

CHAPTER III :

RESEARCH METHODOLOGY

3.1 Introduction

The researcher will explain the research design, the rationale for selecting the sample, the instrument for data collection, and the data analysis in this chapter. This chapter examines the more straightforward methods researchers use to obtain all the necessary data. The data acquired will be analyzed and made into a study discussed in the next chapter.

3.2 The Research Designs

The researcher will use a quantitative research method in view of the fact that at the time of this research, the country is facing the Covid-19 pandemic. A quantitative method through the use of survey questionnaire will avoid close contacts with the respondents. Furthermore, the survey method will enable more data collection within a shorter time frame. According to Sidek Mohd Noah (2002), this study is a design used by researchers to explore the relationship between cause and effect by watching some of the existing goods and evaluating existing data to uncover causal elements. Based on the logic stated, this survey study is chosen as the most appropriate design in the study. This survey study focuses on finding the magnitude of the link between the variables.

3.3 Location of The Study

This study will look at the extent of student acceptance of the PPDa program and attitudes toward illicit drugs. In this study, the study location is in Pahang, which involves secondary schools around the districts of Temerloh. The school was chosen as the study location because it met all its expectations, needs, and requirements. Besides, this population of interest is the most accessible to the researcher.

3.4 The Research Sample

3.4.1 Population

Population means a group of objects, objects, or individuals similar to the group to be studied. Each individual or entity in a population is likely to vary in many ways, but it must have no less than one common characteristic (Rohana Yusof, 2004). The population of this study was 4030 students from seventeen secondary school students in Temerloh, Pahang. The respondents are those students from Form 4 and 5 who have attended the four PPDa programs in school. The researcher is mindful that not all school students undergo a urine test. Thus, selecting the respondents among the sample must fulfill this requirement. Besides that, the selection should be more or less equal between males and females since one of the study's objectives is to compare the data between males and females. This step will avoid using extra quantitative parameters to determine the difference between males and females.

3.4.2 Sample

A sample is an extract of subjects from a population. Thus, it is a vital requirement to the researcher for a good sample size of the studied population. A good

sample size will significantly contribute when the researcher makes the broad definition for the study to be conducted. Several submissions can be made concerning the determination of the sample size, whether small or large. The conclusion of the sample size is based on the probability requirements of the sampling itself. The large sample size can undoubtedly represent the norm found in such a population.

The number of study samples was selected based on the sample size of Krejcie and Morgan (1970), who have listed the sample size based on population size as in Table 3.1 (Krejcie & Morgan 1970, pp. 607-610). The sample for this study was 380 respondents.

| N | S | N | S | N | S | N | S | N | S |
|----|----|-----|-----|-----|-----|------|-----|--------|-----|
| 10 | 10 | 100 | 80 | 280 | 162 | 800 | 260 | 2800 | 338 |
| 15 | 14 | 110 | 86 | 290 | 165 | 850 | 265 | 3000 | 341 |
| 20 | 19 | 120 | 92 | 300 | 169 | 900 | 269 | 3500 | 346 |
| 25 | 24 | 130 | 97 | 320 | 175 | 950 | 274 | 4000 | 351 |
| 30 | 28 | 140 | 103 | 340 | 181 | 1000 | 278 | 4500 | 354 |
| 35 | 32 | 150 | 108 | 360 | 186 | 1100 | 285 | 5000 | 357 |
| 40 | 36 | 160 | 113 | 380 | 191 | 1200 | 291 | 6000 | 361 |
| 45 | 40 | 170 | 118 | 400 | 196 | 1300 | 297 | 7000 | 364 |
| 50 | 44 | 180 | 123 | 420 | 201 | 1400 | 302 | 8000 | 367 |
| 55 | 48 | 190 | 127 | 440 | 205 | 1500 | 306 | 9000 | 368 |
| 60 | 52 | 200 | 132 | 460 | 210 | 1600 | 310 | 10000 | 370 |
| 65 | 56 | 210 | 136 | 480 | 214 | 1700 | 313 | 15000 | 375 |
| 70 | 59 | 220 | 140 | 500 | 217 | 1800 | 317 | 20000 | 377 |
| 75 | 63 | 230 | 144 | 550 | 226 | 1900 | 320 | 30000 | 379 |
| 80 | 66 | 240 | 148 | 600 | 234 | 2000 | 322 | 40000 | 380 |
| 85 | 70 | 250 | 152 | 650 | 242 | 2200 | 327 | 50000 | 381 |
| 90 | 73 | 260 | 155 | 700 | 248 | 2400 | 331 | 75000 | 382 |
| 95 | 76 | 270 | 159 | 750 | 254 | 2600 | 335 | 100000 | 384 |

