

KNOWLEDGE AND ATTITUDE ON SOCIAL  
ANXIETY DISORDER AMONG UNDERGRADUATE  
STUDENTS AT THE SCHOOL OF HEALTH  
SCIENCES, USM

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by

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requirements for the degree of Bachelor of Nursing  
(Honours)

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## CERTIFICATE

This is to certificate that the dissertation entitled “Knowledge and Attitude on Social Anxiety Disorder Among Undergraduate students at School of Health Sciences, USM”, is the bona fide record of research work done by Ms. Nurul Farah Shahira Binti Ahmad Kamil, during the period of October 2020 to June 2021 under my supervision. I have read this dissertation and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation to be submitted in partial fulfillment for the degree of Bachelor of Nursing (Honours).

.....

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## DECLARATION

I hereby declare that this dissertation is the result of my own investigation, except where otherwise stated and duly acknowledged. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at Universiti Sains Malaysia or other institutions. I grant Universiti Sains Malaysia the right to use the dissertation for teaching, research, and promotional purposes.

.....

Nurul Farah Shahira Binti Ahmad Kamil

Date: .....

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## **LIST OF ABBREVIATION**

<b>SAD</b>	Social Anxiety Disorder
<b>USM</b>	Universiti Sains Malaysia
<b>WHO</b>	World Health Organization

**PENGETAHUAN DAN SIKAP TENTANG GANGGUAN  
KERESAHAN SOSIAL DALAM KALANGAN PELAJAR IJAZAH  
DI PUSAT PENGAJIAN SAINS KESIHATAN, USM**

**ABSTRAK**

Pengetahuan tentang gangguan keresahan sosial mempengaruhi sikap yang menunjukkan penerimaan terhadap mereka yang mempunyai gangguan keresahan sosial. Kurang pendedahan terhadap gangguan keresahan sosial dijangka menyebabkan sikap yang negatif. Kajian keratan rentas dilakukan terhadap 389 orang peserta menggunakan kaedah persampelan mudah. Soal selidik disahkan dan diberi kepada semua peserta yang memenuhi kriteria inklusi. Objektif umum kajian ini adalah untuk menyelidik tentang pengetahuan dan sikap tentang gangguan keresahan sosial dalam kalangan pelajar ijazah di Pusat Pengajian Sains Kesihatan, USM. Tahap pengetahuan dan sikap tentang gangguan keresahan sosial dianalisis menggunakan statistik deskriptif. Perkaitan antara pengetahuan dan sikap tentang gangguan kegelisahan sosial, dan perkaitan antara data sosio-demografi (umur, jantina, dan kaum) dengan pengetahuan tentang gangguan keresahan sosial menggunakan ujian Chi Square. Penemuan penyelidikan ini menunjukkan kebanyakan pelajar ijazah di Pusat Pengajian Sains Kesihatan, USM mempunyai pengetahuan sederhana ( $n=276,71.0\%$ ) dan sikap positif ( $n=363,93.3\%$ ) terhadap gangguan keresahan sosial. Di dalam kajian ini, tiada perkaitan antara pengetahuan dan sikap tentang gangguan keresahan sosial dalam kalangan pelajar ijazah di Pusat Pengajian Sains Kesihatan, USM ( $\text{nilai-p}=0.959$ ). Juga tiada perkaitan antara sosio-demografi (umur, jantina, dan kaum) dengan pengetahuan tentang gangguan keresahan sosial dalam kalangan pelajar ijazah di Pusat Pengajian Sains Kesihatan, USM ( $\text{nilai-p}=0.078$ ). Meningkatkan pengetahuan dan sikap dalam kalangan pelajar boleh membantu untuk lebih memahami tentang gangguan keresahan sosial.

**KNOWLEDGE AND ATTITUDE ON SOCIAL ANXIETY  
DISORDER AMONG UNDERGRADUATE STUDENTS AT THE  
SCHOOL OF HEALTH SCIENCES, USM**

**ABSTRACT**

Knowledge on social anxiety disorder influence the attitude that shows the acceptance of people with social anxiety disorder. Less exposure to disorders including social anxiety disorder predicted endorsement of negative attitude. A cross-sectional study was conducted on 389 respondents recruited using a convenience sampling method. A validated questionnaire was given to all respondents that fit the inclusion criteria. The general objective of the study was to study the knowledge and attitude on social anxiety disorder among undergraduate students at the School of Health Sciences, USM. The level of knowledge and attitude on social anxiety disorder was analysed using a descriptive test. The association between knowledge with attitude on social anxiety disorder, and the association between socio-demographic data (age, gender, and race) with knowledge on social anxiety disorder was analysed using Chi-Square test. The findings of this study show that majority of undergraduate students at the School of Health Sciences, USM has moderate knowledge (n=276,71.0%) and positive attitude (n=363,93.3%) regarding social anxiety disorder. In this study, there is no significant association between knowledge with attitude on social anxiety disorder among undergraduate students at School of Health Sciences, USM (p-value=0.959). There is also no association between socio-demographic data (age, gender, and race) with knowledge on social anxiety disorder among undergraduate students at the School of Health Sciences, USM (p-value=0.078). Increasing the knowledge and attitude among students might help in better understanding of social anxiety disorder.

# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the Study

Social anxiety disorder is one of the diagnostic categories included in the American Psychiatric Association's (APA) and Diagnostic Statistical Manual of Mental Disorders (DSM) (Crome et al., 2015). Social anxiety disorder is a mental disorder. It is more than just shyness or self-consciousness since it can cause severe emotional distress. The American Psychiatric Association's (APA) Diagnostic and Statistical Manual describes social anxiety disorder as a recurrent fear of one or more social or performance circumstances in which the person is exposed to unknown individuals or future scrutiny. The individual fears that he or she will act in a way that will be embarrassing, humiliating, rejected, offending others, or negatively evaluated by others (Social Anxiety Institute, 2020). However, the fear is often being recognised as unreasonable or excessive.

The person who encountered these feared situations will try to avoid it and if he or she experienced it, it could cause intense anxiety and distress (Social Anxiety Institute, 2020). People with social anxiety disorder often will feel nervous, afraid, embarrassed when they are around other people or in another word when in social situations (Hofmann, Gutner & Fang, 2017). The individual feels afraid or anxious and avoids social interactions and circumstances that have the potential to be scrutinised. Other examples of social interaction are starting a conversation, being observed during eating or drinking, performing in front of others, such as given speech (American Psychiatric Association, 2013). One of the most common symptoms of social phobia is the fear of speaking in public, where studies have shown that almost nine out of ten people with social anxiety are afraid to talk in front of others (Schneier et al., 2015).

Among the anxiety disorders, social phobia or social anxiety disorder is nowadays considered the third most common psychiatric disorder (13.3%), exceeded in lifetime prevalence only by major depression (17.1%) and alcohol dependence (14.1%) (Reghuram & Mathias, 2020). Social phobia is more frequently found at a younger age from 18 to 29 years old. The disorder strongly affects further psychological development, relationship formation, educational decisions, and career perspectives due to the early age of onset.

Students generally avoid reporting and discussing the difficulties they experience such as interacting with people and quietly trying to combat fears in social settings. One of the reasons is the negative attitude of others towards them that makes them struggle in a social setting (Ejaz, Muazzam, Anjum, Pollock & Nawaz, 2020). This shows that attitude can affect the lives of those with social anxiety disorder. So, it is crucial to recognise the value of changing attitudes and perceptions to promote equality and inclusion for them. According to the Centre for Diseases Control and Prevention (2012), when the attitude is expressed positively, those struggling with disorders would feel supportive and tend to include themselves in a social setting. However, if negative attitudes are expressed, they would avoid being in a social setting, and this is the point that they would feel being discriminated against by others.

Due to the public stigma and fear that the whole family would be ashamed of being connected to someone having this disorder, most people with social anxiety disorder do not seek treatment. A study by Anderson, Jeon, Blenner, Wiener and Hope (2015) proves that compared to other illness, people with social anxiety disorder have the highest percentage that does not seek treatment, which is 80% of them compared with 40% of those with major depressive disorder and 50% of those with generalized anxiety disorder.

Persistent negative attitudes and the social rejection of people with social anxiety disorder happens throughout history. People with this disorder face widespread stigmatisation, discrimination, violence, neglect and avoidance, and the negative attitudes towards them are widespread among the public. Lack of awareness and knowledge encourages discrimination and stigmatisation. However, members of the public have more knowledge about the mental disorder are less likely to endorse stigmatising attitudes (Vijayalakshmi, Reddy, Math & Thimmaiah, 2013). The negative attitudes will become the barrier for those with social anxiety to continue their everyday life.

Those who are knowledgeable about social anxiety disorder, have a greater awareness of social anxiety issues, and are trained in skills that enable them to cope with those with social anxiety will lead to more positive attitudes and enlightened views. Personal knowledge can shape attitudes and beliefs about this social anxiety disorder. If the attitudes are shown positively, it can support those with the disorder.

## **1.2 Problem Statement**

Students need to have a good social interaction since they need to involve themselves with others and social interaction skill is required. However, in various areas of their lives, students with social anxiety disorder may become functionally impaired, such as lower educational achievement, unstable jobs, job absenteeism, and decreased productivity, leading to a dependency on family, community, and country (Ejaz et al., 2020).

