

## **THE RELATIONSHIP BETWEEN SHIP CREW PROFESSIONALISM AND THE IMPROVMENT OF PASSENGER SATISFACTION ON KM. PANGRANGO**

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### **ABSTRACT**

*This study aims to determine the relationship between ship crew professionalism and the improvement of passenger satisfaction on KM. Pangrango PT. PELNI. The research method used is quantitative with an explanatory approach. The research population is KM. Pangrango passengers with a sample of 350 respondents taken using accidental sampling technique. Data collection techniques used a Likert scale questionnaire. Data analysis was performed using simple linear regression with SPSS 25. The results showed that the research instrument was valid with r-count 0.681-0.782 > 0.105 and reliable with Cronbach's Alpha 0.913 for variable X and 0.904 for variable Y. The classical assumption test was met with normally distributed data Sig. 0.200, linear Sig. 0.000, and free from heteroscedasticity Sig. 0.305. The results of the regression analysis show that there is a positive and significant relationship between ship crew professionalism and the improvement of passenger satisfaction with a correlation coefficient value  $r=0.712$ , coefficient of determination  $R^2=0.508$ ,  $t\text{-count}=18.938 > t\text{-table}=1.967$ , and Sig. 0.000 < 0.05. This means that 50.8% of the improvement in passenger satisfaction is influenced by ship crew professionalism, while 49.2% is influenced by other factors. PT. PELNI is advised to maintain the professionalism of the ship crew and improve other service aspects.*

*Keywords: Professionalism, Ship Crew, Passenger Satisfaction*

### **A. Introduction**

Sea transportation is a vital means of connecting the archipelagic regions of Indonesia. PT. Pelayaran Nasional Indonesia (PELNI) as a State-Owned Enterprise has a strategic role in providing sea transportation services for the community, one of which is through KM. Pangrango. As a company engaged in services, the level of passenger satisfaction is the main benchmark for the success of PT.

PELNI's operations (Setiawan & Rumambi, 2023).

Passenger satisfaction in sea transportation is strongly influenced by the quality of service provided on board, particularly the professionalism of the ship crew. The ship crew serves as the frontline personnel who interact directly with passengers throughout the voyage. Their competence, responsiveness, and ability to handle passenger needs and complaints significantly shape the overall travel

experience. Previous studies have indicated that professionalism, which includes aspects such as communication skills, technical expertise, and service attitude, is a key determinant of customer satisfaction in the transportation sector (Pratama et al., 2022). Therefore, evaluating the professionalism of KM. Pangrango's crew becomes essential to ensure service standards are met.

Despite its strategic role, PT. PELNI continues to face challenges in maintaining consistent service quality across its fleet, including KM. Pangrango. Passenger complaints related to delayed information, lack of responsiveness, and limited crew assistance are still frequently reported on various platforms. These issues suggest a potential gap between the expected service standards and the actual performance of the ship crew. Hence, this study aims to examine the influence of ship crew professionalism on passenger satisfaction aboard KM. Pangrango. The findings are expected to provide empirical evidence that can be used by PT. PELNI management to improve human resource training and enhance service delivery policies

Based on internal complaint data from PT. PELNI in 2025, there were still passenger complaints on KM. Pangrango regarding delays in information delivery, unresponsive crew attitudes, and suboptimal passenger handling. This condition indicates a gap between management's expectations of service quality and the perceptions received by passengers. In fact, the ship crew is the frontline that interacts directly with passengers during the voyage (Gekara & Sampson, 2020). This gap is the urgency to empirically examine the relationship between ship crew professionalism and the improvement of passenger satisfaction, considering that service quality significantly influences customer satisfaction in maritime transportation (Dewa, 2023; Tjendana & Pranitasari, 2024).

## **B. Research Method**

This study uses a quantitative method with an explanatory approach that aims to test the relationship between variables (Sugiyono, 2023). The population in this study is all passengers of KM. Pangrango. The research sample was 350 respondents determined by the Slovin

formula and taken using accidental sampling technique.

The variables in this study consist of the independent variable, ship crew professionalism (X), and the dependent variable, the improvement of passenger satisfaction (Y). Data collection was carried out using a closed questionnaire with a 1-5 Likert scale. Each variable was measured by 10 statement items.

Data analysis was performed using IBM SPSS Statistics 25 software

The analysis stages include:

- 1) Instrument test with Pearson Product Moment validity test and Cronbach's Alpha reliability test,
- 2) Classical assumption test consisting of Kolmogorov-Smirnov normality test, linearity test, and Glejser heteroscedasticity test,
- 3) Hypothesis test with simple linear regression analysis to obtain the correlation coefficient (R), coefficient of determination ( $R^2$ ), F test, and t test. The hypothesis testing criterion is if the Sig. value  $< 0.05$  and t-count  $> t$ -table then H1 is accepted.

