CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter will explain the method adopted by this research. This chapter will mention every component involved in conducting this research from population, population frame and sampling techniques used for the interview. Finally, this chapter provides a detail explanation of the selected mode of analysis used and data collection method.

3.2 Research Process

This study involves single phase throughout the whole process. Referring to Figure 1, this study is carried out in a phase of data collection, to measure the relationship between three component which is the usage of social media for da’wah, evaluating the effectiveness of the content delivered, and lastly identifying the challenges of online da’wah during pandemic.
The research process is essential on every step taken to achieve every objective outlined earlier in this study. In order to comprehend the overall picture of this study, the final say of each component is described in inferential analysis.

3.2.1 Collecting Data from Respondent

In order to measure all objectives outlined in Chapter 1, we propose to conduct the data collection from random sampling design but focused on Muslim respondents.
3.2.2 Survey Methods

Survey is a broad term that often includes interviews, questionnaires, and instruments or inventories. A survey is an attempt to estimate opinions, attitudes, and characteristics of a large number of individuals based on data collected from some of those individuals. The Kinsey reports in 1948 and 1953 provide well-known examples. Kinsey and his group interviewed more than 10,000 men and women regarding their research beliefs and practices have started with a sample of individuals representative of the population. However, only about 20% of those contacted were willing to share their beliefs and practices. In order to overcome this issues, the respondents will be more likely very random and volunteered. In this study, the survey forms will be distributed among Muslims respondents, using Google Form through WhatsApp and Telegram social media platform.

3.2.3 Questionnaires

The questionnaire is more than simply a list of questions or forms to be completed. For this research, a properly constructed questionnaire was prepared so that it can be used as a reliable scientific instrument to obtain data from large numbers of individuals. A major advantage of this questionnaire is that data can be obtained on large numbers of participants quickly and relatively inexpensively. Further, the sample can be very large and geographically representative. Often, anonymity easily maintained; that is, identifying information is not associated with the data. This step is very important to make sure the bias of our respondents can be minimized. A questionnaire provides data that can be organized easily, tabulated, and analysed.
In this research, only one classes of questionnaires were used, that is analytical. As the questionnaire distributed, we did not take descriptive questionnaires are usually restricted to factual information like biographical. We only consider analytical questionnaires deal more with information related to attitudes or opinions through out this research. The detailed instruments were provided in instrument section.

3.2.4 Respondent Location

This study is designed within the context of Muslim Malaysia, geolocation is only restricted in Malaysia. Due to time constraints and the feasibility of this study to complete, this study will focus on the Muslim views/perspectives on using the social media as da’wah platform during pandemic period.

3.2.5 Independent Samples Design

Random assignment relates directly to internal validity and is concerned with the way in which we assign participants to experimental conditions. The purpose of random assignment is to avoid bias in the composition of the different individuals. We want to get data that are essentially not bias to any specific individual figure preachers. Random assignment is the best way of handle this type of sampling.

With random assignment, each participant has an equal chance of being selected for a particular experimental condition. The value of this technique can be achieved by asking for volunteers.
The sample taken for this research is restricted among Muslims without any age restrictions. The minimum response that cater through this research is estimated not less than 30 (n > 30). This consideration needs to be realistic since the number of response in type of volunteering is not really promising to be participate.

### 3.2.6 Designing an Instruments

Having identified the operationalization of the variables of this research, the questionnaire will be established as the instrument of this study. The questionnaire is designed according to the standard perspectives on *da’wah*. The instrument consists of three sections that are reflecting the research objectives. The instruction is clearly given in the opening form in each questionnaire.

<table>
<thead>
<tr>
<th>No.</th>
<th>Section</th>
<th>No. of questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The usage of social media in <em>da’wah</em></td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>The effectiveness of social media as a tool for <em>da’wah</em></td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>The challenges and opportunities of using social media for <em>da’wah</em></td>
<td>3</td>
</tr>
</tbody>
</table>

Table 1: Details of Questionnaire

As shown in Table 1, the questionnaire is designed according to the flow of the necessity of understanding. The questionnaire contains three (3) sections, which tabulated in table above.
3.3 Data Analysis

Fraenkel & Wallen (2007) said that data analysis is the process of generating the data to be clearly understood especially for the particular research. Meanwhile, Creswell (2012) said that data analysis is the process for all the gathered information from respondents to be made easier to all. This includes the process of summarizing of all the respondents' data.

On the other hand, a specific and suitable data analysis must be accomplished in order to get an exact meaning of the data so that a conclusion can be come out in which the conclusion's answering back the research questions of the study.

The data for this study was analysed using manual calculation of Statistical Approach.

3.3.1 Statistical T-Test

In our research, we use t-test is an inferential statistic used to determine if there is a significant difference between the means of two section of instruments and how they are related. T-tests are used when the data sets follow a normal distribution and have unknown variances, like the data set recorded from flipping a coin many times.

The T-test is a test used for hypothesis testing in statistics and uses the T-statistic, the T-distribution values, and the degrees of freedom to determine statistical significance. The formula used is stated as below:
\[ T = \frac{\text{mean}_1 - \text{mean}_2}{s(\text{diff})} \]

where:

- mean\(_1\) and mean\(_2\)=The average values of each of the sample sets
- s(diff)=The standard deviation of the differences of the paired data values
- n=The sample size (the number of paired differences)
- n−1=The degrees of freedom

We specify a level of probability (alpha level, level of significance, \(p\)) as a criterion for acceptance. In our case, a 5% value can be assumed for \(t\)-valued.

### 3.3.2 Pearson-\(r\) Correlation Test

The most commonly used correlation coefficient is the one published by Karl Pearson in 1895, having been developed earlier by Sir Francis Galton. Pearson’s correlation coefficient \((r)\) is used to demonstrate whether two variables are correlated or related to each other. When using Pearson’s correlation coefficient, the two variables in question must be continuous, not categorical. The formula used to determine \(r\) value between two categories is given by:

\[
r = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{\sqrt[n]{[\Sigma x^2 - (\Sigma x)^2][\Sigma y^2 - (\Sigma y)^2]}}
\]
\( r \) = Pearson Coefficient

\( n \) = number of respondents

\( \sum xy \) = sum of products of the paired item

\( \sum x = \) sum of the x scores

\( \sum y = \) sum of the y scores

\( \sum x^2 = \) sum of the squared x scores

\( \sum y^2 = \) sum of the squared y scores

The following table 2 shows the rule of thumb for interpreting the strength of the relationship between two variables based on the value of \( r \):

<table>
<thead>
<tr>
<th>Absolute value of ( r )</th>
<th>Strength of relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>( r &lt; 0.25 )</td>
<td>No relationship</td>
</tr>
<tr>
<td>( 0.25 &lt; r &lt; 0.5 )</td>
<td>Weak relationship</td>
</tr>
<tr>
<td>( 0.5 &lt; r &lt; 0.75 )</td>
<td>Moderate relationship</td>
</tr>
<tr>
<td>( r &gt; 0.75 )</td>
<td>Strong relationship</td>
</tr>
</tbody>
</table>

Table 2: Description analysis of pearson r-value

From this analysis, hence we can deduce the effectiveness of social media usage during pandemic for da’wah content since the interrelation between instrument in item 1, 2 and 3 were investigated.
3.4 Conclusion

As a conclusion of this chapter, this research focuses on quantitative method by specifically employing to understand and explore the effectiveness of the social media platform using for da’wah purposes during COVID-19 pandemic period.

The method of this research has adequate criteria for each step in making this study success. Not only about the result that matters, but also the systematic and consistent way of carrying out the study are significant.