According to the Anxiety and Depression Association of America about 15 million American adults have social anxiety disorder with a prevalence of 6.8%. The typical age of onset is 13 years of age, 36 percent of people with social anxiety disorder report symptoms for ten or more years before seeking help (Kumar, 2020). A study by



Rodebaugh, Weeks, Gordon, Langer and Heimberg (2012) revealed that many students lack knowledge and cannot to recognise symptoms of social anxiety. According to a study by Coles, Schubert, Heimberg and Weiss (2014) among psychology undergraduate students, the rate of recognition of all anxiety disorder is below 20% and social anxiety disorder recorded 8.8% which is low.

Low rates were also obtained from a study by Furnham & Lousley (2013) which is 10.73% for social anxiety disorder compared to 34.07% for specific phobia. This become a concern since it is important for students to know this disorder so that they are aware of their surroundings. Those with social anxiety struggles in their life such as interfere with everyday activities, work performance or social life, making it hard to complete school, interview and get a job, and have friendships. So, it is crucial for those surrounds them to recognize those with the disorder and help them through it.

Because of fear of the negative attitude of other people, most of those with social anxiety disorder would not seek treatment to improves their life. Those suffering from social anxiety disorder rarely meet a doctor for proper treatment. According to the Epidemiologic Catchment Area study, only 19.6% of individuals with social anxiety sought treatment (Reghuram & Mathias, 2020). This shows that those with social anxiety are concerned about others attitude, beliefs, and reaction towards them and affect them in their lives.

Knowledge plays an important role in how someone treats others, whether they accept them or not. There is a potential that an individual, who has limited knowledge about social anxiety, may acquire negative attitudes. Less exposure to disorders including social anxiety disorder predicted endorsement of negative attitude (Hoffman, 2017).

Thus, this study is important to see whether undergraduate students at the School of Health Sciences, USM has better knowledge and attitudes on social anxiety disorder.

### **1.3 Research questions**

1. What is the level of knowledge of social anxiety disorder among undergraduate students at the School of Health Sciences, USM?
2. What is the level of attitude of social anxiety disorder among undergraduate students at the School of Health Sciences, USM?
3. Is there any association between knowledge with attitude on social anxiety disorder of undergraduate students at the School of Health Sciences, USM?
4. Is there any association between socio demographic data (age, gender, and race) with the knowledge on social anxiety disorder among undergraduate students at the School of Health Sciences, USM?

### **1.4 Research objective**

#### **1.4.1 General objective**

1. To study the knowledge and attitude on social anxiety disorder among undergraduate students at the School of Health Sciences, USM.

#### **1.4.2 Specific objective**

The following specific objectives of this study are:

1. To determine the level of knowledge of social anxiety disorder among undergraduate students at the School of Health Sciences, USM.
2. To determine the level of attitude of social anxiety disorder among undergraduate students at the School of Health Sciences, USM.

3. To determine the association between the knowledge with attitude on social anxiety disorder among undergraduate students at School of Health Sciences, USM.
4. To determine the association between socio-demographic data (age, gender, and race) with knowledge on social anxiety disorder among undergraduate students at the School of Health Sciences, USM.

### **1.5 Hypothesis – null and alternative**

#### 1. Hypothesis 1

H<sub>O</sub>: There is no significant association between knowledge with attitude on social anxiety disorder among undergraduate students at the School of Health Sciences, USM.

H<sub>A</sub>: There is a significant association between knowledge with attitude on social anxiety disorder among undergraduate students at the School of Health Sciences, USM.

#### 2. Hypothesis 2

H<sub>O</sub>: There is no significant association between socio-demographic data (age, gender, and race) with knowledge on social anxiety disorder among undergraduate students at the School of Health Sciences, USM.

H<sub>A</sub>: There is a significant association between socio-demographic data (age, gender, and race) with knowledge on social anxiety disorder among undergraduate students at the School of Health Sciences, USM.

## **1.6 Significance of the study**

Social anxiety disorder affects towards individual's quality of life (Social Anxiety Institute, 2020). Students sometimes do not aware that they have social anxiety disorder. The symptoms shown are considered normal. Early detection is important for them. However, people around them, especially their friends also might not aware that their friends have social anxiety disorder. It is worsened by their attitude that considers that person showing the symptoms are troublesome.

Those with social anxiety tend to be alone rather than socialize with others especially if they are not familiar with other people. However, extreme fear and anxiety may cause physical symptoms such as blushing, racing heart, sweating, shaky hands or voice, confusion, light-headedness, upset stomach, diarrhea, vomiting, and shortness of breath (Schneier et al., 2015). Those who have poor knowledge might think the symptoms show that the person is avoiding them with poor socialization even in fact it is a disorder.

This study is done to determine the level of knowledge and attitude on social anxiety disorder and its association among undergraduate students at the School of Health Sciences, USM. Having this research may increase the student's awareness about social anxiety disorder, which includes the importance of supporting those with social anxiety and showing a better attitude towards them. Students might be aware of how their attitudes might affect those with the disorder. This exposure to social anxiety disorder to students contributes to a better understanding of social anxiety disorder.