### **C. Results and Discussion**

This section contains the data collection process, research time frame and location, and the results of

data analysis which are supported by illustrations in the form of tables.

The data collection was conducted through the distribution of questionnaires to passengers of KM. Pangrango who had used the service at least once within the last six months. A purposive sampling technique was employed to ensure that respondents had relevant experience with the ship crew's service performance. The questionnaire utilized a five-point Likert scale ranging from strongly disagree to strongly agree to measure the variables of ship crew professionalism and passenger satisfaction. Prior to the main survey, a pilot test involving 30 respondents was carried out to assess the validity and reliability of the research instrument.

The analysis of data was performed using multiple linear regression with the assistance of SPSS version 26. Descriptive statistics were used to describe the characteristics of respondents and the distribution of each variable, while inferential statistics were applied to test the research hypotheses. The results are presented systematically through tables that include reliability

tests, model summary, ANOVA, and regression coefficients. Each table is accompanied by an interpretation to provide a clear understanding of the relationship between ship crew professionalism and passenger satisfaction on KM. Pangrango.

#### **Data Collection Process, Time Frame, and Location**

The research was conducted on KM. Pangrango from February to May 2025 with the routes of Ambon, Namrole, Banda Neira, and Saumlaki. Based on operational data, the total number of passengers during the research period was 2,800 people. This data was used as the population. The research sample was determined using the Slovin formula with a margin of error of 5%. Based on the calculation :

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{2.800}{1 + 2.800(0,05)^2}$$

$$n = \frac{2.800}{1 + 7}$$

$$n = 350$$

The total respondents needed were 350 passengers. The sampling technique used was accidental sampling. Data was collected using a closed questionnaire with a 1–5 Likert

scale distributed directly to passengers during the voyage. Data analysis was performed using IBM SPSS Statistics 25 software.

#### **Instrument Test Results**

The instrument test was carried out to ensure the validity and reliability of the questionnaire used. The results show that all 10 statement items of the ship crew professionalism variable are valid with r-count values ranging from 0.693 to 0.782 > r-table 0.105. All 10 statement items of the improvement of passenger satisfaction variable are also valid with r-count values of 0.681 to 0.767 > 0.105. The reliability test results show a Cronbach's Alpha value of 0.913 for variable X and 0.904 for variable Y. Because the value is > 0.60, both instruments are declared highly reliable (Ghozali, 2021, as cited in Syaleh et al., 2025).

#### **1. Descriptive Statistics and Reliability**

Descriptive analysis was used to describe the level of assessment of each variable based on respondents' answers.

##### **a) Interpretation of Mean Scores**

The results of the descriptive analysis show that passengers gave a good assessment of ship crew professionalism with an average score

of 4.00. However, the level of improvement of passenger satisfaction is only in the sufficient category with an average score of 2.91 (Table 1).

**Table 1. Descriptive Statistics and Reliability Test**

| V | Mean | Std. Dev. | Cron. Alpha | N of Items | Inter. |
|---|------|-----------|-------------|------------|--------|
| X | 4.00 | 0.512     | 0.913       | 10         | Reli.  |
| Y | 2.91 | 0.687     | 0.904       | 10         | Reli.  |

Table 1 presents the Descriptive Statistics and Reliability Test results. V denotes Variable, Mean represents the average score of respondents' answers for each variable, and Std. Dev. is the Standard Deviation which indicates the dispersion of data from the mean. Cron. Alpha refers to Cronbach's Alpha, a measure of internal consistency to test reliability, while N of Items indicates the number of statement items used to measure each variable. Inter. stands for Interpretation of the reliability test result. In the table, X represents Ship Crew Professionalism and Y represents Passenger Satisfaction. Both variables show Cron. Alpha values above 0.70, with X = 0.913 and

Y = 0.904, meaning the research instruments are reliable.

### **Classical Assumption Test Results**

Classical assumption tests were conducted to ensure that the regression model meets the BLUE criteria. The normality test using Kolmogorov-Smirnov produced an Asymp. Sig. value of  $0.200 > 0.05$ , so the data is normally distributed. The linearity test produced a Sig. Linearity value of  $0.000 < 0.05$  and Sig. \_Deviation from Linearity\_  $0.943 > 0.05$ , so there is a linear relationship between variables X and Y. The heteroscedasticity test with the Glejser method produced a Sig. value of  $0.305 > 0.05$ , so there are no symptoms of heteroscedasticity.

### **Hypothesis Test Results**

Hypothesis testing was carried out using simple linear regression analysis to determine the relationship between ship crew professionalism and the improvement of passenger satisfaction.

#### **1. Model Summary and ANOVA**

The results of simple linear regression analysis show a correlation coefficient R value of 0.712, which means there is a strong relationship between ship crew professionalism and the improvement of passenger satisfaction. The R Square value of 0.508 indica

tes that 50.8% of the variation in the improvement of passenger satisfaction can be explained by ship crew professionalism, while the remaining 49.2% is explained by other variables outside the research model. The F-count value of 358.639 with Sig. 0.000 < 0.05 indicates that the regression model used is appropriate (Table 2).

