

Analysis of Knowledge Level Regarding Dangerous Goods and Their Impact on Passenger Compliance at Komodo Airport, Labuan Bajo, East Nusa Tenggara

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Abstract

The modes of transportation consist of land, sea and air transportation modes, the mode of transportation that is often used today is the air transportation mode. In using air transportation, one must know the factors that can threaten flight safety, one of which is the transportation of dangerous goods. The purpose of this study is to find out how the level of knowledge about dangerous goods and the effect of knowledge on compliance. In this study, researchers used quantitative methods using primary data. Primary data was obtained from distributing questionnaires to 100 respondents in the departure terminal area at Komodo Labuan Bajo Airport. Obtained data obtained were then analyzed using descriptive statistics on the scale range and simple linear regression test. The test results are processed using the SPSS program. The results of the descriptive research on the scale range show a high level of knowledge of 3.39 followed by a high compliance score of 3.51. The results of the simple linear regression test showed a significance value of $0.000 < 0.05$, indicating that H_0 was rejected and H_a was accepted. From the results of the study it can be concluded that the level of knowledge of passengers regarding dangerous goods is high and followed by high compliance.

Keywords: Knowledge Level, Dangerous Goods, Compliance



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INTRODUCTION

Transportation is the movement of people or goods from one place to another within a certain time using a vehicle driven by humans, animals or machines (Salim, 2000). Modes of transportation include land transportation, sea transportation, and air transportation. Air transportation is a mode of transportation that is often used at this time. Using air transportation can take a shorter time or can save travel time compared to other transportation. Service users or passengers must pay attention to and implement aviation safety and security when using air transportation modes. According to Cholid, Christian, and Basuki Adi (2010) knowledge of safety in using airplanes can avoid factors that can threaten flight safety. Therefore, passenger knowledge regarding aviation safety plays an important role in anticipating or avoiding airplane accidents.

The factor of transporting dangerous goods is one of the factors that can threaten aviation safety. Therefore, passengers must pay attention to flight safety and comfort. According to the International Air Transport Association (IATA) in the Dangerous Goods Regulation book and Annex 18 concerning The Safe Transport of Dangerous Goods by Air, that dangerous goods are substances or substances that have the potential to seriously harm health, safety or property. property when transported by airplane. The danger posed will result in flight safety.

In essence, dangerous goods can be loaded on flights, however, by fulfilling the applicable flight requirements. Requirements that must be applied include how to pack it, when to label it, and how to store and load it. Implementing these requirements aims to maintain security

and safety in flight. In Law Number 1 of 2009 concerning aviation, aviation safety is a condition of fulfilling safety requirements in the use of airspace, aircraft, airports, air transportation, flight navigation, as well as supporting facilities and other public facilities. While aviation security is a situation that provides protection to flights from unlawful acts through the integrated use of human resources, facilities and procedures. Therefore, passenger knowledge of dangerous goods is very important in maintaining flight security and safety.

News that researchers got from Anonymous, 2021 on November 25 2021 that AVSEC and AMC officers at Komodo airport are working and must be patient in handling passenger luggage. The problem that occurs in the news is that passengers are carrying alcoholic beverages that are no longer sealed and if they are run over by other baggage then the cover may be released which will be dangerous in flight. In addition, from the experience of researchers during field work practices at Komodo Labuan Bajo Airport in October-November 2022 that there were still many passengers carrying dangerous goods such as carrying gas lighters, scissors, knives into the aircraft cabin. Not only that, they also carry a power bank into the baggage of an airplane which can explode and endanger flight safety. The results of research by Lestari and Frisnawati (2022) stated that from the results of the description related to knowledge of dangerous luggage at Sultan Muhammad Salahuddin Airport, it can be seen that some passengers already knew about dangerous luggage.

Based on the cases above, it can be concluded that the case is a flight violation case using an airplane. The case shows that there are still passengers who do not comply with the rules regarding luggage. A person's adherence is a relationship of individual, group, and organizational attitudes. Therefore, obedience is a person's encouragement, both from groups and organizations when doing or not doing according to the rules that have been made. Passenger compliance with flight rules can increase knowledge in shaping the behavior of a person, group or organization.

