CHAPTER III: RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is a process of how research is being conducted. It encompasses tools and techniques to conduct research or find. The research method is a range of tools that are used for different types of inquiries. (Walliman, 2011). Therefore, it is important to select an accurate method that suits the research objective. This chapter explains the method adopted by this research. In this chapter, the method of conducting the study is presented. Exploration of research designs, location of the study, population, sample of the study, and the sample selection procedure is outlined in this chapter.

3.2 The methodology

This study aimed to identify self-efficacy and readiness among the youth of the Drug Prevention Program and the relationship between social media self-efficacy and readiness. The researcher wants to identify the level of social media self-efficacy that can be used to provide holistic drug prevention education. Besides, this study also aims to investigate the level of readiness among youth to be involved in drug prevention education programs.

3.3 Research Design

Research design means a structure to plan and execute research. Research design is the crucial part of the research as it includes all four important considerations: the

strategy, the conceptual framework, the identification of whom and what to study and the tools and procedures to be used for collecting and analyzing data. Punch K.F (1998). The research design is divided into several types for example qualitative research and quantitative research. (Holmes R., et al, 2005).

Quantitative and correlational research designs were employed to achieve the objectives of this study. The use of correlational research was aimed to study the relationship between a variable that was related to differences in one or more other variables (Curtis, Comiskey, & Dempsey, 2016).

Sidek Mohd Noah (2002) stated that a correlational design is used by researchers who aim to study the relationship between cause and effect by observing some of the effects that exist and reviewing the existing data to find causal factors as a result. The survey questionnaire was selected as the most appropriate design in the study to determine the extent of the relationship between the variables.

The variables involved in this study were self-efficacy and community readiness. The survey was distributed to respondents who have been randomly selected among youth in the locality in Peninsular Malaysia. The assessment tool was used to obtain the quantitative data. The use of questionnaires allowed the researcher to collect a large amount of data from various respondents.

3.4. Research Location

The research was conducted in Teluk Intan, Perak. The researcher chose the location of this study because this location has a youth population of 13,948 based on information obtained from the Hilir Perak District Statistics Office. Since most youths have access to the internet, indirectly they also use social media and applicable to gauge

the required information for this study.

3.5. Population and Sampling

Reid (2012) described the population in a study as all units possessing certain characteristics, which are of interest to the researchers' study. From the definition, the population can be understood as the targeted community or group of people who is involved or selected by the researcher for his study. A sample is an extract of subjects from a population. Thus, it is an important requirement for the researcher to obtain a good sample size from the studied population to enable an important contribution. Several submissions can be made to the determination of the sample size whether small or large. The determination of the sample size is influenced by the probability requirements of the sampling itself. The large sample size can certainly represent the norm found in such a population. (Othman, 2001). A population is a group of individuals that own some common characteristics defined by the sampling criteria established by the researcher (Creswell, 2012).

3.5.1 Population

The population of this study, based on information from the Hilir Perak District Hilir Perak District Statistics Office, the youths 15 to 40 years old in Teluk Intan recorded are 13, 948 people based on Population Distribution by Local Authority Areas and Mukims (2010). The youth selected the population of this age range because they are seen to have gadgets and access to the use of social media. The Malaysian Youth Council (MBM) and the Ministry of Youth and Sports Malaysia (or known as KBS)

stated that the youth age was amended in Act 668 in 2019. The age classification of youth has changed from the age of 40 years to 30 years according to the Youth Organizations and Youth Development Act (Act 668). Although the move to lower the age limit of youth from 15 to 40 years to 30 years was being debated, the researcher still chose the original age limit of youth, which is 15 to 40 years as the sample category to be the respondents of this study to gain as much information from them. In this population, the respondents include students in secondary schools, a student in IPTA/IPTS/Colleges, and private institutions. Apart from that, the respondents also consist of workers in the public sector, private sector, unemployed, or housewives. In this study, the age group of the youth was divided into three categories, 15 to 19 years old, 20 to 29 years old, and 30 to 40 years old.