The society has its way of perceiving social anxiety disorder, particularly the young generation and students. College-going students attitude and beliefs tend to influence society the most (Mohamed Mohamed Tork, 2015). Another group of society may be influenced to have a good attitude and beliefs about social anxiety disorder if students

show them a good one. Thus, understanding the attitudes and beliefs about people with social anxiety disorder among undergraduate students is the fundamental step.

Assessing the students' knowledge of social anxiety disorder may help for any intervention and educational programs to increase knowledge and better attitude by the university administrators. Furthermore, the findings of this study can be used as baseline data for further research in this area.

## 1.7 Conceptual and operational definitions

**Table 1.1:** Definition of Terms

<b>Terms</b>	<b>Conceptual definitions</b>	<b>Operational definition</b>
<b>Knowledge</b>	Knowledge is defined as facts, information and skills acquired through experience or education, the theoretical or practical understanding of a subject (Oxford Dictionary, 2020).	In this study, it is referring to understandings towards social anxiety disorder. It is measured using the questionnaire Knowledge of Social Anxiety Disorder Scale developed by Herbert et al (2004).
<b>Attitude</b>	A settled way of thinking or feeling about something (Oxford Dictionary, 2020).	In this study, it refers to the way of thinking or feeling towards social anxiety disorder. It is measured using the questionnaire Social Distance Intensity Score that is developed by Mather et al (2017).
<b>Social anxiety disorder</b>	It is a persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others. The individual fears that he or she will act in a way that will be embarrassing and humiliating by showing the symptoms (Social Anxiety Institute,2020)	In this study, it relate with the disorder that fulfils the symptoms in item that included in questionnaire Knowledge of Social Anxiety Disorder Scale by Herbert et al (2004).
<b>Undergraduate students</b>	A person who is currently studying for their first degree at a university (Oxford Dictionary, 2020).	In this study, it refers to the second year to fourth year students who are pursuing their study at the School of Health Science, USM.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This literature review discuss literature on social anxiety disorder and knowledge and attitude towards social anxiety disorder.

#### **2.2 Etiology of Social anxiety disorder**

The etiology of social anxiety disorder is explained with a few causes which are genetic predisposition, environmental factors, neuroticism, and trauma.

##### **2.2.1 Genetic predisposition**

Genetic factors play a significant role in the development of social anxiety disorder which is well-established. High rates of social anxiety disorder occur within the relatives and the family nature of it. Researchers have now found evidence for a gene that is believed to be linked to this social anxiety disorder. It encodes a serotonin transporter in the brain and this messenger suppresses feelings of anxiety and depressiveness (Anderson et al., 2015).

##### **2.2.2 Environmental factors**

People feel social fears that arise in unfamiliar settings. There is particular attention to both genetic and environmental factors that were found to contribute to the social anxiety. Brown, DiNarpo, Lehman, and Campbell (2013) also studied about this, and they found strong associations between social anxiety disorder with the strictness and aggression of families.

### **2.2.3 Neuroticism**

Neuroticism is a personality trait that is defined as a long-term tendency to be in a stress, negative or anxious emotional state (Medical News Today, 2018). It is related with experiencing worries, negative effects, and other somatic symptoms. Associations have been found between neuroticism, extraversion or positive emotionality, and mood and anxiety disorders (Alkhatami, 2015).

### **2.2.4 Trauma**

Trauma has a significant association with social anxiety. Alkhatami (2015) consider childhood abuse to be a risk factor for psychopathology in adulthood, including social anxiety disorder. Childhood trauma and social anxiety can also be related in terms of the parents' marital problems, separation, and family sexual abuse and violence. Emotional events such as excessive tearing, criticism, bullying, rejection, and humiliation were found to have a lasting, adverse effect on the person's futures and careers.

## **2.3 Knowledge on Social Anxiety Disorder**

Knowledge is related to the respondent's ability to understand how the individual with social anxiety thinks and feels (Ali, Kareem, & Al-Banna, 2017). To understand well what they think and feel, adequate knowledge about the disease can help to understand better. The underdiagnosis of social anxiety and subsequent lack of treatment, often result in progressively poorer prognosis (Reghuram & Mathias, 2020).

Early detection and intervention are essential. A study by Herbert, Crittenden and Dalrymple (2014) among many professions shows that 31% did not know that children with SAD often avoid social situations involving interactions with peers. Only 41% of participants knew that cognitive-behavioural interventions are generally effective for social anxiety disorder.



