEC performance also has a major effect on aviation security and safety, with 87.7% of flight safety explained by AVSEC performance. Hendra & Astutik's (2022) research also supports these findings, showing that AVSEC officers play an important role in ensuring flight safety, despite the challenges in carrying out their duties. Similarly, Findarsih & Widagdo's (2023) research shows that the performance of AMC officers affects flight safety, although their duties are different from AVSEC, but still shows the importance of the officers' role in maintaining flight safety.

Overall, the results of this study are in line with previous research by Ali & Sari (2024). The Effect of Aviation Security (AVSEC) Performance on Aviation Safety.

CLOSING

After conducting research related to the title and problems that researchers have described in the previous chapter, it can be concluded in this study that there is a significant influence between the Performance of Aviation Security Officers (AVSEC) on Aviation Security at Mutiara Sis Al-Jufri Palu Airport. This is evidenced through the SPSS output with the results of a simple linear regression test which shows the equation Y = 0.885 + 0.655 X. The analysis results show a regression coefficient value of 0.885 + 0.655 X. The analysis results show a regression coefficient value of 0.655 with a significance of 0.000 ($p < 0.05$) and t count of 8.123> t table 1.976. The Pearson correlation value of 0.555 indicates a positive relationship between AVSEC performance and flight safety, with the strength of the correlation falling into the moderate category. The percentage effect of AVSEC officer performance on aviation security is 55.5%, while the remaining 44.5% is influenced by other variables not included in this study. Aviation security at Mutiara Sis Al-Jufri Airport Palu which is influenced by the performance of Aviation Security (AVSEC) officers in this study can be interpreted that AVSEC officers as the front guard in aviation security must be able to provide maximum security services, with professionalism and compliance with established procedures, to create a sense of security and comfort for all users of flight services at Mutiara Sis Al-Jufri Airport Palu.

Airports need to strengthen oversight of security procedures by ensuring that AVSEC officers strictly adhere to standard operating procedures (SOPs). Better oversight will improve officer compliance with security procedures and ensure that all procedures are followed correctly.

AVSEC personnel are advised to focus more on time efficiency during the inspection process. Given the importance of accuracy in ensuring flight safety, good time management will help improve officer productivity without compromising the quality of inspections.

Passengers need to be given clearer information about flight safety procedures and the role of AVSEC officers in maintaining flight safety. This education will help passengers to better understand and comply with established safety procedures, so that the inspection process can run more smoothly.

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