

## **CHAPTER II**

### **REVIEW OF RELATED LITERATURE**

This chapter presents the discussion about thesis writing, thesis methodology and previous study.

#### **2.1 Thesis**

Thesis is a research study which is written as one of the requirements to get the bachelor degree (Anwar et al., 2013). In the most general term, thesis is a research document that presents problems for an idea and the action aims to solve it.

Thesis is containing of chapters in which each chapter has a specific purpose and material. All of chapters have each important role in writing a thesis. However, there is a crucial part in writing thesis called thesis methodology.

#### **2.2 Thesis Methodology**

Thesis methodology can be defined as a systematically process to solve the research problems which often explains how the research was done. It should be clear enough in order to make the readers understand about the research.

In writing thesis methodology, the researcher should consider the components of thesis methodology. According to Braunstein (2007), components of methodology including design of study, place and the participant of study, data collection, instrument, and data analysis.

### **2.2.1 Research Design**

According to Khotari (2004), research design is a structure which explains how the research is done, it is a plan for collecting, measuring, and analysing data. Thus, through the research design the researcher explains to others what study design that used to collect information, select respondents, analyze information, discuss the results. Based on Khotari (2004), there are some important features of formulating research design, namely :

- There is correlation between design which is used in the study with the research variable
- The research objective must be clearly written
- There are techniques which is used for collecting data

### **2.2.1 Types of Research Design**

According to Anwar et al.,(2013) there are five types of research approaches, they are : Quantitative research, qualitative research, literature review research, developmental research (R&D), classroom action research (CAR).

On the other hand, Creswell (2009) stated that there are three common approaches to conduct the research, quantitative, qualitative, and mixed methods.

#### **2.2.1.1 Quantitative Research**

Quantitative research is a research method which using numerical data in collecting data to explain, predict, and control the phenomenon. Creswell (2009) has stated the definition of quantitative research is a type of research method which explain phenomenon by collecting numerical data that are analyzed using mathematically based methods (in particular statistics).

Based on Suphat, there are several types of quantitative research. For instance, it can be classified as 1) survey research, 2) correlational research, 3) experimental research, 4) causal-comparative research.

#### **2.2.1.1.1 Survey Research**

According to Isaac & Michael (1997), survey research is a research used to answer questions that have been raised, to solve problems that have been posed or observed, to assess needs and set goals, to determine whether or not specific objectives have been met. Survey research constitutes a kinds of quantitative or numeric description of a population by studying a sample of that population.

#### **2.2.1.1.2 Correlational Research**

Correlational research is a research used to describe the relationship between two or more naturally variables. This research can be used to make or test hypothesis.

#### **2.2.1.1.3 Experimental Research**

In the experimental research, the researcher investigates an intervention towards the certain treatment of study in controled condition. According to Leedy and Ormrod (2001), there are some kinds of experimental research, such as : pre-experimental, true experimental, and quasi-experimental.

- Pre-experimental design (non design) involves an independent variable that does not vary or a control group that is not randomly selected.
- True experimental design, provides a higher degree of control in the experiment and produces a higher degree of validity.

- Quasi-experimental design involves non-random selection of study participants. Therefore, control is limited and true experimentation is not possible. Since the variable cannot be controlled, validity may be sacrificed.

#### **2.2.1.1.4 Causal Comparative**

Causal comparative research is usually called as ex post facto research. In the causal comparative research, the researcher investigates causes or reasons which related to the variables, also examines how the independent variables affected by the dependent variables The causal comparative research design provides the researcher the opportunity to examine the interaction between independent variables and their influence on dependent variables.

#### **2.2.1.2 Qualitative Research Approach**

Qualitative research is a research that utilizes a natural setting to search and find the understanding about the phenomena which involved actual experiences (Creswell, 2003). The data of qualitative research are not usually in numerical data, so that it cannot be analyzed by using statistical methods.

According to Williams (2007), there are several methods for conducting a qualitative research; case study, ethnography study, phenomenological study, grounded theory study, content analysis, and descriptive research.

##### **2.2.1.2.1 Case Study**

Case study is in depth a research that focuses on the study of individual, group, and organization in a certain time using an extensive variety of data.

Creswell (2003) defines case study as “researcher explores in depth a program, an event, an activity, a process, or one or more individuals” (p. 17).

The results of case study will be analyzed to deliver a theory. This research usually takes long time because it follows the individuals on a long term when investigate the aspects of research development. Case study has some types which are distinguished by the size of the bounded case, such as whether the case involves one individual, several individuals, a group, an entire program, or an activity. The variations of case study in terms of intent: the single instrumental case study, the collective or multiple case study, and the intrinsic case study.

On the other hand, Yin (1984) clasified into three categories, namely exploratory, descriptive and explanatory case studies.

1. Exploratory case study is a case study which explores any phenomenon which serves as a point of interest to the researcher.
2. Descriptive case study is a case study which describes the natural phenomena which occur within the data in question.
3. Explanatory case study is a case study which examines the data closely both at a surface and deep level in order to explain the phenomena in the data.

