THE IMPACT OF TERMINAL SERVICE OFFICER(TSO) PERFORMANCE TOWARDS PASSENGER SATISFACTION AT SAM RATULANGI INTERNATIONAL AIRPORT IN MANADO

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Abstract
Sam Ratulangi International Airport in Manado is one of the airports that began to increase flights since being affected by Covid-19. During the first semester period, January to June 2022. An increase of 37% when compared to the same period in 2021 with a total of 733,523 passengers. However, the reduction in Terminal Service Officer (TSO) personnel has not yet increased. It is feared that this could lead to a lack of supervision of facilities in the terminal area. Therefore, this research is expected to increase passenger satisfaction with facilities at Sam Ratulangi International Airport Manado. This research uses quantitative data collection by observation or direct observation, and the distribution of questionnaires. The population in this study were Lion Air JT-748 passengers totaling 100 passengers. The sample obtained was 50 of the existing population using the Probability Sampling technique. The analysis method used to test the instrument is the Simple Linear Regression test. The results of this study indicate that the effect of Terminal Service Officer (TSO) personnel performance on passenger satisfaction at Sam Ratulangi International in Manado is 98.6%, the remaining 1.4% is influenced by other variables not studied.

Keywords: Personnel Performance, Terminal Service Officer (TSO), Passengers, Satisfaction, Facilities

INTRODUCTION

The role of transportation is very important, namely as a means of connecting, bringing closer and mediating between parties who need each other [1][2][3]. An airport is a confined area on land or in water that serves as a location for aircraft to land, take off, load, and unload cargo as well as for intra- and intermodal transportation transfers.

Sam Ratulangi International Airport Manado is an international gateway in the northern part of Indonesia which aims to build the economy, providing flight facilities in facilitating air transportation [4][5][6]. Therefore, the performance of Terminal Service Officer (TSO) at Sam Ratulangi International Airport Manado has an important role in maintaining the quality of service in the terminal area in order to maintain passenger satisfaction [7][8][9].

Service standards at an airport will be considered good if the performance of airport staff achieves the satisfaction desired by customers. In order to achieve customer satisfaction, airport staff are required to provide the best quality service. Service quality is a form of totality that must be carried out by the company in satisfying its customers both visibly and hidden if a company wants to achieve success [10] [11].

The problem that occurs in the Terminal Service Officer (TSO) unit of Sam Ratulangi International Airport Manado is the reduction of employees due to the Covid-19 pandemic. Before being affected by Covid-19, the number of TSO personnel was 12 personnel and in one shift there were 4 personnel (1 in the arrival area and check-in area, 1 in the Boarding Lounge, 1 in the arrival corridor and 1 in the Baggage claim). After being affected by Covid-19, the number of TSO personnel is 11personnel and in one shift there are 2 personnel (1 in theCheck-in area and Boarding Lounge and 1 in the arrival corridor and Baggage claim). The reduction aims to continue to carry out operations on the land side inaccordance with the number of passengers during the pandemic. The reduction in staff still persists to this day,as shown in the table below:

Table 1 Terminal Service Officer (TSO) Personnel Data

AIPORT OPERATION LANDSIDE & TERMINAL SECTION	2018	2019-Now
Airport Operation Landside & Terminal Manager	1	1
Passanger Services and Hospitality Supervisor	0	1
Information Service Officer	6	4
Terminal Service Officer	12	11
Landside Service Officer	2	0
Airport Service and Hospitality Officer	11	1
Total Personnel	**32**	**18**

Based on the news on the samratulangi-airport.com page (12/12/22) it is written that the movement of passengers through Sam Ratulangi Airport Manado during the first semester period, January to June 2022, increased 37% when compared to the same period in 2021 with a total of 733,523 passengers. Meanwhile, in the same period in 2021 it only reached 535,251 passengers. The increase in passengers and the number of flights that occur at this time is not followed by the addition of Airport Operation Landside & Terminal Section employees, especially in Terminal Service Officer (TSO) personnel. It can be feared that there will be a mismatch of existing standards [12].

Based on the reduction of Terminal Service Officer (TSO) personnel and the lack of supervision of passenger flow in the waiting room area as well as lack of cleanliness supervision at airport facilities, the author raises these problems as objects in the author's research.

To fulfill the objectives of this study, the following questions were asked is How does the performance of Terminal Service Officer (TSO) personnel affect passenger satisfaction at Sam Ratulangi International Airport Manado?

