THE EFFECT OF PASSENGGERS' KNOWLEDGE OF PROHIBITED ITEMS AT THE PASSANGER SECURITY CHECK POINT ON FLIGHT SAFETY AT AIRPORT DJALALUDDIN GORONTALO

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ABSTRACT
Airport serves as a facility for providing aviation services, with two sides: the air side and the land side. On the land side, there is a Passenger Security Check Point facility that functions for security checks on all passengers, individuals, and their carry-on items entering restricted security areas. Djalaluddin Gorontalo Airport is managed by the Ministry of Transportation at the Passenger Security Check Point, prohibited items carried by passengers that could endanger flight safety are still found. The research conducted is related to passengers' knowledge about prohibited items and the impact of passengers' knowledge about prohibited items on flight safety at Djalaluddin Gorontalo Airport. Using a quantitative method and distributing questionnaires to 34 passengers and 34 aviation security officers at Djalaluddin Gorontalo Airport. The data obtained were then analyzed using the Spearman rank correlation coefficient test and simple linear regression analysis. The research results indicate that passengers' knowledge about prohibited items at Djalaluddin Gorontalo Airport is already quite good however, there are still passengers who do not fully understand and comprehend prohibited items. There is room for improvement in passengers' knowledge about prohibited items through socialization or education before flights. The data analysis also reveals a strong correlation between variable X and variable Y, which is 0.820. From this value, it can be concluded that passengers' knowledge and flight safety have a strong influence.

Keywords: Knowledge, Prohibited Items, Passanger Security Check Point, Flight Safety.

1. INTRODUCTION

Safety and security are the top priorities in the aviation industry, with no room for even the slightest mistake, as any error, however minor, can threaten the safety of everyone on the aircraft and those nearby [1]. To ensure aviation safety and security, cooperation between airport management and passengers as users of air transportation services is essential.

Passengers are defined as individuals transported using public transportation [2]. Therefore, as the number of air transportation service users increases, it becomes crucial to provide information to airport passengers, one of which is fundamental information regarding what items are allowed and prohibited (prohibited items) in carry-on baggage, as these items may endanger aviation safety and security. Moreover, passengers can contribute to achieving safety and security by complying with all security procedures at the airport [3].

Air transport serves dual roles as both a facilitator and a catalyst. As a facilitator, it offers convenience and efficiency for travelers, helping them reach their destinations swiftly [4]. A crucial element of aviation safety involves ensuring that passengers are aware of which items are prohibited in their carry-on luggage, which is essential for maintaining security during flights. Based on the researcher's observations during the on the job training at Djalaluddin Airport in Gorontalo, it was found that some passengers are still unaware of what items are prohibited in carry-on baggage. Some passengers were found carrying prohibited items such as lighters, tools, or sharp objects like kitchen knives, pocket knives, razors, scissors, and others. Carrying these prohibited items can endanger aviation safety.

Passenger belongings that are prohibited will be confiscated during the security check at the Passenger Security Check Point (PSCP), which may lead to longer queues during the security screening process at the PSCP. Passenger knowledge and understanding of prohibited items are crucial to maintaining aviation safety [5].

Prohibited items are belongings that are forbidden and can be used to carry out illegal actions, incapacitate, injure, and take the lives of others These include explosives, dangerous goods, hazardous tools, and weapons The resulting danger may threaten safety in air transportation and human health [6].

This research focuses on determining the level of passenger knowledge regarding prohibited items and the influence of this knowledge on aviation safety. This research underscores the importance of passenger knowledge and understanding of prohibited items in ensuring aviation safety. A lack of passenger knowledge about prohibited items can potentially endanger aviation safety. During security checks at the Passenger Security Check Point (PSCP), passengers who still carry prohibited items in their cabin baggage will have their items confiscated, resulting in longer security queue processes at the Passenger Security Check Point.

In light of this background, the author is interested in understanding the extent of passenger knowledge about prohibited items and its impact on aviation safety with the title "The Influence of Passenger Knowledge About Prohibited Items at the Passenger Security Check Point on Aviation Safety at Djalaluddin Airport in Gorontalo."