3.5.2 Sampling Method

This study used a simple random sampling technique. Sampling is a fundamental operation for the auditing and statistical analysis of large databases. In simple random sampling, a sample without replacement can be obtained from a sample with replacement by simply removing the duplicates. Of course, the sample size may thereby be reduced, so that additional elements of the population may have to be sampled. When simple random sampling sequentially from a file (or the output of a query) it may be simpler to sample without replacement. (Olken et., al. 1986)

Based on Krejcie and Morgan's (1970) Table, a total of 373 youths will be sampled for this study. The sample selection criteria refer to youths who have internet access and use social media in Teluk Intan. In addition, the researchers selected a sample of youth aged 15 to 40 years old men and women from various backgrounds. The selection of the random sample was because the researchers wanted to see the extent to

which youths with diverse backgrounds have an awareness of using social media platforms to add knowledge about drug prevention education programs.

3.6. Research Instruments

The main instrument used in this research was a survey questionnaire. Tuckman (1978) argues that the instrument in the form of a questionnaire is the most effective way to obtain information from respondents. Two instruments were used to gather the data from the respondents, namely the Social Media Competency Inventory (SCMI) and Drug (ATOD) Readiness Survey. Both instruments have been adapted to gather all the necessary information. Social Media Self-Efficacy Inventory and Alcohol Tobacco and Other Drugs (ATOD) Readiness Survey. Both instruments had been adapted to gather all the necessary information. Social Media Self-Efficacy Inventory was an extract of Social Media Competency. It was used to measure social media platforms involved in drug prevention education programs while the Drug Community Readiness Survey was extracted from Alcohol Tobacco and Other Drugs (ATOD) Readiness Survey. It was used to measure the readiness of youth to be involved in drug prevention education programs.

3.6.1 The Questionnaire

The survey questions applied in this study are in a dual language, English and Bahasa Malaysia. It is divided into three sections. The first section; Section A is aimed to obtain the demographic data of respondents such as gender, age, education, occupation, years of experience with internet use, duration of daily use of the internet, device or access to social media and Social Media Application they used, type of organization and length of time in current position.

The second section; section B consists of assessing social media self-efficacy among youth toward drug prevention education programs. The section of each question is based on seven areas that cover the purpose of Area I: Assess Needs, Assets, and Capacity for Health Education, Area II: Plan Health Education, Area III: Implement Health Education, Area IV: Conduct Evaluation and Research Related to Health Education, Area V: Administer and Manage Health Education, Area VI: Serve as a Health Education Resource Person and Area VII: Communicate and Advocate for Health and Health Education. This section consists of 49 items with 6 Likert scales of Extremely Unconfident, Unconfident, Somewhat Unconfident, Somewhat Confident, Confident, and Extremely Confident as in table 3.1 below.

Table 3.1: Part of items in Social Media Self Efficacy

	Area I: Assess Needs, Assets and Capacity for Drug Prevention Education **Bidang I : Menilai Keperluan, Aset dan Kapasiti untuk Pendidikan Pencegahan Dadah**						
NO.	**ITEMS**	**Extremely Unconfident Sangat Tidak Yakin**	**Unconfident Tidak Yakin**	**Somewhat Unconfident Agak tidak yakin**	**Somewhat Confident Agak yakin**	**Confident Yakin**	**Extremely Confident Sangat Yakin**
1.	Collect primary drug prevention education-related data through survey methods using social media Mengumpul data utama berkaitan pendidikan pencegahan dadah melalui kaedah tinjauan menggunakan media sosial	1	2	3	4	5	6
2.	Identify instruments that can be used for collecting drug prevention-related data using social media Mengenalpasti instrumen yang boleh digunakan untuk mengumpul data berkaitan pencegahan dadah menggunakan media sosial	1	2	3	4	5	6

These 49 items were translated and modified to suit the targeted.

The third part of this questionnaire; Section C is based on the instrument to assess the readiness of youth for drug prevention education programs. The Drug Readiness Survey consists of 11 areas with 32 items. Each area contains a different number of questions and a different scale. Area 1, contains 4 questions, area 2 contains only 1 question, area 3 contains 2 questions, area 4 contains four questions, area 5 contains 4 questions, area 6 contains 3 questions, area 7 contains one question, area 8 contains 1

question, area 9 contains 8 questions, area 10 contains 2 questions and area 11 contains 2 questions.

3.6.2 Social Media Self-Efficacy Inventory

This study used the social media Self-Efficacy instrument employed by Julia M. Alber (2015). The instrument was used to assess Certified Health Education Specialists (CHES) and Master Certified Health Education Specialists (MCHES), who have the responsibility to develop, implement, and evaluate strategies for promoting public health. Social Media Self-Efficacy is defined as an individual's confidence in their ability to use social media technologies as a function of their employment to meet their employer's needs as well as to reach and engage the public. The Seven Areas of Responsibilities for Health Education Specialists will be used to arrange the various responsibilities that a health education specialist may accomplish when planning, implementing, or reviewing a social media program in this section. More specifically, the examiner will assess how confident the respondent is in their ability to complete each job.