Everyone's knowledge influences how they behave, plan, and make decisions. Therefore, the function of one's knowledge when complying with predetermined rules can prevent accidents and provide a sense of security and comfort. The results of Yuwindry, Wiedyaningsih, & Widodo's research (2016) state that there is a significant effect between the level of knowledge on patient compliance. The aims of this study were: To find out how the level of knowledge of passengers about dangerous goods at Komodo Labuan Bajo Airport and to find out whether there is an effect of knowledge about dangerous goods on passenger compliance at Komodo Labuan Bajo Airport.

Theoretical Basis

Definition of Knowledge

Mubarak (2011), defines knowledge as everything that is known based on human experience itself and knowledge will increase according to the process of experience experienced. Every human being gets the process of knowledge through the five senses, namely the eyes and ears. The knowledge gained plays an important role in constructing a person's actions. According to Notoatmodjo (2012) Knowledge has six levels which are included in the cognitive domain, namely:

1. Know. Know is to think back (recall) a material that has previously been studied and has been accepted by someone. Knowing relates to what has been learned, such as being able to pronounce, describe, describe, express, and so on.
2. Understanding. Understanding is a person's ability to correctly define material against objects that are clearly known. Someone who already understands the material or object

must be able to explain, state, give examples, conclude, estimate, and so on to the object being studied.

3. Application. Application is a person's ability to apply material that has been studied in real (real). This means knowledge of laws, formulating, method, basis, and so on in other situations or contexts.
4. Analysis. Analysis is a person's ability to describe an object or material into its parts, but still belongs to one form of organization, and their relationship with one another still exists. This analytical ability can be observed in the use of verbs, such as being able to describe (make a chart), separate, sort and so on.
5. Synthesis. Synthesis is defined as a person's ability to form new formulations from previous formulations by connecting the forms of new parts.
6. Evaluation. Evaluation is a person's ability when making a proof or assessment of an object or material. The assessment is based on existing criteria as well as self-determined criteria.

Definition of Compliance

Compliance is defined as the determined behavior of a person, group or organization in acting or not acting based on predetermined rules. The form of obedience in question is the behavior of discipline or obedience to every order that is determined. Compliance is assessed as a positive action in each choice. Therefore, each individual determines what will be done, obeys, accepts strictly the rules, norms, laws, social, requests or wishes from someone who has power. According to Ian & Marcus (2011) states that compliance refers to a situation when an individual's behavior is comparable to the behavior of an individual with recommended actions or proposed advice or information obtained from sources.

Aviation Security and Safety

Minister of Transportation Regulation Number PM 51 of 2020 explains that aviation security is a condition that provides protection to airlines from unlawful acts through the integrated use of human resources, facilities and procedures. In Law Number 1 of 2009 concerning aviation, aviation safety is a condition of fulfilling safety requirements in the use of airspace, aircraft, airports, air transportation, flight navigation, as well as supporting facilities and other public facilities. Therefore, safety in flight is a condition that is absolutely fulfilled. Various disturbances that occur in air transportation can be detrimental to service users, cargo shipments, and will result in the danger of the aircraft itself.

Dangerous Goods

The International Air Transport Association (IATA) and Annex 18 concerning The Safe Transport of Dangerous Goods by Air state that goods defined as dangerous goods are substances or substances that have the potential to seriously harm health, safety or property when transported by airplane. . Dangerous goods if carried by passengers and transported in an airplane will result in flight safety. Dangerous goods can basically be transported by airplane, but must meet the requirements in accordance with the regulations made, including how to pack them, provide labels as well as storage and loading.

Aircraft Passenger

According to Damardjati (2001) "Passenger is any person who is transported or who must be transported on an airplane or the agency that organizes the transportation." Meanwhile, according to Martono (2007) a passenger is someone who travels by airplane and is not registered as the crew of the aircraft in question. Meanwhile, the definition of a passenger

according to PM 38 of 2015 is a person who uses air transportation services and whose name is listed on the ticket as evidenced in a valid identity document and has a boarding pass.