#### **2.2.1.2.2 Ethnography Study**

The ethnography study is extremely different with case study. Leedy and Ormrod (2001) stated that ethnography studies an entire group which shares a common culture, while case study studies an individual, event or program.

Usually the researcher immersed in the daily behaviors to investigate the changes

of the group's norms, culture, beliefs, and other factors. According to Leedy & Ormrod (2001), there were some steps in conducting ethnography study. The first step aims to obtain access to the site. Then the researcher should have a good relationship and build the trust with the participants of the group. And the last, the researcher begins to intermingle with the people in order to investigate the informants in the custom. The result from findings may have boundaries to generalize the theories since in every group has different case.

#### **2.2.1.2.3 Phenomenological Study**

Phenomenological study is a method which describes individuals' lived experiences or a phenomenon. In this case, individuals' experiences may be phenomena such as insomnia, being left out, anger, grief, or undergoing coronary artery bypass surgery. Based on Christensen, Johnson, and Turner (2010) the main purpose of a phenomenological study is to describe completely the essence of live experiences of an individual, or a group of people with a specific phenomenon. Experiences have a relationship with the individuals' behavior. This method is almost the same with grounded theory study because it uses interview as instruments in order to understand and interpret a participant's perception of the experience. In this method, not only in-depth interviews but also participants' written or self-reports including instruments which can be analyzed. According to Leedy & Ormrod (2001), phenomenological study has a purpose that is to understand participants' experiences. It tries to answer the questions from the experience.

#### **2.2.1.2.4 Grounded Theory Study**

Grounded theory is a research method which begins from data that developed to a theory. According to Leedy & Ormrod (2001), the research should emerge the theory from the data which is obtained in the field than from related literature of the research. Mostly, grounded theory is used in sociology discipline because this method tests interactions and actions of human. The data collection of this method can be obtained from some sources such as interview, analyze historical records, and observation.

#### **2.2.1.2.5 Content Analysis**

Content analysis is a research method which involves the data from the certain objects to draw conclusions about the content. According to Hsieh & Shannon (2005), content analysis is a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns.

The objects for the content analysis includes short stories, letters, texts or symbols, diaries, books, television, newspapers, and films as well as other forms in order to identify patterns, and themes. The method is designed to identify specific characteristics from the chosen content.

#### **2.2.1.2.6 Descriptive Research**

Descriptive research is a kind of research that can be either quantitative or qualitative research. Descriptive research is used to find information about symptoms or phenomena and to describe and explain about the observed phenomena. The subject of the research is natural setting. Descriptive research

does not have hypothesis testing. Qualitative descriptive research is purely data-derived in that codes are generated from the data in the course of the study.

### **2.2.1.3 Mixed Research Approach**

Mixed method approach is a design of research which combine between qualitative and quantitative approaches to answer research problems. Johnson and Onwuegbuzie (2004) defined that, “Mixed methods research is formally defined here as the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study. Mixed methods research also is an attempt to legitimate the use of multiple approaches in answering research questions, rather than restricting or constraining researchers’ choices “(p. 17-18). The goal for researchers using the mixed methods approach to research is to draw from the strengths and minimize the weaknesses of the quantitative and qualitative research approaches (Johnson & Onwuegbuzie, 2004). In using the mixed methods approach, researchers should be able to design the research design which combine the data from quantitative and qualitative research. Mixed methods approach is more complicated, time-wasting than others approaches.

#### **2.2.1.3.1 Types of Mixed Research Approach**

According to Creswell (2012), there are six types of mixed methods research which commonly used in educational research :

##### **1) Convergent Parallel**

Simultaneously collect, merge, and use both quantitative and qualitative data.



## **2) Explanatory Sequential**

Start from collecting quantitative data and second to gather qualitative data to enhance on the quantitative findings.

## **3) Exploratory Sequential**

First collect qualitative data to investigate a phenomenon and second gather quantitative data to explain the qualitative findings.

## **4) Embedded**

Collecting quantitative and qualitative data at the same time while one's design purpose is supporting the findings of the other design.

## **5) Transformative**

Using either the convergent, explanatory, exploratory, or embedded design types while including the design types within an evolving context (a possible change in perspective).

## **6) Multiphase**

Examining a subject or issue through a number of studies.

### **2.2.2 Data Collection**

The method of data collection depends on the sources. There are two major sources of data collection, primary and secondary sources of data collection. The sources collected in the first approach are called primary sources, whereas the secondary sources are the sources gathered using the second approach.

#### **2.2.2.1 Primary Sources of Data**

#### **2.2.2.1.1 Questionnaire**

Questionnaire is one of the most popular methods to collect data in conducting research. Questionnaire is also called as inquiry which contains some questions related to the research problem that will be solved, arranged, and shared to the respondents to get field collecting.

#### **2.2.2.1.2 Observation**

Observation is one of methods to collect primary data. It begins through watching and listening the phenomenon or activities directly where it takes place. Observation is usually used in a study related to the behavioural science. In quantitative research, observation is commonly used as complementary instrument, including questionnaire and interview. Mostly, the researcher uses notebook and check list containing the objects that will be observed.

