

CHAPTER 3

METHOD OF DATA COLLECTION AND ANALYSIS

3.1 Research Design

Survey research provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population (Creswell, 2013). It includes cross-sectional and longitudinal studies using questionnaires or structured interviews for data collection, with the intent of generalizing from a sample to a population (Creswell, 2013). In this research, the writer used survey research to conduct this research and questionnaires to collect data

3.2 Method of Data Collection

The researchers explained in detail about participants, instruments, and procedures.

3.2.1 Participants

The author of this research used a quantitative survey method with a large sample so that the researcher can find out pupils' perception. First, the author conducted a pilot study to make sure the questionnaires are valid and followed up with a thorough questionnaire to collect complete data.

According to (Cohen et al., 2007) a sample size of thirty is held by many researchers to be the minimum number of cases. But, in this study the researcher used 70 participants in total to make the data more valid. This means 20 pupils from class 10 IPA 2, 23 pupils from class 11 IPS 2, and 27 pupils from class 12 IPA 4. For the pilot study the researcher used 43 participants. When estimating the sample size for the pilot

trial, the simplest methods to apply are sample size rules of thumb, with a minimum sample size of 12 subjects (Whitehead et al., 2016). But, in this study the researchers used 43 participants. This means 21 pupils from class 10 IPS 3 and 22 pupils from class 11 IPA 2.

3.2.2 Instrument

The instrument used in this research is close-ended questionnaires and used Likert Scale to measure the perception. This questionnaire ranged from 4 until 1. 4 strongly agree, 3 agree, 2 disagree, and 1 strongly disagree. According to Dalati (2021), there are three advantages of close-ended questionnaires. The first advantage is low cost as it does not involve qualified staff or interviewers. The second advantage is reduction in biasing error. This type of questionnaire reduces biasing error that might result from the variability of the interviewers' skills and their personal characteristics. Finally, the third advantage is there is greater anonymity. The absence of an interviewer provides greater anonymity. The assurance of anonymity with close-ended questionnaires is helpful, specifically when the survey deals with sensitive issues. On such matters, a survey may evoke a higher response rate than a personal interview. The questionnaire topics were the content of pupils' perceptions on BPK Penabur Christian Senior High School. Participants were asked to fill in the questionnaire honestly.

3.2.3 Procedure of Data Collection

1. Researchers analyzed the content of Sammons et al., (1995)'s journal.
2. Researchers interpreted each of Sammons et al., (1995)'s main factors for effective schools.

3. Researchers made statements for the questionnaire based on those interpretation of the main factors.
4. Researchers sort the statements according to Sammons et al., (1995)'s journal.
5. Researchers made an online questionnaire form that was presented in close-ended questions.
6. Below are the main points of the questionnaire covered items related to perceptions of BPK Penabur Christian Senior High School:
 1. Shared Vision and Goals
 2. Concentration on teaching and learning
 3. Purposeful Teaching
 4. High Expectations
 5. Positive Reinforcement
 6. Monitoring Progress
 7. Pupil Rights and Responsibilities
 8. Home-school Partnership
7. The researcher first did a Pilot Study through a link to share online forms to 43 participants from grade 10 IPS 3 and 11 IPA 2 from BPK Penabur Christian Senior High School.
8. After all of the pilot questionnaires are filled in, researchers shared online forms again to 70 pupils which means 20 pupils from class 10 IPA 2, 23 pupils from class 11 IPS 2, and 27 pupils from class 12 IPA 4.

9. Researchers finally evaluated and concluded the final result of the questionnaires to obtain answers for the research questions.

3.3. Method of Data Analysis

To analyze the questionnaire's responses from the participants, the writer used descriptive statistics. Descriptive statistics attempt to describe the midpoint of a distribution of scores, which is called the measure of central tendency, and the distribution of scores called dispersion, of which variance is an example (Marshall & Jonker, 2010). Descriptive statistics are the easiest to perform and interpret and are a useful way of summarizing data and giving an idea of the sample. Eventually, descriptive statistics cannot be used to demonstrate causal analysis which requires the use of inferential statistics, which allow us to generalize from a sample to a larger population.

To analyze the result, since the Likert Scale that is used ranged from 1 to 4. The calculation for the parameter is minimum score plus maximum score, then divided by two. So, if the result is above 2,5 then it is a positive perception. But if it is below 2,5 then it is a negative perception.