Relevant Research

Table 1. Relevant Research

No.	Name	Year	Title	Research Result
1.	Indah Lestari dan Elnia Frisnawati	2022	Analysis of the level of knowledge of passengers on dangerous goods at Sultan Muhammad Salahuddin Bima airport	From the results of the description regarding knowledge of dangerous luggage at Sultan Muhammad Salahuddin airport, it can be seen that some passengers already know about dangerous goods at Sultan Muhammad Salahuddin airport, Bima.
2.	Vega gracetia pasamba	2022	Analysis of the level of knowledge of domestic passengers on dangerous goods at the Mozea Kilangin airport in Timika	The results of the study show that the knowledge of passengers and the level of knowledge of domestic passengers on dangerous goods is categorized as understanding.
3.	Hafriani dan Yune Andriana Pinem	2022	Analysis of the level of cargo delivery services regarding dangerous goods at Komodo Labuan Bajo airport	The results of the study show that the knowledge of users of cargo delivery services is quite good

Hypothesis

The hypothesis is a temporary answer to the formulation of the problem, (Sugiyono, 2017). Based on the theoretical basis, the suggested hypothesis in this study is as follows:

1. H0: There is no effect of the level of knowledge about dangerous goods on passenger compliance at Komodo Labuan Bajo Airport, NTT.
2. Ha: There is an effect of the level of knowledge about dangerous goods on passenger compliance at Komodo Labuan Bajo Airport, NTT.

RESEARCH METHODS

Research Design

The method used in this study is a quantitative method. According to Sugiyono (2017) quantitative data is data in the form of numbers, or qualitative data that is converted into numbers (scoring). The required quantitative approach is expressed in the form of numbers in analyzing the influence between variables. The meaning of the quantitative method in this study is based on the philosophy of positivism, used in researching a predetermined population or sample, data collection techniques in this study use research instruments, and the purpose of data analysis is in quantitative/statistical form, namely to test the hypothesis that has been determined . This research was conducted in February 2023 and was carried out online by researchers by distributing questionnaires online to respondents. The research was conducted at Komodo Labuan Bajo Airport.

Population and Sample

According to Sugiyono (2017) population is a generalized area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions. Therefore, the population is not only people, but also objects and other natural objects. The population is also not just the amount contained in the object/subject being studied, but includes all the characteristics or properties possessed by the object or subject under study. The population in this study were passengers at Komodo Labuan

Bajo Airport, NTT. According to Sugiyono (2017) the sample is part of the number and characteristics possessed by the population. If the population is large and it is not possible for the researcher to study the entire population due to several factors such as limited manpower and time, the researcher can take samples from that population. The sampling technique in this study is non-probability sampling. Non-probability sampling is a sampling technique that does not provide equal opportunities or opportunities for each element or member of the population to be selected as a sample (Sugiyono, 2017). The method used in this research uses a purposive sampling technique. The purposive sampling technique is a sample determination technique with certain considerations (Sugiyono, 2017). The sample in this study were passengers at Komodo Labuan Bajo Airport.

Data source

Source of data in this study using primary data sources. Primary data is data obtained directly by researchers and not through intermediaries by distributing questionnaires directly to respondents (Sugiyono, 2017).

Data Collection Technique

The data collection technique used by researchers in obtaining data in this study was a survey. According to Sugiyono (2017) survey is a quantitative research method used to obtain data with specific purposes and uses. The data obtained are data that occurred in the past or present, regarding beliefs, opinions, characteristics, behavior, and relationship variables to test several hypotheses. Meanwhile, according to Nana Syaodih Sukmadinata (2015) that survey research is used to collect data or information about a large population using a relatively small sample. Research using this survey is used to get an overview of population characteristics such as age, gender, education, etc.

Research Instruments

According to Sugiyono (2017) the research instrument is a tool that is observed. The research instrument used was a questionnaire sheet which was compiled based on the indicators of the research variables. The indicators are then set forth in detail in the questions in the form of a questionnaire and distributed to the respondents. The research instrument used in this study was a questionnaire in the form of questions or statements with answer choices that had been provided by the researcher. Processing of research instruments using a Likert scale. According to Sugiyono (2017) the Likert scale is used to measure attitudes, opinions, and perceptions of a person or group of people about social phenomena. When using a Likert scale, the variables to be measured are translated into variable indicators. After that, these indicators are used as a starting point in compiling instrument items which can be in the form of questions or statements.