Most of the participants demonstrated less knowledge of symptoms and diagnostic issues for social anxiety disorder. It is revealed that teachers were scoring the lowest knowledge and psychologists scoring the highest knowledge. A study by Rodebaugh, et al., (2012) revealed that many students cannot recognise symptoms of social anxiety. Even those with good educational backgrounds do not have high knowledge about social anxiety also.

The knowledge is essential as it suggests what an individual sees and hears, they deem to be true. Therefore, this suggests that any positive information about social anxiety disorder will be substantial enough to obtain a positive view of this illness. Besides, Sadik, Bradley, Al-Hasoon and Jenkins (2020) reported that in developing countries, although the etiology of mental illness was understood, it was demonstrated that understanding the nature of mental illness is less prevalent. Individuals who are required to have a large amount of mental health knowledge such as general practitioners, continued to demonstrate negative stigma towards diagnosed patients (Hansson, Jormfeldt, Svedberg & Svensson, 2013).

#### **2.4 Attitude on Social Anxiety Disorder**

Eiroa-Orosa & Limiñana-Bravo (2019) conclude that individuals who suffer from mental health difficulties are most likely to experience stigmatising attitudes from others. Ali et al (2017) discovered a few beliefs amongst the public towards those with social anxiety disorder. It includes the belief that people who suffer from it are self-inflicted and difficult to communicate with. Those with social anxiety disorder already have problem to communicate and start a conversation. When others show attitude such as avoidance to speak and communicate with them, it will be more trouble and they tend to stay by themselves rather than being socialized with others.

The press is seemed to be responsible for the distorted opinion, beliefs, and attitude regarding mental health (Crome et al., 2015). Most media negatively show an inaccurate view of mental health, disease, and disorders. It impacts individual's attitude as they collect wrong information. 40% of the portrayals of mental health within the media remain negative (Whitley & Berry, 2013).

The theory of psychology indicates that stigma is a part of human nature, suggesting that people accept such behaviours for specific purposes. This statement shows that having stigma or not will shape the attitude of that person. Negative attitudes towards social anxiety can cause serious and enduring consequences on diagnosed individuals, which can affect all aspects of life (Alkhathami, 2015). Individuals who experience negative attitudes from others have a greater risk of completing suicide than those who are not (Whitley & Berry, 2013). Therefore, it is reasonably evident that negative attitudes towards mental health significantly affect life and well-being.

The results of a study also revealed that most of the individuals reported that if they were to notice that someone was anxious, it would not influence their thought of that individual's intelligence, ambition, reliability, or mental health. At the same time, however, individuals did report that they would think less of an individual's leadership abilities if that individual shows anxiety and a strong majority reported that they would think less of that individual's strength of character (Hofmann et al., 2017). This finding could reflect a general negative view of social anxiety disorder.

## **2.5 Relations between Socio-demographic and Knowledge on Social Anxiety**

### **Disorder**

A study has been conducted to assess the knowledge on social anxiety disorder among educational professionals with different socio backgrounds which are teachers, school psychologists and the school counsellors. The teachers scored lowest compared to the school psychologists and the school counsellors while psychologists were scoring the highest knowledge on social anxiety disorder. The results suggest an alarming lack of knowledge of social anxiety disorder among educational professionals (Herbert et al., 2004). The psychological knowledge demand rate in students with social anxiety symptoms was significantly higher than those without, which are 42.0% and 11.2% respectively (Wang et al., 2020).

Social anxiety disorders are more common among females than males (4.6% compared to 2.6% at the global level). In the Americas, as many as 7.7% of the female population are estimated to suffer from the disorder compared to males which is 3.6% (World Health Organization, 2017). Given females have a higher prevalence of social anxiety disorders, females were expected to show higher knowledge than males (Hadjimina & Furnham, 2017).

In terms of age, it is found that people over 60 years of age have lower knowledge to recognize various disorders, including social phobia and depression compared to those under 30 years of age (Reavley, Morgan & Jorm, 2014). Another study shows the knowledge is 59.8% for older adults, compared with 78.12% for young adults. This is due to young people's greater exposure to current knowledge on the disorders. Young age adults were more likely exposed to this type of information in school through various mental health prevention activities (Beaunoyer, Landreville & Carmichael, 2019).

In terms of the level of education, a higher level of education is also associated with better knowledge thus better recognition of social anxiety disorder and panic disorder. Undergraduate university degree has high knowledge compared to elementary and secondary students due to higher education level. Those with higher education level are more exposed to this disorder since educational programs are a primary source of knowledge (Hadjimina & Furnham, 2017).

