# CHAPTER III

# RESEARCH METHOD

To support this study, the researcher will discuss the important part covered in the methodology, such as the research design, research object, data sources, data collections method, data analysis, and triangulation.

## A. Research design

In this research, the researcher uses descriptive qualitative research to describe the personality and efforts contained in the movie The Man Who Knew Infinity. According to Bogdan and Biklen the descriptive nature of qualitative research is obvious. The information gathered is in the form of words or visuals rather than numbers. Data from numerous sources, such as film transcripts and articles, is being processed. This study looked at descriptive data collection methods in order. This is meant to describe the main character's personality and the efforts researcher makes to be examined. Sugiyono (2010: 222) stated that in qualitative research, the key instrument is the researcher him selves.

## B. Research Object

The research object is a small scope which is the focus of the research. The researcher used the object of the research is The Man Who Knew Infinity Movie in the laptop drive. The movie's title is The Man Who Knew Infinity, the setting of the movie in Madras, India and Cambridge University during World War I 1961, released on 26 April 2016 in United Stated, directed by Matt Brown, the writers are Matt Brown (screenplay) and Robert Kanigel (nature biography), and the duration of the movie is 108 minutes.

**C. Research Instrument**

In conducting a research, the instrument is needed to collect the data. In qualitative research, Nasution states that the main instrument is the researcher itself (Sugiyono, 2016). Researcher as the main instrument is the main performer in collecting and analyzing the data. In the study to be conducted, the researcher as the main instrument will analyze personalities and efforts of the man who knew infinity movie. The movie is obtained by the researcher through a tool, so it will be more accurate.

In this research, Instrument is a tool that is used in collecting data (Gay & Airasian, 2000). According to (Arikunto, 2000) revealed that an instrument in collecting data is a tool used by researcher to help collect data to make it more systematic and easy.

According to (Sugiyono, 2009) Data collection instruments besides the researcher itself is various forms of tools and in the form of other documents that can be used to support the validity of research results, but function as supporting instruments. The instruments used in this research were observation and documentation. Here, researchers use laptops to make observations and take pictures on the research object.

**D. Data Source**

The researcher will use two kinds of data in doing this research; they are primary data and secondary data

1. Primary data is the main data obtained from the movie. It is also the original and most basic data source of this research. In this research, there are 2 primary data sources that will be used by researcher, they are; movie and subtitle.

2. Secondary data sources use document models to support and complement primary data (Sumardi Suryabrata: 1983:39). From various kinds of books and relevant materials such as literary theory books and so on, data can be obtained.

## E. Data Collection Method

To collecting data, the researcher used documentation technique to get the data. There are some steps to collect the data, they are watch the movie three times:

1. Watch the movie for the first time, the researcher will watch the movie The Man Who Knew Infinity to find out the storyline, make a summary and then become an appendix.

2. Watch the second time, the researcher will focus on the selected characters to be analyzed, such as personality of the main character.

3. Watch the third time, the researcher will focus on the part that was the subject of research, such as effort of the main character named Ramanujan.

4. Data collected.

## F. Data analysis

After the data has been collected, the first step is to analyze it. The technique of data analysis is used in qualitative research to answer the research question. The data is analyzed using the descriptive approach by the researcher.

Because descriptive can be understood as a process for addressing an issue and finding the answer to the problem that has been established, the researcher will use descriptive analysis in this proposal. This research will be analyzed in the following steps:

1. Identifying

   The researcher identifies data related to the main character, there is an effort that made Ramanujan become one of the mathematicians in the movie The Man Who Knew Infinity.

2. Classifying

   Researcher classifies based on research questions. The researcher classifies the data in the form of Personality and efforts.

3. Describing

   The researcher describes the data in content of narrative, descriptive and utterances sentences.

4. Analyzing

   The researcher analyzes Personality and Ramanujan's efforts to become one of the mathematicians in the movie The Man Who Knew Infinity. The researcher use objective theory and phenomena approach in every part of the movie to analyze the data

5. Making the conclusion

   After analyzing the research, the researcher concludes the analysis of the research.

## G. Data Triangulation

The triangulation technique was used by the researcher in this study to determine the validity of the data. The theoretical triangulation technique was utilized in this study, which involves combining two or more hypotheses (Sugiyono, 2010). The information gathered by using the techniques of observation, listening, comprehension,

and taking notes. The theories are then blended and matched to check the data acquired so that their validity can be accounted for expert judgment when comparing their findings with a certain perspective is the research guider and the researcher itself.

The data was repeatedly observed and checked by the researcher. According to Creswell (2009: 191), multiple sources of data information could be used to verify triangulation and build a consistent theme rationale. As a result, the researcher supplemented the data with information from a variety of sources as well as expert theories.