2. METHOD

2.1 Research Design

This research utilizes a quantitative approach to systematically and empirically examine the connection between passengers' awareness of prohibited items and aviation safety. Grounded in the positivist paradigm, the study prioritizes objectivity and leverages statistical methods to interpret numerical data. The main objective is to evaluate the hypothesis that passengers' knowledge of prohibited items has a significant impact on the safety of aviation operations at Djalaluddin Gorontalo Airport. The research follows a descriptive correlational design, measuring both the independent variable (passenger awareness of prohibited items) and the dependent variable (aviation safety) to determine if there is a notable correlation.

2.2 Research Variables

The research involves two types of variables, which is independent variable (Variable X) and dependent variable (Variable Y).

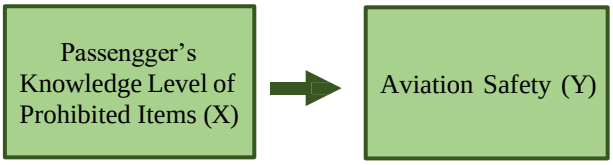

Figure 1 Research Variable

Variable X or Independent variables are variables that explain, cause and influence changes in dependent variables. These variables can also be knows as stimulus, predictor, and antesensant variables as well as independent variables [7]. In this study, Variable X represents Passengger's Knowledge Level of Prohibited Items. On the other hand, Variable Y is the one that is impact by independent variable [7]. It reflects the outcome result from the independent variable. In this study, Variable Y is the aviation safety.

2.3 Research Setting

The research setting is Djalaluddin Gorontalo Airport, specifically within the Passenger Security Check Point (PSCP) area. The PSCP is a critical zone within the airport where passengers undergo security screening before boarding their flights. This setting is chosen because it is the primary point of interaction between passengers and airport security protocols, making it an ideal location to study the impact of passenger compliance with security regulations on overall flight safety. The environment of the Passenger Security Check Point is highly controlled and monitored, ensuring that the data collected reflects the real-time challenges and behaviors exhibited by passengers during the security screening process.

2.4 Population, Sample, and Research Object

The population for this study consists of passengers who use air transportation services at Djalaluddin Gorontalo Airport. These passengers are diverse in terms of demographics, travel purposes, and familiarity with aviation security procedures. The total population size is estimated based on the average number of passengers who pass through the airport daily during its operating hours, which are from 07:00 to 19:00 WITA.

From this population, a sample is selected using the Taro Yamane formula with a precision level set at 15%. This formula is appropriate for determining an adequate sample size that balances the need for statistical accuracy with practical constraints such as time and resources. The resulting sample includes 34 passengers who are representative of the broader passenger population. Additionally, 34 aviation security officers (AVSEC) are included in the sample to provide insights into the operational aspects of security checks and their impact on safety. The research object is centered on assessing the level of passenger knowledge regarding prohibited items and understanding how this knowledge or lack there of affects aviation safety.

2.5 Data Collection Techniques and Research Instruments

In this study, data is gathered through a multi-method approach to enhance the reliability and validity of the results. The main data collection techniques include direct observation, a review of relevant literature, and the use of structured questionnaires.

2.5.1 Observation

Direct observations are conducted at the Passenger Security Check Point to gather first-hand data on passenger behavior and the types of prohibited items most frequently detected during security checks. This method allows the researcher to contextualize the survey data with actual observations of the screening process [8]. Direct observation was carried out at the passanger

security check point at Djalaluddin Gorontalo Airport during the on-job training program from December 11, 2023 to March 1, 2024.

2.5.2 Literature Review

A comprehensive review of relevant literature, including regulations, previous studies, and theoretical frameworks related to aviation security and passenger compliance, is conducted. A study or literature study is very important to be carried out in a research because research cannot be separated from the literature [9]. This helps in framing the research questions and designing the questionnaires used in the study. Literature review is employed to investigate issues related to the influence of passengers' knowledge of prohibited items on passenger security check point at Djalaluddin Gorontalo Airport.

2.5.3 Questionnaires

The primary tool for gathering data is a structured questionnaire, which is organized into two parts. The first part is aimed at passengers and evaluates their understanding of prohibited items. The second part is intended for aviation security personnel, focusing on their views regarding how passenger knowledge influences security protocols.

The questionnaires are distributed digitally via Google Forms, for ensuring wide accessibility and ease of data collection with criteria namely to passengers who use services over 17 years old who will travel using air transportation at Djalaluddin Gorontalo Airport and Aviation Security (AVSEC) personnel at Djalaluddin Gorontalo Airport. The responses are then compiled and prepared for statistical analysis.