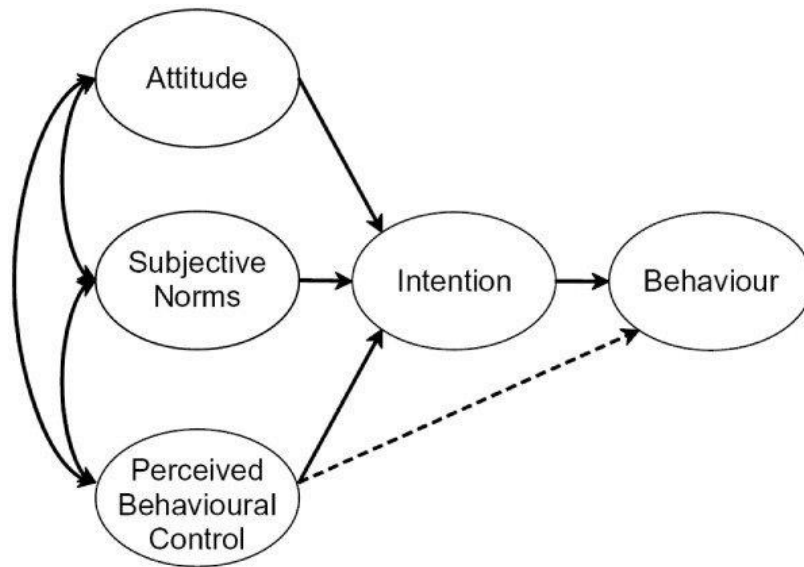
## **2.6 Relations between Knowledge and Attitude on Social Anxiety Disorder**

The impact of how knowledge can affect attitude change is essential. Sciences, Street and Kingdom (2017) reported that educated individuals show an increased level of positive attitudes towards social anxiety disorder. Consequently, these individuals possessed fewer stigmas. Further evidence suggests that a lack of understanding in a subject area is likely to cause negative attitudes. Lack of understanding is due to a lack of knowledge about that subject area. When providing an educational intervention strategy explicitly targeting this, participants' knowledge increased, which led to positive attitudes being developed (Anderson et al., 2015).

The WHO (2013) reported that the lack of knowledge is due to negative attitudes. In other words, there is a potential that an individual, who has limited knowledge about social anxiety, may acquire negative attitudes. The study from Hoffman (2017) revealed that less exposure to disorder including social anxiety disorder predicted endorsement of negative attitude.

## **2.7 Conceptual Framework**

This study use Theory of Planned Behaviour proposed by Ajzen (1991). This theory has a few components: attitude, subjective norm, perceived behavioural control, behaviour, and intention. Attitudes refer to the degree to which a person has a favourable or unfavourable evaluation of the behaviour of interest. Behavioural intention refers to the motivational factors influencing a specific behaviour where the stronger the intention to perform the behaviour, the more likely the behaviour will be performed. Subjective norms refer to the belief about whether most people approve or disapprove of the behaviour. It relates to a person's beliefs about whether peers and people of importance to the person think he or she should participate in the behaviour. Perceived behavioural control refers to a person's perception of the ease or difficulty of performing the behaviour of interest (LaMorte, 2019).

