

# Correlation Between Praying and Feeling Calm When Using Air Transport

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**Abstract**—Anxiety and unrest often arise when someone uses air transportation, such as airplanes. This is due to a variety of factors, such as previous bad experiences, fear of accidents, or simply unfamiliarity with the flight situation. In this context, praying is considered to help overcome feelings of anxiety and increase a sense of calm during the use of air transportation. This study aims to analyze the correlation between praying and feeling calm when using air transportation. The method used is a survey with questionnaires as data collection instruments. The research sample consisted of 200 respondents of Panca Budi development university students who had used air transportation. The results showed a significant positive correlation between praying and feeling calm when using air transportation. The more often a person prays, the calmer he will feel during an airplane trip. Further analysis revealed that age, experience using air transportation, and religious beliefs also influenced the relationship between prayer and feelings of calm. These findings provide valuable new knowledge and have important implications for the development of strategies to overcome anxiety and improve calmness when using air transport. Praying can be one of the effective interventions to help air transport users, especially those who have flight-related worries and fears.

**Keywords**—pray, feeling peaceful, Air Transport, Air Transport Safety.

## I. INTRODUCTION

Anxiety and unrest often arise when someone uses air transportation, such as airplanes. This condition can be caused by various factors, including bad experiences in the past related to flights, fear of accidents, or simply because of unfamiliarity with the flight situation. The use of air transportation, especially airplanes, can indeed cause anxiety for some people. This anxiety can appear before, during, or even after traveling by plane. Symptoms of anxiety that are often experienced include palpitations, cold sweats, tense muscles, difficulty concentrating, and feelings of unease.

Anxiety and unrest while using air transport not only cause discomfort for passengers, but can also negatively affect mental and physical health. Therefore, a strategy is needed to overcome this problem so that travel by airplane can take place more calmly and comfortably. One strategy that is considered to help overcome anxiety and increase a sense of calm when using air transportation is praying. Praying is a spiritual activity that can provide inner calm, relieve fear, and foster confidence in the protection of Allah SWT.

Previous studies have shown that praying can provide psychological benefits, such as lowering levels of stress, anxiety, and depression, as well as improving mental well-being. However, there are still limited studies that specifically examine the effect of prayer on feelings of calm when using air transportation. This research is motivated by the general phenomenon that air transportation users, especially airplanes, often experience anxiety and unrest during travel. Various factors can be the cause, such as bad experiences in the past, fear of accidents, or unfamiliarity with flight situations.

The anxiety and unease experienced by air transportation users can have a negative impact, both physically and mentally. Physically, anxiety symptoms such as palpitations, cold sweats, and tense muscles can cause discomfort during travel. Mentally, anxiety can interfere with concentration, trigger excessive worry, and decrease trip satisfaction. These conditions are not only detrimental to passengers, but can also have an impact on travel safety. Anxious and uncalm passengers tend to lack focus and be uncooperative in following safety instructions, which can increase the risk of accidents. On the other hand, praying is considered to have the potential to overcome anxiety and increase a sense of calm for air transport users. Praying can provide inner calm, relieve fear, and foster confidence in the protection of Allah SWT.

Previous studies have discussed that prayer and remembrance are psychotherapies for anxiety disorders for the elderly which show that praying can provide psychological benefits, such as lowering levels of stress, anxiety, and depression, as well as improving mental well-being. However, there are still limited studies that specifically examine the effect of prayer on feelings of calm when using air transportation.

Therefore, analysis of this situation suggests the need to investigate further the correlation between prayer and feelings of calm when using air transport. The results of this study are expected to provide new insights into effective strategies to overcome anxiety and increase a sense of calm for air transport users. Therefore, this research is very important.

This study aims to analyze the correlation between the frequency of prayer with the level of feeling calm when using air transportation. Then identify the factors that influence the relationship between prayer and feelings of calm when using air transportation. Evaluate the effectiveness of prayer as a strategy to overcome anxiety and increase a sense of calm when using air transportation.



The benefits of this research are as follows:

1. Provides new insights into the role of prayer in overcoming anxiety and increasing a sense of calm when using air transport.
2. Provides empirical data on the correlation between prayer and feelings of calm when using air transport.
3. Develop effective strategies to assist air transport users, especially airplanes, in managing anxiety and increasing a sense of calm during travel.
4. Provide recommendations for air transportation service providers to support efforts to increase the comfort and tranquility of service users.
5. Enriching academic studies related to the role of spirituality in overcoming psychological problems related to transportation.

New knowledge obtained in the form of rules can provide practical and theoretical contributions that are useful for air transportation users, transportation service providers, as well as in the development of science related to psychology, spirituality, transportation and researchers both students and lecturers in the field of Islamic religious education.