Table 3.1 Krejcie & Morgan Determination Schedule 1970

3.4.3 Sampling strategy

In this study, the researcher opted to use non-proportional stratified random sampling. Non-proportional sampling is a probability sampling technique, and this sampling technique is used for addressing the complexities found by researchers with stratified samples of varying sizes. The researcher chose to use disproportionate stratified random sampling in this study because Temerloh district has 17 secondary schools. The number of students for each school is disproportionate depending on the number of students in the secondary school. Stratified random sampling is not proportional, shown in Table 2. In this sampling method, the population is divided into subgroups known as strata. However, the sampling fraction was not identical for all subgroups or strata, of which several strata somewhat redundant samples compared to the others.

| No. | School Name | Total Number of Respondents |
|-----|---|-----------------------------|
| 1 | Sekolah Menengah Kebangsaan Kerdu | 20 |
| 2 | Sekolah Menengah Kebangsaan Temerloh | 20 |
| 3 | Sekolah Menengah Kebangsaan Kuala Krau | 30 |
| 4 | Sekolah Menengah Kebangsaan Datuk Bahaman | 15 |
| 5 | Sekolah Menengah Kebangsaan Seri Semantan | 20 |
| 6 | Sekolah Menengah Kebangsaan Seri Tualang | 20 |
| 7 | Sekolah Menengah Kebangsaan Bukit Damar | 20 |
| 8 | Sekolah Menengah Kebangsaan Temerloh Jaya | 25 |
| 9 | Sekolah Menengah Kebangsaan Paya Pulai | 25 |
| 10 | Sekolah Menengah Kebangsaan Teluk Sentang | 20 |
| 11 | Sekolah Menengah Kebangsaan Bukit Cermin | 25 |
| 12 | Sekolah Menengah Kebangsaan Lanchang | 20 |
| 13 | Sekolah Menengah Kebangsaan Seberang Temerloh | 25 |
| 14 | Sekolah Menengah Kebangsaan Mentakab | 20 |
| 15 | Sekolah Menengah Kebangsaan Hwa Lian | 30 |
| 16 | Sekolah Menengah Kebangsaan Seri Bahagia | 20 |
| 17 | Sekolah Menengah Kebangsaan Abu Bakar | 25 |
| | Total | 380 |

Table 3.2 Non-proportionate Stratified Simple Random Sampling for Temerloh district secondary schools

3.5 The Research Instrument

3.5.1 Initial development of the questionnaire

The researcher made a rigorous study of past research done locally and internationally on acceptance of drugs prevention programs and attitudes towards illicit drugs. Unfortunately, the researcher did not find any documentation directly related to

the subject as desired. A few small studies, Wan Anor Bin Wan Sulaiman, Wan Nur Fatini Wan Anor, Wan Nazilah Wan Othman, and Adi Fahrudin, on the acceptance of anti-drug activities in schools. However, the researcher found those studies quite inadequate. The scopes were too limited. As for attitude to illicit drugs, the researcher could not locate any such study with proper instrumentation. Thus, the researcher has to develop this instrument empirically based on theories of attitude formation. The following section will discuss the rationale behind the items selected for the instrument.

3.5.2 Items on levels of acceptance

As described earlier in Chapter 2, the level of acceptance is defined as “the degree a person wants to partake in the program.” Of course, such a definition is arbitrary and subjected to different interpretations. After much deliberation, the researcher decided on the following five statements as indicators of the respondent’s “acceptance”:-

- I enjoyed myself fully in this program
- I took part actively in this program
- I have learned many things in this program
- I believe all the students should attend this program
- This is a very useful program

However, the above statements are only suitable for three types of programmers, namely:

- *Program Skim Lencana Antidadah Pasukan Berpakaian Seragam Sekolah Menengah (SLAD),*
- *Program Mesej Lima Minit Antidadah,*

- *Program Sumber dan Sudut atau Lorong PPDa.*

As for *Program Ujian Urin Pelajar Sekolah*, the researcher will use a slightly modified set of statements. This is needed because students are pre-selected to undergo such tests based on the counselor's suspicion about drugs involvement. In other words, the respondents had been "forced" to join this program. The modified statements are:

- I willingly took part in this program
- I understand the objective of urine test
- Urine test is not harmful to me
- I believe all the students should attend this program
- This is a very useful program

In order to quantify the levels of acceptance, the instrument will use a Likert type scale as follows.

| <i>Code</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> |
|--------------------|-------------------------|------------------------|----------------|---------------------|----------------------|
| <i>Description</i> | <i>Totally disagree</i> | <i>Partly disagree</i> | <i>Neutral</i> | <i>Partly agree</i> | <i>Totally agree</i> |

Since all the statements are positively biased, a higher score on the Likert scale will indicate more positive acceptance. Hence a score of "3" will be accepted as the mid-point. Scoring less than "3" will indicate negative acceptance, whereas any score more than "3" will be positive acceptance.

3.5.3 Attitude towards illicit drugs

The instrument to measure attitude towards illicit drugs is based on the tripartite model for attitude as shown in Figure 1 in Chapter 2. Five statements are designed to measure each component of attitude.

