

CHAPTER 3

CHAPTER 3 - RESEARCH METHODOLOGY

3.1 Introduction

The research methodology is used to measure the relationship between perception and satisfaction of customers from other corps towards the transport service provided by Royal Service Corps (RSC). In the Chapter, the sections such as preliminary data gathering, absorption of theories, theoretical framework, research design, survey instrument, measurements and data analysis are given to paint a picture how we go about carrying the research on this matter.

3.2 Primary Data

Primary data is collected from the information provided by the servicemen through self-administered questionnaires. It is used to gather respond from the servicemen from various corps about the service performance of transportation provided by the RSC. We also exploit some of the knowledge and experience in developing the questionnaire and what area that will be the main focus in order to get clearer picture of the overall service.

3.3 Secondary Data

Secondary data are data gathered and recorded by someone else prior to the current needs of researchers. This data are always historical, already assembled and do not requires access to respondents or subject. The advantage of secondary data is that the data always gathered faster at lower cost than primary data. However, secondary data may not exactly meet the needs of researcher because they are collected for other purposes. In our research, most of the secondary data that we used were from previous study and inspections but no so much related to our research on the perception of service quality and

customers satisfaction. Most of the data were about the serviceability rate, accident cases and the state of readiness on overall system.

3.4 Absorption of Theories

Customer satisfaction theory (Chase and Bowen, 1991) treats service quality as a perceptual phenomenon identified through the views of the customer were mainly adopted in the study to get exact first hand information. The meaning, definition and evaluation of quality exist in the customer's mind. Ultimate quality is the difference between service quality expectations and the perceptions of reality (e.g. Parasuraman, 1993). This theory shifts focus from the production and output of the service to the customer.

Gronroos (1990) has developed a conceptual model that emphasizes the evaluation process by customers towards certain services. Customer will compare their predictions with their perceptions towards the service. In our case, the servicemen will compare the services that they get while using the RSC transport service with their expected predictions. Gronroos has also stated about technical quality and functional quality. Technical quality includes the way the services are provided. In this model, expectation is divided into two levels that are desired service and sufficient service. The gap between these two levels is called tolerant zone, which tells customers willingness to adjust their needs towards the services with minimum services that should be provided.

3.5 Theoretical framework

Theoretical framework is a conceptual model that discusses the interrelationship among the variables that are deemed to be integral to the dynamics of the situation being investigated. Developing a conceptual framework can help us to hypothesize and examine certain relationships so as to

improve our understanding of the dynamics of the situation. It is the fundamental in our entire research analysis. The theoretical framework is as follow:

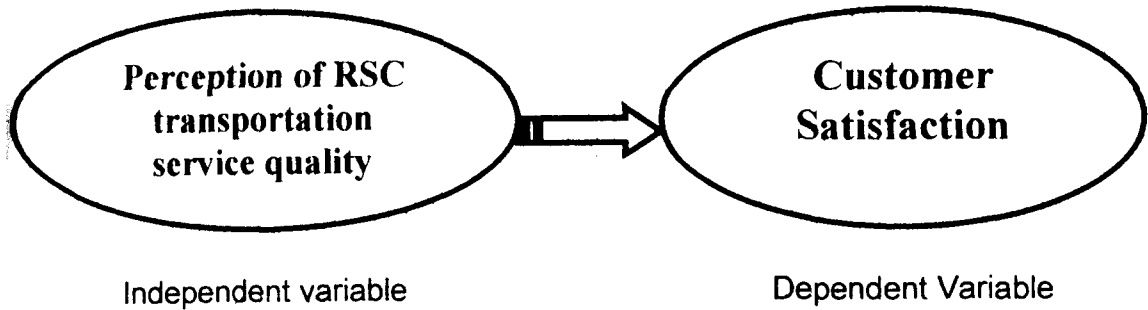


Figure 3.1 – Theoretical Framework

Based on our research study, attributes such as tangibles, reliability, responsiveness and driver's personality are those independent variables, which influence the dependent variables that are customer satisfaction.

The dependent variable is the variable of primary interest to the researches. In this case, the main purpose of the study is to determine the level of customer satisfaction due to the perception of service quality that is provided by the RSC transport service. Therefore, the customer satisfaction will be the dependent variable. By then, the RSC should aware about the customers' needs and wants in order to develop a good image among the other corps or the entire service. Thus, the management should concern about the customer satisfaction towards the service that is being provided.

For the independent variable, it is one of that influences the dependent variable in either a positive or negative way. The perception of service quality is the independent variable as it influences the customer satisfaction in a positive way. Customer satisfaction will be higher if the perception of service quality is greater. Service quality is very important especially in the transportation service industry. If customers do not satisfy with the service provided due to their low perception of service quality, they may paint a bad image and bad reputation on the RSC as a whole.

In conclusion, theoretical framework is used to identify the network of relationship among the variable considered important to the study of any given problems situation. It is essential to understand what the variables means are and what the different types of variables.

3.6 Research Design

Purpose of the study. It usually explains the nature of certain relationship, or establishes the differences among group or the independence of two or more factors in a situation. We want to know the nature of the relationship that can be established between perception of service quality and customer satisfaction towards the transport service from RSC.

Type of investigation – Correlation study. When the researcher wants to delineate the important variables associated with the problem, the study is called a correlation study. Here, we want to know whether the perception of service quality and customer satisfaction is related or not. In the other words, we want to know whether customer satisfaction is affected by their perception of service quality or not.