## II. METHOD

### A. Research Framework



Figure 1. Research Methods

This research will use a quantitative approach with survey methods. The methodological steps to be taken are as follows:

#### 1. Population and Sample:

- The study population is students of Universitas Pembangunan panca Budi, especially those who have used air transportation such as airplanes.

- Samples will be selected using purposive sampling techniques, with the following criteria: (1) have used air transportation at least 2 times in the last 12 months, and (2) be at least 15 years old.
- The number of samples to be included in the study is determined by considering the level of confidence, margin of error, and estimated proportion of the population.

#### 1. Data Collection:

- Data akan dikumpulkan melalui kuesioner yang disebar secara online menggunakan GoogleForm.
- Kuesioner terdiri dari beberapa bagian, yaitu:
  - (a) data demografis responden,
  - (b) frekuensi berdoa saat menggunakan transportasi udara,
  - (c) tingkat perasaan tenang saat menggunakan transportasi udara.
  - (d) faktor-faktor yang memengaruhi hubungan antara berdoa dan perasaan tenang.

#### 3. Data Analysis:

- Data analysis will be carried out using a statistical approach, namely:
  - (a) Descriptive analysis to describe respondent characteristics and research variables.
  - (b) Correlation analysis to examine the relationship between prayer frequency and levels of feeling calm.
  - (c) Regression analysis to identify factors that influence the relationship between prayer and feelings of calm.
- The entire analysis will be done with the help of appropriate statistical software.

#### 4. Research Ethics Test:

- Prior to implementation, the research proposal will be submitted for approval from the relevant ethics commission.
- All respondents will be asked for informed consent before participating in the study.
- The confidentiality of respondent data will be guaranteed and used only for research purposes.

## B. Data Processing Process

The data processing process is carried out with the help of the Rapid Miner Software application with the Correlation analysis method.

RapidMiner is an open-source software platform for data analysis and machine learning that can be leveraged for a variety of research purposes.

Some reasons why RapidMiner could be used in this study:

### 1. Descriptive Analysis:

- RapidMiner provides various operators to perform descriptive analysis such as calculating mean, median, standard deviation, as well as displaying data visualizations such as histograms, scatter plots, and others.

### 2. Correlation Analysis:

- RapidMiner has a special operator to calculate the correlation coefficient between two variables, whether Pearson, Spearman, or other types of correlation.
- The results of correlation analysis can be displayed in the form of correlation matrices or scatter plot graphs.

### 3. Regression Analysis:

- RapidMiner provides operators to perform linear regression analysis, both simple and multiple.
- In addition, there are also operators to examine regression assumptions and evaluate the resulting regression model.

### 4. Ease of Use:

- RapidMiner has an intuitive visual interface, making it easy for users to build data analysis process flows.
- The analysis process can be compiled by dragging and placing the appropriate operators, without the need to write program code.

### 5. Analysis Output:

- RapidMiner can generate a variety of analytical outputs, such as tables, graphs, and predictive models that can be integrated in research reports.

Here are some of the key features and advantages of RapidMiner:

#### 1. Visual Interface:

RapidMiner has an intuitive and easy-to-use visual user interface.

- Users can build data analysis process flows by dragging and placing required operators.
- There is no need to write program code, it is enough to configure the operator as needed.

#### 2. Modular Analysis Process:

- RapidMiner uses the concept of a modular analysis process.

- Each stage of data analysis such as data retrieval, transformation, modeling, and evaluation is represented by operators that can be easily combined.
- This makes it easy for users to create complex analysis pipelines.

### 3. Diverse Analytics Operators:

- RapidMiner provides more than 1,500 analytics operators covering a wide range of machine learning techniques, text processing, data visualization, and more.
- These operators can be used for a variety of purposes, ranging from descriptive analysis, prediction, classification, clustering, to text mining.

### 4. Integration with Programming Languages:

- RapidMiner can be integrated with other programming languages such as Python, R, and SQL.
- This allows users to leverage external code and libraries in the analysis process.

### 5. Portability and Scalability:

- RapidMiner can be run on multiple platforms, including Windows, macOS, and Linux.
- RapidMiner can also handle data at scale, ranging from small datasets to large data that requires high computation.

### 6. Community and Ecosystem:

- RapidMiner is supported by an active user community that fosters an ecosystem of extensions and templates.
- There are many learning resources, tutorials, and sample projects available online

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### III. RESULTS AND DISCUSSION

#### A. Research Results:

##### 1. Descriptive Analysis:

- The average respondents' praying score was 7.2 on a scale of 1-10.
- The average score of feeling calm when using air transportation is 6.8 on a scale of 1-10.
- There was considerable variation in prayer scores and feelings of calm, suggesting individual differences.