The questionnaire employs a Likert scale, ranging from "Strongly Agree" to "Strongly Disagree," to gauge attitudes, knowledge levels, and perceived adherence to regulations among respondents. The questionnaire administered using a Likert scale to gather comprehensive responses from all participants. The data was analyzed by multiplying each response by a corresponding weight, as defined in the value weight table. The calculated results from the respondents' answers are as follows:

1) Repondents who answered “strongly agree” (5) = 5 × n = n
2) Repondents who answered “agree” (4) = 4 × n = n
3) Repondents who answered “neutral” (3) = 3 × n = n
4) Repondents who answered “disagree” (2) = 2 × n = n
5) Repondents who answered “strongly disagree” (1) = 4 × n = n

Table 1 Likert Scale

No.	Simbol	Kriteria Jawaban	Skor
1.	SA	Strongly Agree	5
2.	A	Agree	4
3.	N	Neutral	3
4.	D	Disagree	2
5.	SD	Strongly Disagree	1

Total score represented as n, which n is the value derived from the respondents' answers. After determining the total score, the next step is to interpret the respondents' assessments using the Index % formula. The calculated index is then placed into a percentage value table to evaluate whether it aligns with the "strongly agree" scale or other parts of the scale. The Index (%) formula is given by

$$\text{Index\% Formula} = \frac{\text{Total Score}}{X} \times 100 \quad (1)$$

Subsequently, the calculated index values are entered into a percentage value table to determine their position on the agreement scale. The Index Formula % is multiplied by 100, and the resulting data is categorized into the percentage value table to identify where it aligns on the scale.

Table 2 Likert Scale Response Index [10]

Percentage	Description
0% - 19.99%	Strongly Agree
20% - 39.99%	Agree
40% - 59.99%	Neutral
60% - 79.99%	Disagree
80% - 100%	Strongly Disagree

2.6 Data Analysis Techniques

The data obtained from the questionnaires undergoes thorough statistical examination using SPSS (Statistical Package for the Social Sciences) version 27.0. The process starts with validity and reliability assessments to confirm that the questionnaire items effectively measure the intended constructs.

2.6.1 *Validity and Reliability Test*

The validity test evaluates if the questionnaire items accurately capture the knowledge of prohibited items and the perceptions of aviation safety. The test of reliability, commonly measured by Cronbach's alpha, tests the consistency of responses among various items in a questionnaire. Reliability testing is conducted by calculating the Cronbach Alpha value for the indicators within each variable If the Cronbach's Alpha value is > 0,60 (6%), then a variable is considered reliable; conversely, if the Cronbach's Alpha value is < 0,60 (6%), then a variable is deemed unreliable [10].

2.6.2 *Normality Test*

Testing for data normality is commonly done before applying a statistical method The purpose of normality testing is to determine whether the distribution of data follows or approximates a normal distribution, which is a distribution with a pattern similar to the normal

distribution and is one of the assumptions in data analysis or commonly referred to as classical assumptions. By using the Kolmogorov Smirnov normality test which pays attention to the level of conformity between certain theoretical distributions.

2.6.3 *Correlation Test*

The correlation test used is the Spearman Rank Correlation Coefficient, which is a hypothesis test used to determine the relationship between two variables. The Spearman Rank Correlation Coefficient is used to assess the level of association or test the significance of associative hypotheses when the data for each variable is ordinal in determining whether there is a relationship or correlation between these variables, the formula for the correlation coefficient is used The correlation coefficient is an index or number used to measure the strength (strong, weak, or none) of the relationship between variables [11]. Then after determining the value of the coefficient, the correlation strength between variables can be evaluated by referring to the following correlation coefficient values as a reference.

Table 3 Categories of Spearman Rank Correlation Coefficient

Koefisien	Kategori
KK = 0.00	No Correlation
0 < KK ≤ 0.20	Very Low/Very Weak Correlation
0.20 < KK ≤ 0.40	Low/Weak Correlation
0.40 < KK ≤ 0.70	High/Strong Correlation
0.70 < KK ≤ 0.90	Very High/Strong Correlation
0.90 < KK < 1.00	Very high correlation/very strong, reliable
KK = 1	Perfect Correlation

2.6.2 *Simple Regression Analysis*

The main focus of the data analysis is on evaluating the correlation and conducting a simple linear regression analysis. Simple linear regression is employed to evaluate how effectively passenger knowledge can predict aviation safety outcomes.