Extent of researcher interference with the study – minimal interference. A correlation study is conducted in the natural environment of the organization with minimum interference by researcher. In our study, the questionnaires that are distributed involve the respondents' participation without our interference. We will just process the information directly without any additional make-ups.

Unit of analysis – Individual. We want to know how many servicemen are satisfied with the RSC transportation service and what their perception towards it. For this purpose, data have been collected from 200 respondents of the servicemen from various corps and the unit of analysis is individuals.

Time horizon – Cross-sectional studies. A cross-sectional study can be done in which data are gathered just once, perhaps over a period of days or weeks or months in order to answer a research question. Our survey has been done once and the data has been collected within few days. This is due to constrained time and allocation.

3.7 Research field

Research field is an area identified to do scientific research. When an area is identified, sample is taken from the population in particular area to get an overall depiction on the population surveyed. Our research field is generally covered from Kuala Lumpur to Malacca where the military units are in Sungai Besi Camp to Terendak Camp. It is also due to the conveniences of getting information from the location because quite close to our resident.

3.8 Survey Instrument

The questionnaires are our main source used to analyze and interpret the research. It is administered personally to gather data for analyzing, getting the hypothesis and for the purpose of answering the question of research. We used questionnaire because it is an efficient data collection mechanism and we know exactly what is required. The advantages of using the instrument are:

- less expensive and less time consuming than interview
- does not require as much skill to administer the questionnaire as to conduct interviews
- can collect all completed responses within a short period
- doubts regarding any question could be clarified immediately

Besides that, we also used secondary sources such as previous study and inspections, books, magazine, Internet and thesis to obtain additional information regarding our research.

The questionnaire used in this study consists of 5 pages with the total of 40 questions in 4 sections. Section A consists of 16 attributes that measure perception of service quality towards the RSC transport service, which follow SERVQUAL questions. The score for each item was recorded on a 5 point Likert Scale with '5' labeled as 'Strongly Agreed'.

Section B consists of 16 attributes which measures customer satisfaction towards the RSC transport service such as vehicle condition, facilities provided and driver's personality. 5 point Likert Scale is used with '1' being labeled as 'Strongly Dissatisfied' and '5' labeled as 'Strongly Satisfied'.

Meanwhile, Section C used to gather additional information about the survey. It is done by using the Scale relating to the usage of the service and rating the level of service generally. The respondents were required to mark (\checkmark) for the appropriate answers from question 1 to 3. Questions in Section D were adapted from previous studies, which also used Nominal Scale. It is basically about socio-demographic details such as age group, rank, period of service (working experience), and corps. The questionnaires were only prepared in Bahasa Malaysia.

3.8.1 Measurement: Scaling

Two types of scales were used in this survey to measure the selected variables. Nominal Scale is used to assign subjects to certain category of group. This scale is used in Section D to obtain personal data like age group, rank, service experience and corps. This method is also used to assign respondents to one of two non-overlapping or mutually exclusive categories.

Information on the variables can be obtained in greater detail when we employ an interval scale other than the nominal scale, which only gives basic or gross information. *Interval scale like the Likert scale not only groups individuals*

according to certain categories of these groups, it also measures the magnitude of the differences in preferences by computing the means and standard deviation of the responses. This scale is used in Section A and B, which includes 16 questions each. Section A concludes the perception of service quality and the Section B concludes the customer satisfaction towards the RSC transport service.

3.8.2 Reliability

In order to indicate the extent to which the measure is without bias (error free) and offers consistency measurement across time and across the various items in the instruments. In other words, the reliability of a measure indicates the stability and consistency with which the instrument measures the concept and helps to assess the integrity of measurement.

3.8.3 Stability of Measure

The ability of measure to maintain stability over time, despite uncontrollable testing conditions or the state of respondents themselves is indicative of its stability and low vulnerability to changes in the situation.

In our research, we use our own way whereby, we only do this survey once where we provide the respondent with questionnaire and at the same time get their response. This is due to time constraint but our measurement and questionnaire are still stable because we measure the correlations accurately.

3.8.4 Validity

For our survey, we have used construct validity. This validity testifies how well the results obtained from the use of the measure fit the theories around which the test is designed. Convergent validity is developed when the scores obtained by two different instruments measuring the same concept are highly

correlated. Discriminant validity is established based on theory where two variables are predicted to be uncorrelated.

3.9 Research Procedure

1. First and foremost, we observe the broad area of the research interest and focus on the situation.
2. Secondly, we collected data through the process of preliminary data gathering
3. Then, we define the problem from its original broadways to define more clearly the issues of concern.
4. The fourth step in a scientific research is to develop a theoretical framework, where variables are clearly identified and labeled in order to test the relations between independent variables and dependent variables.
5. The, we proceed to generation of hypothesis that is coming up with several testable statements, which logically conjectured relationship between two or more variables.
6. The sixth step is developing a scientific research design to determine the purpose of the study, types of investigation, extent of researcher interference with the study, unit of analysis, and time horizon. .
7. After that, data collection, analysis and interpretation and carried out. We distributed our questionnaires then, we analysis the data by using the SPSS software.
8. The eighth step is the data deduction whereby we determine whether our hypotheses is substantiated and research questions are answered

9. If yes, then we proceed to report writing, followed by report presentation and lastly the report is being used for managerial decision-making.