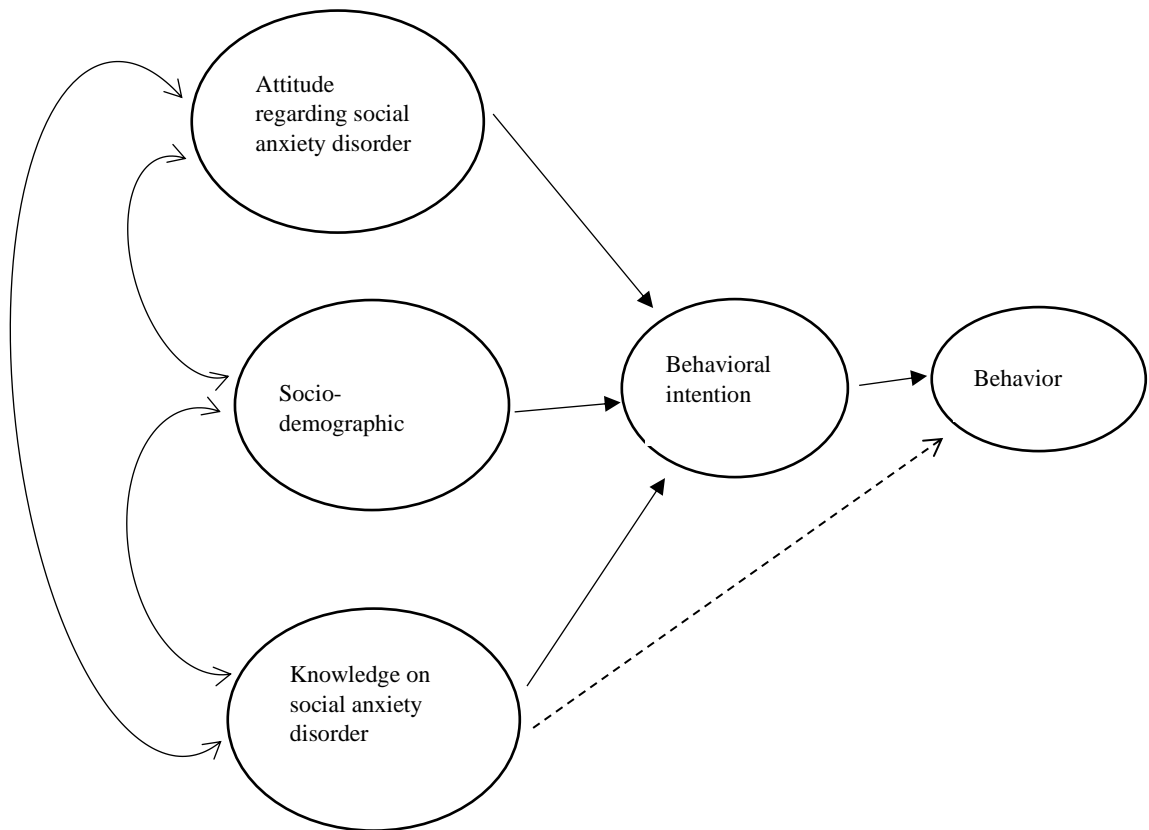


**Figure 2.1:** Theory of Planned Behaviour from Ajzen (1991)

Figure 2.1 shows the theory of planned behaviour. It explained that intention to perform behaviour of different kinds could be predicted from attitudes toward the behaviour, subjective norms, and perceived behavioural control. Attitudes, subjective norms, and perceived behavioural control are shown to be related to behavioural, normative, and control beliefs about the behaviour.

In this study, attitude towards the behaviour refers to the attitude of undergraduate students at School of Health Sciences, USM towards those with social anxiety disorder. The subjective norm in this study is socio-demographic data (age, gender, and race). Perceived behaviour control depends on the knowledge regarding social anxiety disorder. The determinants asked in the questionnaires that distributed known as Knowledge on Social Anxiety Disorder Scale by Herbert et al (2004). It can predict their behaviour towards those with social anxiety disorder.

Figure 2.2 shows the adapted version of Theory of Planned Behaviour that is being used in this study.



**Figure 2.2:** Theory of Planned Behaviour from Ajzen (1991)

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Introduction**

In this chapter, the research methodology was supported using the approach and rationale to support it. It includes the research design, location, duration, population, sample plan and data collection method, data analysis plan and instrument for data collection. The research design is important to achieve the objective of the study.

#### **3.2 Research design**

The research design selected for this study is a cross-sectional survey design. This type of study is suitable to give a detailed description of the participant's knowledge and attitude towards social anxiety disorder as well as the association between knowledge with the attitude of social anxiety disorder among undergraduate students at the School of Health Sciences, USM. It also includes association between socio-demographic factors with knowledge on social anxiety disorder. Students answered a set of a self-administered questionnaires.

#### **3.3 Study setting and population**

This study take place at Health Campus Universiti Sains Malaysia, Kubang Kerian, Kelantan. This research took time from October 2020 until June 2021, while the data collection from January 2020 until March 2020 using a self-administered questionnaire. The study was conducted on undergraduate students at the School of Health Sciences from year two until year four in Universiti Sains Malaysia (USM), Health Campus, Kubang Kerian, Kelantan. Students from different health sciences programs (Biomedical science, Dietetic, Forensic Science, Nursing, Exercise Sport Science, Nutrition, Medical Radiation, Environment and Occupational Science, Audiology and Speech Pathology)



were involved in this study. The total number of year two to year four undergraduate students at the School of Health Sciences, USM are 710 students.

This study excluded the first year of undergraduate students at the School of Health Sciences, USM. Because compared to the other year students, year one students are less exposed to the situation related to social anxiety. These includes socialising with their friends, doing the presentation, group assignment, and others. So, they might not be able to assess those surrounds them, especially classmates with this disorder and how they react with them. Year one students are having online class learning due to Covid-19. They might have presentation online, but social anxiety disorder can be assessed when face to face. This is because fear of speaking in public is one of the most common symptoms of social phobia, where studies found out that nearly nine out of ten people with social anxiety are frightened to speak in front of others (Schneier et al., 2015).

### **3.4 Sampling plan**

#### **3.4.1 Sample Criteria**

Inclusion criteria:

- Male and female students of year two to year four from the undergraduate student at School of Health Sciences, Universiti Sains Malaysia.
- Able to understand, speak and write in English

Exclusion criteria:

- Students from year one of undergraduate student at School of Health Sciences, USM
- Students from Diploma of Nursing, USM

### 3.4.2 Sample size estimation

The sample size calculated for each objective. In this study, the objectives were using single proportion formula to calculate the sample size.