METHOD

Research Design

Research design is a design of the overall process required in planning and conducting research. The steps taken by the author, including determining the research design, must be based on the problem and research objectives according to [13].

This research uses quantitative data collection. Quantitative data is a research method based on positivistic (concrete data), research data in the form of numbers that will be measured using statistics as a calculation test tool, related to the problem under study to produce a conclusion according to [14][15][16].

Research Variables

In theory, the definition of a research variable is an object, or trait, or attribute or value of people, or activities that have various variations between one another that are determined by the author with the aim of studying and drawing conclusions. In this study, the authors used independent variables (variable X) and (variable Y).

1. Independent variables (Variable X) are variables whose values affect other variables. This X variable is the performance of Terminal Service Officer (TSO) personnel.
2. The dependent variable (Variable Y) is the variable that depends on the value of other variables. This Y variable is passenger satisfaction.

The points contained in variable X and variable Y will be the main basis for the author in the process of making a questionnaire in the form of statements that the author will give to respondents to obtain information so that a conclusion can be drawn. From the two variables above, the problem indicators are described to make it easier for the author to make a questionnaire.

Table 2 Variable Indicator

Variabel	Indikator	Sumber
Terminal Service Officer **(TSO) Performance (X)**	Toilet Hygiene Inspection	PM Transportation No.178 Year 2015 and Work Instruction Quality Procedure (PMIK)
	Room Temperature Check	
	Room Lighting Check	
Passenger Satisfaction (Y)	Expectation match	PM Transportation No. 178 of 2015 and theory from Tjiptono (2015: 101)
	Would like to visit again	
	Recommend to others	

The population of this study were passengers of Lion Air with flight number JT-748 from Surabaya to Manado at Sam Ratulangi International Airport Manado totaling 100 passengers.

The sampling technique in this study using Probability Sampling. This technique is used in this study because the population has broad members. To determine the sample size the author uses the Taro Yamane formula, according to [17][18][19].

$$\mathbf{n} = \frac{N}{N.d^2 + 1}$$

Keterangan:

n : jumlah sampel

N : jumlah populasi

d : nilai presisi / ketepatan yang diinginkan 10%

Based on this formula, the number of samples (n) of the research is obtained as follows, with a precision value of 10% (0.1):

$$\mathbf{n} = \frac{N}{N.d^2 + 1}$$

$$= \frac{100}{100.(0{,}1^2) + 1}$$

$$= \frac{100}{100.(0{,}01) + 1}$$

= 100/2 = 50 responden

In accordance with the calculation, the sample obtained in the study from Lion Air JT-748 passengers at Sam Ratulangi International Airport Manado amounted to 50 respondents.

Data Collection Technique

Data collection techniques are data collection methods, namely techniques or methods that can be used by researchers to collect data [20].

The author aims to facilitate data collection on the effect of Terminal Service Officer (TSO) personnel performance on passenger satisfaction at Sam Ratulangi International Airport Manado. Then the author took steps to collect data using a questionnaire questionnaire which was made from the indicators of the problems found. After that the author also carried out Direct Observation at Sam Ratulangi International Airport Manado.

Research Instruments

Validity Test

The validity test is used to measure whether a questionnaire is valid or not. An instrument or questionnaire is said to be valid if the questions on the instrument or questionnaire are able to reveal something that will be measured by the questionnaire [21][22].

The validity test was carried out with the bivariate person correlation formula with the help of the IBM SPSS statistics 26 program. The questionnaire item in the validity test is said to be valid if r_hitung> r_tabel and a positive value, the item or statement at a significant value of 5% (0.279). Conversely, items are said to be invalid if r_count < r_table at a significant value of 5% (0.279).

Reability Test

The reliability test is used to measure the consistency of the measurement results of the questionnaire in repeated use. Respondents' answers to questions are said to be reliable if each question is answered consistently or the answers cannot be random.

In finding reliability in this study, the authors used Cronbach Alpha technique to test reliability. That is, if the Cronbach Alpha coefficient> 0.70, the question is declared reliable or a construct or variable is declared reliable. Conversely, if the Cronbach Alpha coefficient <0.70 then the question is declared unreliable. The calculation of the reliability of the Cronbach Alpha formulation was carried out with the help of the IBM SPSS 25 program.

Normality Test

The normality test is used to determine whether the data population is normally distributed or not. If the data is normally distributed, then parametric statistical tests can be used [23].