RESEARCH RESULTS AND DISCUSSION

Passenger Knowledge Level of Dangerous Goods at Komodo Labuan Bajo Airport, East Nusa Tenggara

From the results discussed based on descriptive statistics that the overall score is based on the scale range, the level of knowledge is high with a value of 3.39. The value of 3.39 means that the level of knowledge of passengers regarding dangerous goods is at a high value. Based on the survey results it is known that the most prominent point is the statement P3, namely "I know that dangerous goods can threaten flight safety" with a value of 351, P13 namely "Before traveling by airplane I always check the luggage I carry" with a value of 352, and P19 namely

"Knowledge regarding the prohibition of carrying dangerous goods can anticipate the occurrence of aviation accidents with a value of 360. The results of the descriptive statistics range of the high compliance value scale of 3.51. The value of 3.51 means that passenger compliance with dangerous goods is at a high value. Based on the survey results, it is known that the most prominent point is the statement P1, namely "Knowledge about dangerous goods is very important for security and safety of lighting" with a value of 360, P3, namely "Following flight rules can provide a sense of security and comfort in flight" with a value of 363, and P7 namely "When I was examined by the officer and found dangerous goods, I am willing to hand over the goods to the inspecting officer" with a value of 356. From the results of the scale-range descriptive statistics, it is stated that passengers at Komodo Labuan Bajo Airport know and understand the dangers of dangerous goods that can threaten flight safety. In addition, passengers also comply with flight rules by not carrying dangerous goods on flights.

The Effect of Knowledge Level Regarding Dangerous Goods on Passenger Compliance at Komodo Labuan Bajo Airport, East Nusa Tenggara

From the results of the study it can be concluded that the results of the simple regression test show that the value of the regression coefficient on the variable level of knowledge about dangerous goods on passenger compliance is positive and the results of the t test show a significance value of $0.000 < 0.05$. Because the significance value is < 0.05 , it can be stated that H_0 is rejected and H_a is accepted, so it can be concluded that the level of knowledge about dangerous goods affects passenger compliance at Komodo Labuan Bajo Airport, NTT. The effect of the level of attention on compliance is positive, as evidenced by the tcount of 14,852 positive values. When the level of knowledge is high, the level of compliance will also increase. This proves the results of calculating the level of passenger knowledge that the level of knowledge of passengers is high about dangerous goods of 3.39 followed by the results of calculating passenger compliance not to carry dangerous goods on flights which are also high at 3.51. The results of this study are in line with previous research conducted by Rully Kurniawan (2019) with the results of the research that the analysis of the level of knowledge of domestic passengers regarding dangerous goods is meant in the tofu class. Apart from that, it is also in line with previous research conducted by Vega Gracetia Pasamba (2022) which stated that the results of the study showed that the knowledge of passengers and the level of knowledge of domestic passengers regarding dangerous goods were categorized as understanding.

CONCLUSION

The level of knowledge of passengers about dangerous goods at Komodo Labuan Bajo Airport was stated to be high with a value of 3.39 and followed by passenger compliance which was also high with a value of 3.51. This means that passengers at Komodo Labuan Bajo Airport know the dangers of dangerous goods if transported by airplane and comply with flight rules by not carrying dangerous goods when traveling by airplane. The level of knowledge about dangerous goods affects passenger compliance at Komodo Labuan Bajo Airport, NTT. The effect of the level of attention on compliance is positive, as evidenced by the tcount of 14.852 which is positive. This means that the higher the level of passenger knowledge about dangerous goods, the higher the level of compliance. This is supported by the results of calculations that at Komodo Labuan Bajo Airport the level of knowledge is high followed by high compliance.

Based on the results of the research, the suggestions given by the researchers are as follows: For the Labuan Bajo UPBU, especially the Aviation Security unit, it is more thorough and improved in carrying out checks related to passenger luggage. Everything related to flight safety and security must be considered because it affects flight safety. One of the factors that

can threaten aviation safety is the transportation of dangerous goods (dangerous goods). Therefore, the role of the Aviation Security unit plays an important role in maintaining aviation security and safety. For future researchers, it is hoped that they can conduct broader and in-depth research related to the level of knowledge about dangerous goods and their effect on passenger compliance by adding different analytical methods or other variables not included in this study.

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