Single proportion formula:

$$n = [Z/\Delta]^2 p(1-p)$$

Whereby,

n = Sample size

Z = Value representing the desired confidence level, 95% (Z score = 1.96)

$\Delta$  = Desired level of precision, plus minus 5%

p = Anticipated population proportion

For the first objective (to assess the level of knowledge on social anxiety disorder among undergraduate students at School of Health Sciences, USM), previous study by Herbert et al (2004), shows 78% (0.78) people have adequate knowledge regarding social anxiety disorder.

$$\begin{aligned} \text{Calculation: } n &= \left(\frac{Z}{\Delta}\right)^2 p(1-p) \\ &= \left(\frac{1.96}{0.05}\right)^2 (0.78)(1-0.78) \\ &= 263.7 \\ &= 264 \end{aligned}$$

The minimal sample size was 264 and after considering 10% drop out, the calculate sample size was:

$$n = 264 + 10\% \text{ drop out}$$

$$= 264 + 26.4$$

$$= 290 \text{ undergraduate students}$$

For the second objective (to assess the level of attitude on social anxiety disorder among undergraduate students at School of Health Sciences, USM), previous study by Madianos et al (2012), shows that 67% is the highest attitude score.

$$\begin{aligned} \text{Calculation: } n &= \left(\frac{Z}{\Delta}\right)^2 p (1-p) \\ &= \left(\frac{1.96}{0.05}\right)^2 (0.67) (1-0.67) \\ &= 339.75 \\ &= 340 \end{aligned}$$

$$n= 340 + 10\% \text{ drop out}$$

$$= 374$$

$$= 374 \text{ undergraduate students}$$

For the third objective which is to determine the association between the knowledge with attitude on social anxiety disorder among undergraduate students at School of Health Sciences, USM, previous study by Mather et al (2017), shows the result of 36%.

$$\begin{aligned} \text{Calculation: } n &= \left(\frac{Z}{\Delta}\right)^2 p (1-p) \\ &= \left(\frac{1.96}{0.05}\right)^2 (0.36) (1-0.36) \\ &= 354 \end{aligned}$$

$$n= 354 + 10\% \text{ drop out}$$

$$= 389.4$$

= 389 undergraduate students

Therefore, the reasonable sample size from the third objective which is (n=389) will be taken as the study sample.

### **3.4.3 Sampling method**

This study used convenience sampling for respondents during collection data time. It is a non-probability sampling. Population members who are conveniently available to participate, fulfil the inclusion and exclusion criteria will take part in this research. The questionnaire was distributed online for those who are conveniently available to take part will answer the questionnaire.

This research involves total of 389 participants. The participants are from Year 2, Year 3, and Year 4 of School of Health Sciences, USM. Convenience sampling is chosen as it is beneficial, easy, convenient, and not costly.

## **3.5 Instrumentation**

### **3.5.1 Instrument**

A questionnaire was used in this study to collect the data from respondents. It is written in English. The questionnaire consists of three sections which is Section A, B and C.

#### **3.5.1.1 Section A: Socio-demographic Data**

The questionnaire on socio-demographic data is comprises of five questions that include age, gender, year of education, programs, and race. For this section, there was a space provided for them to tick or write to answer the questions.

#### **3.5.1.2 Section B: Knowledge on Social Anxiety Disorder**

This section used the questionnaire that was developed by Herbert et al (2004) known as Knowledge on Social Anxiety Disorder Scale. This section consists of thirty-

six questions to measure the level of knowledge on social anxiety disorder. Respondents will be asked to choose the correct answer.

### **3.5.1.3 Section C: Attitude on Social Anxiety Disorder**

This section used the questionnaire that was developed by Mather et al (2017) known as Social Distance Intensity Score. This section consists of seven questions to measure the level of attitude on social anxiety disorder. It is rated on Likert scale which is ranging from strongly agree, agree, neither agree or disagree, disagree, and strongly agree. High scores suggested a negative attitude towards social anxiety disorder.

### **3.5.2 Translation of instrument**

The translation of instrument is not required since the original version of the questionnaire was already written in English. Moreover, the respondent that need to answer the questionnaire are all undergraduate students at School of Health Sciences that can understand English well. The inclusion criteria for this study also include students that can understand, speak, and write in English. So, there is no problem regarding the questionnaire and there is no need for translation. The questionnaire was distributed in the English version.

### **3.5.3 Validation and Reliability of Instrument**

Validity is the correlation value of measurement and true value of variable. High validity will have a measurement that accurately reflects the true value of the variable. The questionnaire was validated by three content experts which are nursing lecturers in USM Health Campus. Before the questionnaire was distributed, it is necessary to do content validation to ensure the questionnaire was easy to understand and applied to the population sample.

Reliability is the capability of the research to obtain the same value when measurements were repeated (Chua, 2016). The Cronbach alpha value for the