In statistics, there is a data scale that is divided into 4 namely: nominal, ordinal, interval and ratio [12]. Data scale is one of the things that must be considered in conducting data analysis. This is because each analysis method requires a type of data that can be used with that method. There are several conditions or conditions for performing simple linear regression, including:

1. Variable X must be feasible (Validity and Reliability Test)
2. Normally distributed data (Normality Test)
3. There is a relationship between variable X and variable Y (Correlation Test)
4. Interval or ratio scaled data

If ordinal scale data is still used in linear regression analysis, then the result of incorrect interpretation of the regression model will be obtained. The recommended step is to change the data analysis technique and change the data from ordinal to interval so that linear regression analysis can be applied. This can be done by transforming ordinal scale data into interval scale data using the Method of Successive Interval (MSI) transformation method [13], MSI transformation is a method to convert ordinal data into interval data by adjusting the cumulative proportions of each variable category to match the standard normal curve This conversion allows for the application of more advanced statistical tests and facilitates more detailed insights. Which is then analyzed using simple linear regression to determine the extent of the influence of passenger knowledge about prohibited items on flight safety using a common simple regression equation given by:

$$Y = a + b X \quad (2)$$

Increase or decrease of dependent variables based on independent variables. If b (+) then it goes up, if b (-) it goes down. On the other hand, hypothesis testing in a simple linear regression analysis is carried out to evaluate whether the proposed hypothesis should be accepted or rejected. This can be seen by looking at the significance value.

Then to determine the extension of the influence of variable x on variable y in a simple linear regression analysis, one can refer to the value of R Square (R^2). The low coefficient of determination indicates that the ability of independent variables to explain dependent variables is very limited. On the other hand, if the R^2 value is close to 1 (one) and far from 0 (zero), it indicates that the independent variable has a strong ability to provide all the necessary information to predict the dependent variable [14].

2.7 Research Location and Time

The research is conducted at Djalaluddin Gorontalo Airport, focusing specifically on the Passenger Security Check Point (PSCP). The airport is a key gateway in Northern Indonesia, and the PSCP is a crucial area for ensuring that passengers comply with security regulations before boarding their flights. The research spans a specific time frame during the airport's operational hours, from 07:00 to 19:00 WITA, to capture a representative sample of passengers and security processes. The data collection phase is synchronized with the researcher's On the Job Training (OJT) schedule, ensuring that the study is both practical and aligned with the operational realities of the airport.

3. RESULT AND DISCUSSION

The validity test was carried out by analyzing the correlation between each indicator's score and the overall score for each variable using the SPSS software. As mentioned earlier, the r table value with approximately

32 degrees of freedom (df) at a 5% significance level is 0.3388. After processing the data with SPSS, the Pearson correlation coefficients and significance values were obtained, as detailed below:

Figure 2 X Variable's Pearson Product Moment Validity Test Result

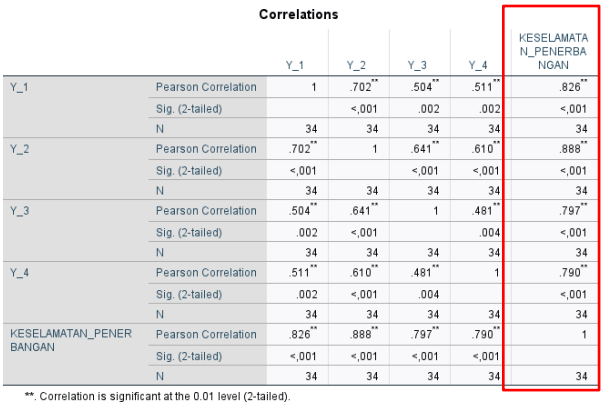

Figure 3 Y Variable's Pearson Product Moment Validity Test Result

Table 1. Validity Test Results for Variable X

Instrument	Score	r_{table} 5%(32)	Description
X1	0.717	0,3388	Valid
X2	0.822	0,3388	Valid
X3	0.817	0,3388	Valid
X4	0.836	0,3388	Valid
X5	0.744	0,3388	Valid
X6	0.886	0,3388	Valid
X7	0.802	0,3388	Valid
X8	0.836	0,3388	Valid
X9	0.822	0,3388	Valid
X10	0.817	0,3388	Valid

The table above shows the validity test results for variable X, where there are 10 question instruments for this variable. It is known that the formula for r table is df = N-2, so 34-2 = 32, resulting in df = 32. Then, with an r table value at a 5% significance level and df = 32, the r table value is 0.3388. Therefore, from the validity calculation for variable X, it is determined that all instruments are valid. An instrument is considered valid if the calculated r (score) > r table.