The validity and reliability of social media Self-efficacy are ($\alpha = 0.98$) and item separation=6.76, the accepted value for social science study. The language used in the questionnaire in this research was dual language Bahasa Malaysia, and English.

3.6.3 Section C – Drug Community Readiness Survey

Community Readiness Survey is a survey developed and validated by the Minnesota Institute of Public Health (MIPH) that assesses resident attitudes and norms

regarding alcohol, tobacco, other drug use, and gambling problems to raise awareness, strengthen prevention strategies, and help spotlight areas of greatest need. The magnitude of the coefficients points to strong ($\alpha > .7$) internal consistency reliability among items in four of the eight domains and marginal reliability ($\alpha \geq .6$) in another.

The survey was designed to assist in determining where the community is in terms of readiness for prevention. The survey uses key leaders to look at eight areas: 1. Perception 2. Ownership 3. Support 4. Community efficacy 5. Community commitment 6. Social Norm 7. Communication 8. Behavior. Some tools exist to help prevention professionals assess community readiness. This tool can be used to assist prevention professionals in identifying how ready a community is for substance abuse prevention. The prevention professional or community coalition members can interview key informants using the survey, or the survey can be sent by mail to the key informants. In-person interviews can increase the response rate. However, they take more time to implement. While mailing surveys can save time, one must expect lower response rates. Regardless of which tool or method is used, it is essential that prevention program planning begins with the identification of a community's level of readiness and action to improve that community's readiness.

This Drug Community Readiness Survey has 11 questions. The answer choice is in the form of a Likert Scale and is divided into questions 1 (a, b, c,d,) (4 Likert scales (1 = Not at a problem 4 = A Serious Problem), Questions 2 (a) 4 Likert scales (1 = Never to 4 = Very Often), Question 3 (a, b) (1 = Not at all to 5 = A great deal), Question 4 (a,b, c,d) (1 = Not at all to 4 = Very), Question 5 (a,b,c,d) 5 Likert Scales (1=Strongly Agree to 5 = Strongly Disagree), Question 6 (a,b,c), Question 7 (a) 5 Likert Scales (1= Not at all and 5=Very). Question 8 5 Likert Scales (1= Strong Favor to 5=Strongly Oppose), 9 (No scoring sheet is available for this survey because the authors did not

create one. They recommend that the community average the response for each question and then interpret the results in the context of their community.

Table 3.2: Part of items Drug Community Readiness Survey

1.	**In your community, how much of a problem do you believe each of the following is?** **Dalam komuniti anda, berapakah besarkah masalah yang anda percaya setiap perkara berikut?**	**Not a problem** Tiada Masalah	**A minor problem** Masalah kecil	**A moderate problem** Masalah Sederhana	**A serious problem** Masalah serius
a.	Marijuana use by teenagers *Penggunaan ganja oleh remaja*	1	2A	3	4
b.	Other drug use (such as cocaine, inhalants, methamphetamines, or "uppers") by teenagers *Penggunaan dadah lain (seperti kokain, inhalan, methamphetamine atau "pendorong") oleh remaja*	1	2	3	4
c.	Marijuana use by adults *Penggunaan ganja oleh orang dewasa*	1	2	3	4

3.7. Data Collection and Procedure

Data were collected online using Google Forms. Researchers distributed links to questionnaires that have been created in Google Form through various means. Platforms such as WhatsApp and Telegram applications, Facebook, and email were used to distribute the form to the targeted respondents.

Written applications for permission were made to government offices, institutions namely Giatmara and Community Colleges, private colleges, and schools through the District Education Office (For youths in the organization, the list of youth names was obtained from the District Youth Office, Hilir Perak District AADK Squad, District Youth Council, Youth Association Chairmen and Club, NGO Association Chairmen, and other channels. The researchers have also provided QR Codes for respondents who

participated in various programs organized by departments/NGOs and associations to directly answer the questionnaire.