**Tabel 2. Model Summary and ANOVA**

| M | R     | R <sup>2</sup> | Adj. R <sup>2</sup> | F       | Sig.  |
|---|-------|----------------|---------------------|---------|-------|
| 1 | 0.712 | 0.508          | 0.506               | 358.639 | 0.000 |

Table 2 displays the Model Summary and ANOVA results. M denotes Model, R represents the correlation coefficient between the independent and dependent variables, R<sup>2</sup> is the R Square or coefficient of determination, and Adj. R<sup>2</sup> refers to Adjusted R Square which measures the explanatory power of the model after adjusting for the number of predictors. F is the F-statistic value from the ANOVA test used to assess the overall significance of the regression model, while Sig. indicates the significance value or p-value. The results show that Model 1 has R = 0.712, R<sup>2</sup> = 0.508, and Adj. R<sup>2</sup> = 0.506 with F = 358.639 and Sig. = 0.000

## 2. Partai Test Results

### a) Significance of Ship Crew Professionalism

The results of the partial t-test show a t-count value of 18.938 > t-table 1.967 with Sig. 0.000 < 0.05. Based on these results, H1 is accepted, which means that ship crew professionalism has a positive and significant relationship with the improvement of passenger satisfaction on KM. Pangrango (Table 3).

**Table 3. Regression Coefficients**

| M | B     | Std. Error | Beta  | t      | Sig.  |
|---|-------|------------|-------|--------|-------|
| C | 7.245 | 1.182      |       | 6.129  | 0.000 |
| X | 0.561 | 0.032      | 0.712 | 18.938 | 0.000 |

Table 3 presents the regression coefficients of the model. M denotes Model, B represents Unstandardized Coefficients, Std. Error is the Standard Error of each coefficient, Beta refers to Standardized Coefficients Beta, t is the t-statistic value, and Sig. indicates the significance value or p-value. In the table, C stands for Constant, which is the intercept of the regression equation, while X represents Ship Crew Professionalism as the independent variable. The results show that X has a positive

unstandardized coefficient  $B = 0.561$ , meaning that ship crew professionalism has a direct positive influence on passenger satisfaction.

### **Discussion**

This gap between good professionalism and sufficient satisfaction indicates that although the crew is considered professional, it has not been fully able to create maximum improvement in satisfaction for passengers. The main finding of this study is the proof of a significant relationship between ship crew professionalism and the improvement of passenger satisfaction of 50.8%. This result is in line with the SERVQUAL theory (Parasuraman et al., 1988) which states that the dimensions of reliability, assurance, and empathy from service providers are the main determinants of customer satisfaction.

#### **1. Theoretical and Empirical Implication**

The result also supports several previous studies which found that service quality and crew behavior significantly affect passenger satisfaction in sea transportation (Ghozi et al., 2024; Setiawan & Rumambi, 2023; Saransi & Erlinda, 2024). Hidayat (2023) also found that crew friendliness has a sig

nificant effect on passenger satisfaction. The magnitude of the 50.8% effect indicates that ship crew professionalism is a dominant factor in the improvement of passenger satisfaction. This reinforces the statement by Suparjo et al. (2020) that professionalism directly affects service performance.

However, there are still 49.2% other factors such as the physical condition of the ship, schedule accuracy, travel time, ticket prices, and supporting facilities that also play a role in the improvement of passenger satisfaction (Fauziah et al., 2025; Aryanty et al., 2024; Octavianes et al., 2025). Therefore, optimizing human resources is necessary to improve ship crew performance (Dwi Arif et al., 2025; Purba & Siska, 2025).

### **D. Conclusion**

The research findings confirm that ship crew professionalism has a positive and significant association with the improvement of passenger satisfaction on KM. Pangrango, as evidenced by the hypothesis testing results which reject  $H_0$  and accept  $H_1$ . Although passengers perceived the crew's professionalism as good, reflected in the dimensions of reliability, ass

urance, and empathy, the increase in passenger satisfaction only reached a sufficient level, indicating that professional conduct alone has not fully optimized the passenger experience on the Ambon - Namrole Banda Neira - Sausmlaki routes. This implies that management should not solely rely on human resource aspects but also address operational and physical service elements that contribute to overall satisfaction. Based on this conclusion, it is recommended that PT. PELNI (Persero) strengthen crew development through periodic service training and complaint-handling workshops, while simultaneously improving tangible aspects such as ship cleanliness, catering quality, and schedule accuracy. This study is limited by its focus on a single vessel and time frame from February to May 2025, thus generalization to other routes or shipping periods must be made cautiously. Future research should expand the scope by including additional variables like ticket pricing, travel duration, and safety perception, as well as comparing several vessels to provide a more comprehensive understanding of passenger satisfaction determinants in sea transportation.

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