The interpretation used in the normality test is sig. > 0.05 means that the data is normally distributed. In this study, the normality test was carried out using the IBM SPSS Statistic 26 computer program assistance test.

Simple Linear Regression

Simple linear regression is an analytical tool used to measure the effect between the independent variable (x) and the dependent variable (y).

This analysis is to determine the direction of the relationship between the independent variable and the dependent variable whether positive or negative and to predict the value of the dependent variable if the value of the independent variable increases or decreases.

The simple linear regression equation is as follows:
Y = a + bX
Description:
Y: Subject in the predicted dependent variable
a: Consistent
b: Coefficient of variable x
X: Independent Variable

RESULT AND DISCUSSION

Result

The data used in this research is primary data. Primary data in this study was obtained by distributing questionnaires to obtain data on the performance of Terminal Service Officer (TSO) personnel and passenger satisfaction at Sam Ratulangi International Airport Manado. The research results obtained from the field are presented as follows.

Direct Observation

Observations were made by the author from January 10 to 21, 2023. The author made field observations related to the performance of Terminal Service Officer (TSO) personnel on passenger satisfaction when the authors was carrying out On the Job Training (OJT) at

the Terminal Service Officer (TSO) unit at SamRatulangi International Airport Manado.

The author observes the performance of the Terminal Service Officer (TSO) in all units such as the departure terminal, check-in area, passenger waiting room or boarding lounge, corridor where passengers enter the garbarata or exit the garbarata, baggage claim, and also the arrival terminal. Of the several areas supervised by Terminal Service Officer (TSO) personnel, the author chooses one area, namely the waiting room or boarding lounge.

When Terminal Service Officer (TSO) personnel carry out inspections in the waiting room or boarding lounge area. Some of the things that are considered are cleanliness in the passenger toilet, cleanliness in the nursery room, lighting, temperature in the room is appropriate, overseeing the flow of pax (passenger flow) departure is neatly organized and ensuring that all passengers are not confused in finding where their departure gate is.

When inspecting the cleanliness of passenger toilets, some things to look out for are:

1. Ensure that the sink can be used properly
2. Ensure that toilets do not have standing water that could cause passengers harm
3. Ensure that tissues are in place and available for passengers to use
4. Ensure handwashing soap is available so that passengers can be satisfied with the services provided.

When inspecting the nursery room, there are several things that need to be considered:

1. Ensure that the air conditioner in the room is on, so that the temperature in the room is cool.
2. Ensure that drinking water facilities are fully stocked, so that facility users are happy with the facilities available.

When inspecting the lighting in the waiting room, the things that must be considered are the light intensity in the Terminal area of 200-250 lux, the baggage area of 250-300 lux, the toilet of 100-150 lux. Light intensity in accordance with existing standards greatly affects passenger comfort [24].

When inspecting the waiting room temperature, it is important to note that all air conditioners should be running at ≤ 25°C, [25].

Questionnaire

The submission of this questionnaire was carried out on March 13 and 15, 2023 which will then be given a response by the respondent. Respondents of this study were Lion Air passengers with flight number JT-748 on the Surabaya-Manado route. Each respondent can only give 1 response to each statement by giving a check mark (√) in the indicator column which the respondent thinks is most appropriate. In distributing questionnaires conducted to collect data, researchers will distribute questionnaires directly with paper media to respondents. The author must also be smart in choosing passengers who are not in a hurry or still have a lot of free time so that the work can be concentrated and maximized.

The questions presented in the questionnaire will be accompanied by choices / alternative answers which will be measured using a Likert scale of 1 to 4 scale calculations. The Likert scale is used to measure the attitudes, perceptions and opinions of a person or group of people about social phenomena. The questionnaire used is an attitude scale test that refers to the Likert scale parameters. The answer choices are categorized as an attitude SS (strongly agree), S (agree), TS (disagree), STS (strongly disagree) [26][27].

From the Likert scale calculation of the TSO Personnel Performance questionnaire above, it can be concluded that the percentage results are in the score interpretation criteria with the information "High" and "Very High". Which means that passengers (respondents) agree or strongly agree with the good performance of TSO personnel.

For the calculation of the Likert scale of the Passenger Satisfaction questionnaire above, it can be concluded that the percentage results are in the score interpretation criteria with the captions "High" and "Very High". Which means that passengers (respondents) agree or strongly agree that the facilities or services offered by Terminal Service officer (TSO) personnel are satisfactory.