Table 2. Validity Test Results for Variable Y

Instrument	Score	r_{table} 5%(32)	Description
Y1	0.826	0,3388	Valid
Y2	0.888	0,3388	Valid
Y3	0.797	0,3388	Valid
Y4	0.790	0,3388	Valid

The table above shows the validity test results for variable Y, where there are 4 question instruments for this variable. It is known that the formula for r table is df = N-2, so 34-2 = 32, resulting in df = 32. Then, with an r table value at a 5% significance level and df = 32, the r table value is 0.3388. Therefore, from the validity calculation for variable Y, it is determined that all instruments are valid. An instrument is considered valid if the calculated r (score) > r table.

Reliability Statictics X

Reliability Statistics

Cronbach's Alpha	N of Items
.941	10

Reliability Statictics Y

Reliability Statistics

Cronbach's Alpha	N of Items
.840	4

Figure 4 Result of Cronbach's Alpha Reliability test

Furthermore, from the output results, it can be seen that the Cronbach's Alpha value obtained is greater than (>) 0.60 for both variables. Therefore, it can be concluded that the items of both variables are reliable.

Based on the questionnaire results that have been submitted to the respondents, the next step for the researcher is to perform calculations using the Likert scale formula, where the statistical results are as follows:

Table 4 results calculations using the Likert scale formula

Variabel X						
Statement	**Data**					**Index Total (%)**
	5	4	3	2	1	
	S	SA	N	D	SD	
X1	15	14	5	0	0	85,88%
X2	10	18	6	0	0	82,35%

X3	12	19	3	0	0	85,29%
X4	13	16	5	0	0	84,70%
X5	10	15	9	0	0	80,58%
X6	7	14	13	0	0	76,47%
X7	9	14	11	0	0	78,82%
X8	9	15	10	0	0	79,41%
X9	10	18	6	0	0	82,35%
X10	12	19	3	0	0	84,11%

Variabel Y						
Variabel	**Data**					**Index Total (%)**
	5	4	3	2	1	
	S	SA	N	D	SD	
Y1	18	12	4	0	0	88,23%
Y2	19	13	2	0	0	90%
Y3	16	14	4	0	0	87,05%
Y4	12	17	5	0	0	84,11%

One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			34
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		1.70061024
Most Extreme Differences	Absolute		.141
	Positive		.115
	Negative		-.141
Test Statistic			.141
Asymp. Sig. (2-tailed)[c]			.086
Monte Carlo Sig. (2-tailed)[d]	Sig.		.086
	99% Confidence Interval	Lower Bound	.079
		Upper Bound	.093

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Figure 5 Kolmogorov-Smirnov Normality Test Result

In Figure 2, the results from the Kolmogorov-Smirnov normality test indicate a significance value of 0.086, which exceeds 0.05. Consequently, it can be inferred that the residual data follows a normal distribution.

Correlations

			PENGETAHUAN_PENUMPANG	KESELAMATAN_PENERBANGAN
Spearman's rho	PENGETAHUAN_PENUMPANG	Correlation Coefficient	1.000	.820**
		Sig. (2-tailed)	.	<,001
		N	34	34
	KESELAMATAN_PENERBANGAN	Correlation Coefficient	.820**	1.000
		Sig. (2-tailed)	<,001	.
		N	34	34

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

Figure 6 Spearman Rank Correlation Test Result

In Figure 3, the results from the Spearman rank correlation test performed using the SPSS software reveal a correlation coefficient of 0.820. This positive value signifies that the two variables are directly related; as passengers' understanding of prohibited items increases, so does aviation safety. The significance value, recorded at 0.001, is below the 0.05 threshold, confirming that the connection between variables X and Y is statistically significant.