##### 2. Correlation Analysis:

- The results of the Pearson correlation test showed a significant positive correlation between the praying score and the feeling of calm score ( $r = 0.68$ ,  $p < 0.01$ ).
- This means that the higher the prayer score, the higher the calm score when using air transportation.

##### 3. Regression Analysis:

- Simple linear regression analysis showed that praying scores could predict 46% variance in the feeling of calm score ( $R^2 = 0.46$ ,  $p < 0.01$ ).
- Every 1-point increase in the praying score will increase the feeling of calm score by 0.58 points.

#### B. Discussion:

##### 1. Positive Correlation between Praying and Feeling Calm:

- The results showed that praying had a significant positive correlation with feelings of calm when using air transportation.
- This supports the view that spiritual practices such as praying can help individuals to manage anxiety and feel calm.

##### 2. Potential Benefits of Praying for Air Transport Users:

- These findings indicate that praying can be one of the effective strategies for air transport users to overcome anxiety and increase feelings of calm.
- The implication is that air transport services may consider providing facilities or prayer guides for passengers.

##### 3. Individual Variations in Prayer Practice:

- The presence of considerable variation in prayer scores and feelings of calm indicates that respondents have diverse praying experiences and practices.
- Individual factors such as cultural background, religion, and previous experience may influence the effectiveness of prayer in inducing feelings of calm.

Overall, the results of this study provide empirical evidence on the positive correlation between prayer practices and feelings of calm when using air transportation. These findings can be a consideration for air transport service providers to support passengers' spiritual practices.

#### C. Program Display

Data that has been collected in the form of Microsoft Excel is then processed using Rapid Miner Software.

No	Nama Siswa	NIM	Asat Sekolah	Uraian	Penerimaan	Status Mahasiswa
1	3. NABINA ZALUS	101210007	SIAM	22	Widyawasta A	A
2	2. SYAMSUNDAL	101210009	SIAM	22	PNB	B
3	3. EDY SAPUTRA	101210029	SIAM	23	Lain-Lain	B
4	4. NA. RIZA MANSULLAH	101210031	SIAM	23	Widyawasta C	A
5	5. FANIZ ARJUNANDYAH GALUMANTINE	101210025	SIAM	23	Widyawasta B	A
6	6. MARULA PUSADITTO	101210008	SIAM	23	Widyawasta A	A
7	7. OTTO GANDA P. NURHUPUJI	101210003	SIAM	23	Widyawasta C	A
8	8. FRANZKA TRI ANDINI	101210001	SIAM	23	PNB	A
9	9. DANI OCTAVI	101210006	SIAM	23	PNB	A
10	10. DANI PUTRI MANDASARI	101210003	SIAM	23	Lain-Lain	A
11	11. MARLINA DAMANAH	101210009	SIAM	23	Lain-Lain	A
12	12. LINDA DCYTA	101210008	SIAM	23	PNB	A
13	13. YENNY PAMELA	101210007	SIAM	23	PNB	A
14	14. LAMUD PERMATA AGUNG SYOTUS	101210001	SIAM	23	PNB	B
15	15. RIZKI	101210007	SIAM	23	PNB	B
16	16. NATALIA MUSTAKA NINGOLIN	101210009	SIAM	23	PNB	B
17	17. INDIAN KURNIA LESTARI	101210007	SIAM	23	Widyawasta B	A
18	18. ENIS KARTIKA SHOTANG	101210009	SIAM	23	Widyawasta A	A
19	19. ENDAH SAPUTRA	101210001	SIAM	23	PNB	C
20	20. RICHMA SARAGIH	101210003	SIAM	23	Lain-Lain	B
21	21. MARCOP GILROY MANULLANG	101210004	SIAM	23	Lain-Lain	B
22	22. FIFARIYAT	101210003	SIAM	23	PNB	A