#### **2.2.2.1.3 Interview**

The third instrument is interview. Face to face with the interviewee and ask some questions to get information. According to Burns (1997), an interview is a verbal communication, often face to face, though the telephone may be used, in which an interviewer tries to get information, beliefs or opinions from another person.

#### **2.2.2.2 Secondary Sources of Data**

Secondary sources of data is data which have been collected and analysed by someone else. Secondary data may be from published data or unpublished data. Usually published data are available in (a) publication center, local and foreign governments; (b) subsidiary organisations; (c) journals; (d) books, magazines and

newspapers; (e) reports and publications of various associations connected with business and industry, banks, stock exchanges (f) reports prepared by research scholars, universities, economists in different fields; and (g) public records and statistics, historical documents, and other sources of published information.

The sources of unpublished data are many; they may be found in diaries, letters, unpublished biographies and autobiographies.

### **2.2.2.3 Data Collection Procedure**

According to Creswell, J. (2014) the data collection procedure include some components, namely :

- Identify the purposefully selected sites or individuals for the proposed study which include (a) the setting (where the research will take place), (b) the actors (who will be observed or interviewed), (c) the events (what the actors will be observed or interviewed doing), and (d) the process (the evolving nature of events undertaken by the actors within the setting).
- Indicate the approach of collecting data. In many qualitative studies, researcher collects multiple forms of data and spend a considerable time in the natural setting gathering information such as interview, observation, document, and audio.
- Explain the steps of collecting data which related with the study.

### **2.2.3 Data Analysis**

The data which have collected, should be analysed in order to answer the research problem. Kothari (2004) stated that analysis refers to the computation of certain measures along with searching for patterns of relationship that exist among

data-groups. Analysing the data for qualitative and quantitative is different. In quantitative research, the researcher usually uses mathematically based (statistics) because the data which collected are numerical data.

### **2.2.2.1 Qualitative Data Analysis**

Qualitative data analysis is the process which move from the raw data that have been collected as part of the research study and use it to provide explanations, understanding and interpretation of the phenomena, people and situations which was studied. Data analysis in qualitative research is done when the process of collecting data and after the process. Denscombe (2010) argued that there are some principles of qualitative data analysis. The first is to organize and diverse data into a concise structure. The second principle is to make the relationship between the research objectives and the summary clear. The third principle suggests that one should conclude by developing a model or improving the conceptual of the research. Miles and Huberman (1994) suggest that qualitative data analysis consists of three procedures : data reduction, data display and drawing conclusion.

#### **1. Data reduction**

The data were collected from the field so many, so that it needs to eliminate the unnecessary data. It is the process of reducing the qualitative data which obtain from the instruments such as interview transcripts, observation, documents, field notes etc. Data reduction can be meant summarize, choose the main things, focus on the important information, and discard the unnecessary data.

According to Miles and Huberman (1994), in writing data reduction, that should have some components. Those are :

- There is definition of data reduction based on the study
- There is reduction of data which is suitable with the problem
- There is coding of data based on the variable.

## 2. Data display

After data reduction, the next step is data display. In qualitative research, data display usually was explained descriptively. Miles and Huberman (1994) suggest that a good display of data is in the form of tables, charts, networks and other graphical formats is more essential.

In addition, data display has some components such as :

- Make sense to the data that has been collected by displaying the data related the concepts.
- There is definition of data display based on the study.
- The writer displays the data which have collected specifically.

## 3. Drawing Conclusion

The third step is drawing conclusion/verification. It allows the researcher to draw conclusions based on the existing data in the field notes regarding the study. These initial conclusions can be verified, that is their validity examined through reference to the existing field notes or further data collection. The steps of data drawing and data display must not be separated from data reduction. In addition, drawing conclusion has some components such as :

- There is definition of data conclusion based on the study.
- There is proposition of the study.

#### **2.2.2.2 Quantitative Data Analysis**

In quantitative research, data analysis begins from grouping the data based on the variables and kinds of respondents, tabulating data based on the variables of all respondents, providing data for each variable, calculating the data for answering problems and examining the hypothesis.

Data analysis technique in quantitative research is using mathematically based method (statistics). There are two kinds of statistics which used for data analysis in research, descriptive statistic and inferential statistic.

- Descriptive Statistic

Statistic that used to analyse data through describing the data without drawing conclusion. Descriptive statistic is used for investigating the relationship among the variables by correlation analysis, comparing the data of sample or population.

- Inferential Statistic ( inductive statistic )

Technique that used to analyse the sample of data and the results also apply for the population. This statistic will be appropriate when the sample was obtained from the obvious population, and used random sampling for sampling technique.

### **2.3 Previous Study**

There were previous studies have been conducted by some researchers. The first previous study was conducted by Thakur and Trikha (2004), the purpose

of the study was to find out the pattern of post-graduate research studies, the research design, the tools and the techniques used, the geographical distribution and the contents of post-graduate theses.

The second previous study was conducted by Yang, Wang, Su (2006), the researchers wanted to review the research methodologies in international business. The study focused on five major aspects : data collection methods, sample sources including sampled countries and subjects, sampling methods, sample sizes, and response rates.