So, it can be concluded that the results of the respondent's index of 24 statements that have been distributed regarding the effect of the performance of the Terminal Service Officer (TSO) state that it is in a very high category with this statement.

Discussion

Discussion of Validity Test

Table 3 Validity Test TSO

No Item	r_{hitung}	r_{tabel} 5% (50)	Description
1	0,759	0,279	**Valid**
2	0,756	0,279	**Valid**
3	0,726	0,279	**Valid**
4	0,731	0,279	**Valid**
5	0,591	0,279	**Valid**
6	0,587	0,279	**Valid**

7	0,640	0,279	**Valid**
8	0,537	0,279	**Valid**
9	0,615	0,279	**Valid**
10	0,676	0,279	**Valid**
11	0,708	0,279	**Valid**
12	0,772	0,279	**Valid**

Table 4 Validity Test Passengger Satisfaction

No Item	r_{hitung}	r_{tabel} 5% (50)	Description
1	0,666	0,279	**Valid**
2	0,696	0,279	**Valid**
3	0,643	0,279	**Valid**
4	0,746	0,279	**Valid**
5	0,588	0,279	**Valid**
6	0,539	0,279	**Valid**
7	0,686	0,279	**Valid**
8	0,603	0,279	**Valid**
9	0,671	0,279	**Valid**
10	0,749	0,279	**Valid**
11	0,731	0,279	**Valid**
12	0,707	0,279	**Valid**

The results of the validity test of the employee questionnaire and the passenger questionnaire showed 12 items were valid, r_hitung> r_tabel at a significant value of 5% (0.279).

Thus, it can be concluded that all statement items distributed are declared valid and the questionnaire in this study can be used for further analysis.

Discution of Reability Test

Table 5 Reability Test TSO

Reliability Statistics

Cronbach's Alpha	N of Items
.889	12

Table 6 Reability Test Passengger Satisfaction

Reliability Statistics

Cronbach's Alpha	N of Items
.884	12

The calculation of the reliability test above shows that the Cronbach's Alpha value of the Terminal Service Officer (TSO) personnel performance questionnaire is 0.889 and the passenger questionnaire is 0.884.

This means that the indicators used in this study are reliable, and respondents have answered each questionnaire item consistently over time. And it can be said that the questionnaire used in this study is a strong questionnaire.

Discussion of Normality Test

Table 7 Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		50
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.79009459
Most Extreme Differences	Absolute	.102
	Positive	.102
	Negative	-.087
Test Statistic		.102
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.

The normality test is carried out to determine whether the data used is normally distributed or not. The test tool used in the normality test of this study is the Kolmogorov Smirnov test with the IBM Statistic SPSS 26 program. Data can be said to be normal when the significance> 0.05.

The normality test results in the table above show that the significance value = 0.200 (>0.05), so it can be concluded that all variables in this data are normally distributed.

Discussion of Simple Linear Regression

Table 8 Koefisien Determinasi Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.993[a]	.986	.985	.798

a. Predictors: (Constant), Kinerja Personil
b. Dependent Variable: Kepuasan Penumpang

Based on the table of the coefficient of determination test results, it is known that the correlation or relationship value (R) is 0.993. From this output, the coefficient of determination R Square (R2) is 0.986 (98.6%) where this figure means the magnitude of the

influence of variable X on Y. While the remaining 1.4% (100% - 98.6%) is influenced by other factors. In other words, the variability of Y that can be explained by variable X is 98.6%, while the influence of 1.4% is caused by other variables outside this model.

CONCLUSION

Based on the results of research and discussion, it is concluded that the Performance of the Terminal Service Officer (TSO) greatly influences Passenger Satisfaction at Sam Ratulangi International Airport Manado by 98.6%, the rest (1.4%) is influenced by other variables not examined, this calculation is based on the Simple Linear Regression Test.

Based on the results of research conducted at Sam Ratulangi International Airport Manado, the author can provide the following suggestions:

1. For Angkasa Pura I Sam Ratulangi Manado International Airport to open additional Terminal Service Officer (TSO) personnel so that the performance of Terminal Service Officer (TSO) personnel can be maximized in conducting supervision and security for the creation of passenger satisfaction at Sam Ratulangi Manado International Airport.
2. For Terminal Service Officer (TSO) personnel to improve their quality in serving passengers by attending training or customer service training in order to realize excellent service to passengers at Sam Ratulangi Manado International Airport.

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