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	3.190	1.036		3.079	.004
	PENGETAHUAN_PENUMPANG	.320	.041	.809	7.778	<,001

a. Dependent Variable: KESELAMATAN_PENERBANGAN

Figure 7 Simple Linear Regression Test Result

Based on the simple linear regression test results in Figure 4. above, the regression equation is as follows:

1. **a** = the constant value from the unstandardized coefficients, which according to the regression results in Figure 4.20, is 3.190. This constant means that if Passenger Knowledge (X) is absent or equals 0, the consistent value for Aviation Safety (Y) is 3.190.
2. **b** = the regression coefficient value, which is 0.320. This indicates that for every one-unit increase in Passenger Knowledge (X), Aviation Safety (Y) will increase by 0.320.
3. The positive (+) value of the regression coefficient indicates that Passenger Knowledge (X) has a positive effect on Aviation Safety (Y). Therefore, the regression equation is $\hat{Y} = 3.190 + 0.320\ X$.

According to the linear regression outcomes illustrated in Figure 4, the significance value (Sig.) stands at 0.001, which is below the 0.05 probability threshold. This result indicates that H0 is rejected and Ha is accepted, confirming a significant influence of Passenger Knowledge (X) on Aviation Safety (Y). To assess the magnitude of the impact of variable X on variable Y in the simple linear regression analysis, the R Square (R^2) value from the model summary in SPSS serves as a key reference.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.809[a]	.654	.643	1.72698

a. Predictors: (Constant), PENGETAHUAN_PENUMPANG

Figure 8 Model Summary

Referring to Figure 5, the R Square (R^2) value is 0.654, which is categorized as moderate according to the theory put forth [15]. This figure suggests that Passenger Knowledge (X) accounts for 65.4% of the impact on Aviation Safety (Y), while the remaining 34.6% is driven by other factors not covered in this research.

The study reveals that 81.99% of passengers understand prohibited items, while 18.01% do not, highlighting the need for better information dissemination. The data was analyzed using the Method of Successive Interval (MSI) and visualized in a bar graph. Some indicators, such as knowledge about

alcoholic beverages and liquids over 100 ml, showed the lowest scores, indicating a need for improved passenger education on these topics. Additionally, environmental factors related to aviation safety also scored low, suggesting the need for enhancements in this area to support overall safety, including personnel and standard operating procedures.

Additionally, the research identified a notable positive correlation between passenger knowledge and aviation safety at Djalaluddin Gorontalo Airport, with a correlation coefficient of 0.820, signifying a strong connection. The simple linear regression analysis yielded a regression equation of $Y = 3.190 + 0.320\ X$, indicating that a one-unit increase in passenger knowledge results in a 0.320 rise in aviation safety. The R^2 value of 0.654 indicates that 65.4% of the variation in aviation safety is accounted for by passenger knowledge, while the remaining 34.6% is influenced by other factors not examined in this study. This highlights the crucial role of improving passenger awareness to enhance aviation safety.

Passenger Understanding of Prohibited Items

Based on the results of a questionnaire survey using a Likert scale, the average percentage of variable X was found to be 81.99%, indicating that passengers understand prohibited items, while 18.01% of passengers do not yet understand prohibited items when preparing for a flight. Therefore, passengers need to be more informed about prohibited items before flying.

The data derived from the average responses of the Likert scale questionnaire originally represented ordinal data. This data was subsequently converted into interval data through the Method of Successive Interval (MSI) for analytical purposes, with the average results depicted in a bar chart as shown in Figure 6.

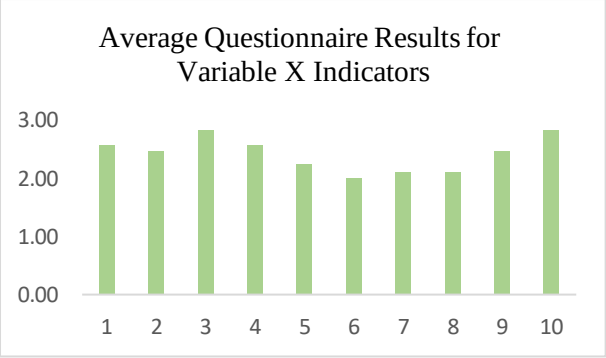

Figure 9 Average Questionnaire Results for Variable X Indicators

Based on the average results of the questionnaire on passengers' knowledge of prohibited items, several indicators had the lowest values, particularly indicators X.6, X.7, and X.8, which relate to analysis and synthesis indicators. For the question item X.6, "Are you aware that alcoholic beverages are considered dangerous goods and that liquids over 100 ml are prohibited from being carried into the aircraft cabin?" the lowest score obtained was 2.00. This indicates that passengers' knowledge regarding alcoholic beverages and liquids over 100 ml still needs to be improved. This low score suggests that more information or knowledge is needed regarding prohibited items to enhance passengers' understanding and awareness of aviation safety. Additionally, other indicators such as X.7 and X.8 also require improvement, although they do not have the lowest scores, to further enhance passengers' knowledge of prohibited items in relation to aviation safety.