3.5.3.1 Cognitive component

The following statements are used to indicate what the respondent think about the used of illicit drugs.

- I think illicit drugs are not harmful to health
- I am sure I can stop taking illicit drugs at any time I want to
- Illicit drugs give me energy to study and work
- I am not ashamed even if I am addicted to illicit drugs
- Taking illicit drugs is just like smoking – no big deal

3.5.3.2 Affective component

The following statements are used to indicate how the respondent feels about the used of illicit drugs.

- I hate illicit drugs
- I love illicit drugs
- Taking illicit drugs is so cool
- Illicit drug is the best
- I cannot live without illicit drugs

3.5.3.3 Behavioral component

The following statements are used to indicate how the respondent act or behave in society when face with the used of illicit drugs.

- After taking illicit drugs, I am full of energy
- When I am high on drugs, I do not even need to eat
- I prefer to hang out with others who are also taking illicit drugs
- I hate those people who tell me to avoid drugs
- I do not care even if I go to jail because of drugs

Just as the case for the levels of acceptance, attitude will be measured by a five point Likert type scale below.

| <i>Code</i> | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> |
|--------------------|-------------------------|------------------------|----------------|---------------------|----------------------|
| <i>Description</i> | <i>Totally disagree</i> | <i>Partly disagree</i> | <i>Neutral</i> | <i>Partly agree</i> | <i>Totally agree</i> |

All the statements, except “I hate illicit drugs” are worded in such a way that higher score will indicate positive attitude towards illicit drugs. Likewise, “3” is taken as the midpoint. A mean score less than “3” will indicate negative attitude towards illicit drugs. A mean score more than “3” will indicate positive attitude towards illicit drugs.

3.5.4 The Questionnaire

The questionnaire will consist of 3 sections. Section A has two questions about the gender and gross income of the parents. Section B will consist of 4 parts with each part having 5 statements. This section is to measure the level of acceptance of the PPDa programmes. Section C has 15 items to measure the 3 components of attitude towards illicit drugs. Since this questionnaire is built empirically, a pilot test will be done on the

initial instrument. A sample of 30 students will be chosen who will not be part of the final survey. The Cronbach Alpha coefficient will be calculated to determine the reliability of the instrument. Content validity will be done by an expert in research methodology. An English specialist will be asked to check on the wording of the instrument. The researcher will also interview three randomly selected respondents to detect any misinterpretations in the test items. After the final edition, the questionnaire, letter of approval from EPRD and the Pahang state education office will be printed together in a booklet form for the actual survey.

3.5.5 Analysis of Data

The data collected from Sections A, B and C will be keyed into Statistical Package for Social Science Version 25.0 (SPSS) for data analysis. The data analysis is descriptive, where the data was described and summarized into meaningful information. SPSS can help interpret all kinds of data into useful information. All the data from Section B and C will be coded as in the Likert scale given except item C2 and C6, coded in the reverse order. This is because item C2 and C6 is a negative statement. We will use the following type of analysis to answer the research questions.

The mean score will be used to determine the level of acceptance, as in research questions 15.1. Since “3” is taken as the mid-point, hence any score more than “3” will be positive acceptance, whereas any score less than “3” will be negative acceptance.

As in research question 1.5.2, the mean score for items C1-C15 is calculated to determine the attitude towards illicit drugs. Item C2 and C6 is code in reverse. As in the case for levels of acceptance, “3” is taken as the mid-point; hence any score more than “3” will be a positive attitude towards illicit drugs, whereas any score less than “3” will be a negative attitude towards illicit drugs. In other words, those who score more than

“3” tend to ‘like’ illicit drugs, whereas those who score less than “3” tend to ‘dislike’ illicit drugs.

To determine the relationship between student acceptance of the PPDa program and the student attitude towards illicit drugs, as in research question 1.5.7, the researcher will do a correlation test. The Pearson correlation coefficient will be determined from the data. To visualize the relationship better, a scatter can use a plot too. A positive correlation index or a positive gradient of the scatter plot will indicate a positive relationship. In contrast, a negative correlation index and a negative rise of the scatter plot will show a negative relationship. In other words, a positive relationship indicates that those who like the PPDa program also like illicit drugs, whereas a negative relationship suggests the reverse.

In order to answer research questions 1.5.3 and 1.5.4 about the difference in the level of acceptance and attitude towards illicit drugs based on gender, the researcher will perform an independent sample t-test with a significant level of 0.05.

To answer research questions 1.5.5 and 1.5.6 about the difference in the level of acceptance and attitude towards illicit drugs based on student socioeconomic status, the researcher will use the Analysis of Variance (ANOVA) between groups.

3.6 Summary

In this chapter, the researcher outlines how she proposed collecting data to answer the research questions and objectives. In so doing, the researcher explained in detail how to create the research instrument. Finally, the researcher also explains how to analyze the data to answer the research questions.