3.8 Analysis

The data obtained from the survey questionnaire were analyzed by using the statistical approach. According to Mohd Majid Konting (2004), a descriptive survey study is a study that aims to explain. This study describes an ongoing phenomenon, obtains a thorough explanation as well as explores areas that have not been studied to obtain accurate information. According to Sidek Mohd Noah (2002), survey research or descriptive study is often conducted to provide a systematic description of the facts and characteristics of a population or field of interest in an accurate fact. So, the results of the survey are loaded into the Statistical Package for the Social Sciences (SPSS) version 27 for statistical analysis. An assessment is conducted to test the reliability and validity of the measurement used.

Descriptive analysis was used to describe information about respondents 'profiles such as gender. In addition, descriptive analysis was also used to describe the variable's level of social media self-efficacy and level of youth,s readiness. According to Mohd. Majid (1990; in Juliah, 2004) statistical data analysis using SPSS programming software that can produce accurate calculations because it is free from errors. Since the researcher wanted to investigate the relationship between social media self-efficacy and youth's readiness, the Pearson Correlation analysis coefficient was used. Therefore, Spearman's Rho Correlational was used to measure the relationship between all the variables studied. Inferential statistical analysis, T-test was used to identify whether is there any difference in youth with a low and high level of self-efficacy in their social

media efficacy for drug prevention education.

3.9 Pilot Study

A pilot study involving 30 youths was conducted in January 2022 through the use of online Google Form. The purpose of doing the pilot test was to test the accuracy and the validity of the instrument as well as to identify problems that would be encountered during the administration of actual research. This step is important to ensure superior results will be obtained in this research. All ambiguities, confusions, and discrepancies found during the pilot study improved before the actual questionnaire was distributed to the sample. Feedback during the study pilots was used to address problems encountered during actual research.

A pilot study was also conducted to obtain the reliability of the items i.e. using Cronbach's Alpha coefficient. This step is important because the original instrument used in English has been translated into Malay by the researcher and there are modifications in the content of the original questionnaire. The feedback from the pilot study was used to ensure the appropriateness of the use of language and terminology of Malay language after translation and also the suitability of the questionnaire after adaptation. The results obtained from the implementation of a pilot study on youth on the questionnaires for Section B and Section C are as follows:

Table 3.3: Reliability Statistic Pilot Test for Social Media Self-efficacy

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.986	.986	49

Table 3.4: Reliability Statistic Pilot Test for Drug Community Readiness Survey

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.880	.879	30

3.9.1. Reliability and Validity

According to Tuckman in Sidek Noah (2002), test reliability means the test is consistent. Meanwhile, Mohd Majid Konting (1990) explained that reliability is the degree of consistency of a measuring instrument in changing variables or ideas. A measuring instrument with a high-reliability value indicates a consistent measuring instrument, on the other hand, if the reliability value is low it indicates an inconsistent measuring instrument.

Validity refers to the appropriateness of interpretations made of test scores and other evaluation results concerning the specific use of the evaluation (Ghafar 1998). The validity analysis is performed and conducted in this study to test the variables studied in this research to identify whether the variable is measurable or not. A validity test helps ensure that a test is following certain professional standards to ensure that its measures are supposed to be measured Kaplan & Saccuzzo (2001). In other words, the validity test measures the gap or differences between what is measured and the intention of what is intended to be measured. Face and construct validity are conducted and performed to examine and identify that the variables are valid and, at the same time, measurable. If face validity appears in the measurement, it measures what was supposed to measure. The supervisor judged the study's significance and questionnaire relevancies items, and construct validity was determined using factor analysis.

Construct validity used the factor analysis results, and these results were used to confirm whether theorized dimension emerged or not (Sekaran & Bougie, 2013).

3.10 Limitations of the Research

This research is limited to the aspects that are investigated and guided by a questionnaire available. It is also limited to selected samples only, namely the youth in Teluk Intan. In addition, this research also has some limitations beyond the power and ability of the researcher to avoid them.

The researcher could not ascertain the sincerity of the samples in answering survey questions. Differences between respondents having different levels of education as well likely to influence respondents to respond to or answer questionnaires investigate. Other factors such as limited period, experience, awareness, level of thinking, and suitability of location are also likely to influence the accuracy and excellence of this research.

3.11 Conclusion

To collect accurate data for this study, researchers have applied all of them these processes in the example. sampling methods, pilot studies, data collection, and data analyzed 377 youths in the Teluk Intan. The collected data were entered and analyzed using descriptive analysis methods to identify the mean values for each variable. Pearson correlation is used to measure the relationship between all variables studied. These results and findings of the study are discussed in the next chapter.