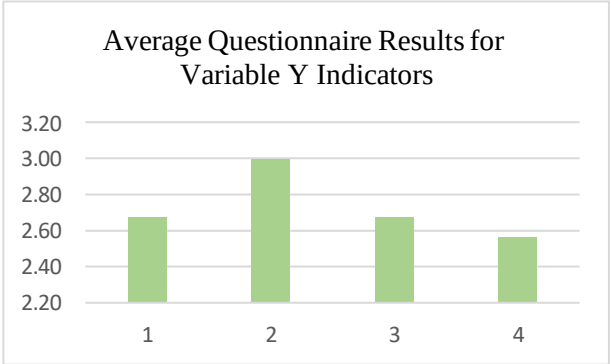

Figure 10 Average Questionnaire Results for Variable Y Indicators

Furthermore, the average results of the questionnaire on aviation safety for the environmental indicator Y.4 also received the lowest score of 2.56. This suggests that the environmental factor in aviation safety needs to be improved to support a safer aviation environment. The environmental factor in aviation safety can include Aviation Security personnel who support the implementation of programs that comply with aviation safety standards. In addition to the environmental factor, other factors such as human resources and standard operating procedures also need to be enhanced to improve aviation safety.

The Impact of Passenger Knowledge on Aviation Safety

Based on the previously presented questionnaire results, it can be inferred that passengers' understanding of prohibited items at the Passenger Security Check Point (PSCP) has an impact on aviation safety at Djalaluddin Gorontalo Airport. This relationship is validated by both the normality test and the correlation coefficient hypothesis test. The normality test yielded a result of 0.086, with a significance value (Sig.) greater than 0.05, indicating that the data follows a normal distribution. Additionally, the correlation test produced a result of 0.820, signifying a strong correlation. Consequently, it can be concluded that there is a significant and strong relationship between passenger knowledge and aviation safety.

The hypothesis test results for the simple linear regression, as discussed in the previous chapter, revealed a significance value (Sig.) below 0.05. This outcome leads to the rejection of H0 and the acceptance of H1, demonstrating that there is an influence between variable

X (passenger knowledge) and variable Y (aviation safety).

The simple linear regression test yielded the equation $\hat{Y} = 3.190 + 0.320X$. This indicates that when variable X is zero, the constant value for variable Y is 3.190. The coefficient for variable X is 0.320, suggesting that with each one-unit rise in variable X, variable Y will see an increase of 0.320 units. Consequently, it can be inferred that there is a positive relationship between these two variables, where passenger knowledge has the potential to impact aviation safety.

The extent of the impact between variable X and variable Y is reflected in the coefficient of determination, or R square (R^2), which stands at 0.654. According to theory (Hair et al., 2011), this falls within the moderate range. This figure indicates that Passenger Knowledge (X) accounts for 65.4% of the variation in Aviation Safety (Y), while the remaining 34.6% is influenced by other factors not explored in this research.

4. CONCLUSION

After conducting the research related to the title and issues outlined in the previous chapters, the following conclusions can be drawn: The average results from the questionnaire indicate that 81.99% of passengers are aware of prohibited items, while 18.01% are not. This suggests that while the overall knowledge of prohibited items at the Passenger Security Check Point (PSCP) at Djalaluddin Gorontalo Airport is relatively good, there remains a portion of passengers who are still not fully informed. Additionally, the study found a moderate influence of 0.654 between passenger knowledge about prohibited items (X) and aviation safety (Y), with a Spearman rank correlation coefficient of 0.820, indicating a strong positive relationship between the two variables.

Based on these findings, the researcher suggests that the Djalaluddin Gorontalo Airport Administration (UPBU) should enhance their outreach efforts by utilizing the existing videotron facilities to display information on commonly carried prohibited items, particularly those that passengers are less aware of, such as alcoholic beverages classified as dangerous goods and liquids exceeding 100 ml in carry-on baggage. Additionally, public awareness campaigns could be integrated into events like National Transportation Day and community service activities to further educate the public about prohibited items. It is also recommended to include QR codes on banners in the PSCP area, allowing passengers to easily access information about prohibited items, thereby improving their knowledge and compliance.

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