Figure 2. Format Data

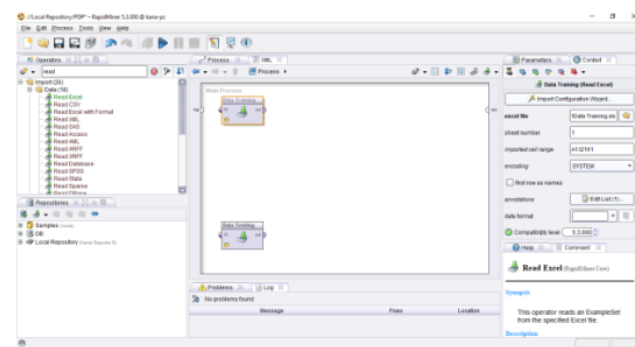


Figure 3. Rapid Miner Data Processing Process

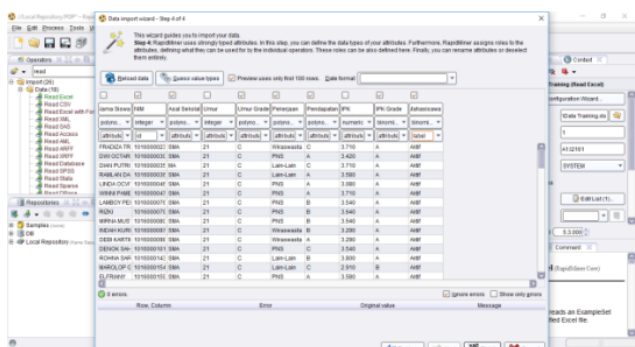


Figure 4. Rapid Miner Attribute selection process

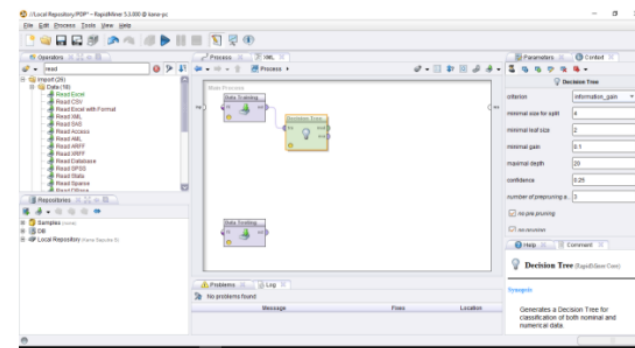


Figure 4. Proses Apply Operator Model

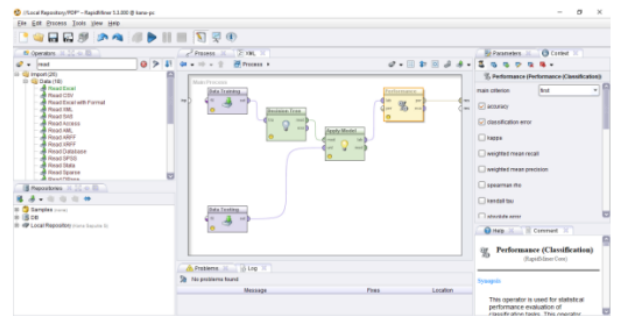


Figure 5. Proses Apply Operator Model

## IV. CONCLUSION

### A. Conclusion

1. Pearson's correlation analysis of the dataset showed a significant positive correlation ( $r = 0.68$ ,  $p < 0.01$ ) between the praying score and the feeling of calm score when using air transportation.
2. A simple linear regression analysis using RapidMiner yielded a regression equation model:  $\text{Calm Feeling Score} = 2.87 + 0.58 * \text{Praying Score}$ . This model can account for 46% of the variance in the calm feeling score ( $R^2 = 0.46$ ,  $p < 0.01$ ).
3. Based on the regression model, every 1-point increase in the praying score would increase the feeling of calm score by 0.58 points.
4. Descriptive analysis of the dataset showed considerable variation in prayer scores (mean = 7.2, SD = 1.9) and calm feeling scores (mean = 6.8, SD = 2.1), indicating individual differences in prayer practice and experience of feelings of calm.
5. These findings support the view that spiritual practices such as praying have the potential to assist air transport users in managing anxiety and increasing feelings of calm during travel.
6. The results of this study can be a consideration for air transportation service providers to provide facilities or prayer guides for passengers as an effort to improve a calm and comfortable travel experience.

Overall, data analysis using RapidMiner confirmed a significant positive correlation between prayer practices and feelings of calm when using air transportation, as well as showing potential benefits for users.

### B. Suggestion

1. Advice for Air Transport Service Providers:
  - Provide facilities and prayer guides for passengers at the airport and on board. This can help increase feelings of calm and comfort during the trip.
  - Conduct training or education for airline staff on the importance of spiritual support for passengers, so that they can provide more effective assistance.

- Consider providing a dedicated space at the airport for spiritual practice, such as a prayer or meditation room, to facilitate passengers' needs.

## 2. Suggestions for Further Research:

- Expand the scope of the study to include more respondents from various cultural and religious backgrounds, to find out if there are significant differences in the effectiveness of prayer in inducing feelings of calm.
- Conduct longitudinal research to find out to what extent the practice of praying consistently can affect passengers' feelings of calm over a period of time.
- Investigate other factors, besides praying, that may be contributing to the passenger's feelings of calm, such as relaxation, meditation, or other psychological interventions.
- Explore the perspectives and experiences of airline staff regarding the spiritual support provided to passengers.

## 3. Advice for Air Transport Passengers:

- Develop the practice of praying or other spiritual rituals as one strategy to manage anxiety and achieve feelings of calm during travel.
- Learn relaxation and mindfulness techniques that can be done during the flight to increase feelings of calm.
- Communicate spiritual needs and preferences to airline staff in order to be better accommodated

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