



**UNIVERSITI PUTRA MALAYSIA**

***PREVALENCE AND ASSOCIATED FACTORS OF DEPRESSION,  
ANXIETY AND STRESS AMONG SECONDARY SCHOOL STUDENTS  
IN SEKOLAH MENENGAH AGAMA, HULU LANGAT***

**MUHAMMAD NIZAM BIN MOHD HARIS (158683)  
SOON HIE YING (161340)**

**Ip  
FPSK1 2013 8**

## ACKNOWLEDGEMENT

We would like to extend our heartiest thanks to Dr. Salmiah Binti Md Said for her patient guidance and supervision throughout the course of this study, without which we would not be able to complete and produce a comprehensive research.

We would also like to thank Dr Titi Rahmawati binti Hamedon for her helpful advices and support. We are indebted to our classmates who are willing to help us in various ways towards the completion of this project.

We would like to express our sincere appreciation towards our respondents, staffs and teachers from Sekolah Menengah Islam Abim and Sekolah Menengah Islam Al-amin for their kind cooperation during our data collection period.

Last but not least, we would like to thank the lecturers for their informative lectures and helpful guidance.

## PREVALENCE AND ASSOCIATED FACTORS OF DEPRESSION, ANXIETY AND STRESS AMONG SECONDARY SCHOOL STUDENTS IN SEKOLAH MENENGAH AGAMA, HULU LANGAT

M.N.M.HARIS<sup>1</sup>, H.Y.SOON<sup>1</sup>, S.M.SAID<sup>2</sup>, T.R.HAMEDON<sup>2</sup>

<sup>1</sup> *Second Year Medical Student*

<sup>2</sup> *Department of Community Health, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia*

### Abstract

**Introduction:** Mental health problems are common issues in all region of the world. It is crucial especially among secondary school students as they have to face with lots of changes in terms of physical, emotional, psychological, or social that can be associated with mental health problems.

**Objective:** To study the prevalence of depression, anxiety and stress among secondary school students and to determine the association between gender, family income, parents' marital status and self-esteem level with depression, anxiety and stress among secondary school students.

**Methods:** This was a cross-sectional study. Self-administered questionnaire was used to collect the data from the secondary school students of Form One, Two and Four from the particular schools. All the data were analysed using SPSS version 21.

**Results:** The prevalence of the depression among the respondents is about 44.3% , 67.5% for anxiety and 43.9% for stress. There are significant association between total family income with depression ( $p=0.039$ ), self-esteem with depression ( $p<0.001$ ), anxiety ( $p=0.001$ ) and stress ( $p<0.001$ ). However, there are no significant association between gender with depression, anxiety and stress, total family income with anxiety and stress, parents' marital status with depression, anxiety and stress.

**Conclusion:** The prevalence of respondents having mental problems are considered quite high especially anxiety which comprised of 206 out of 305 respondents. Sex of the students and their parents' marital status do not influenced their depression, anxiety and stress level. Income of the family also has no significant impact on the anxiety and stress level of the students but do significantly associated with their depressed level. On the other hands, self-esteem of the respondents does affect their depressed, anxiety and stress level.

**Keyword:** depression, anxiety and stress

**PREVALENS KEMURUNGAN, KERESAHAN DAN TEKANAN DAN  
FAKTOR-FAKTOR YANG MEMPENGARUHINYA DI KALANGAN  
PELAJAR SEKOLAH AGAMA DI DAERAH HULU LANGAT.**

M.N.M.HARIS<sup>1</sup>, H.Y.SOON<sup>1</sup>, S.M.SAID<sup>2</sup>, T.R.HAMEDON<sup>2</sup>

<sup>1</sup> *Second Year Medical Student*

<sup>2</sup> *Department of Community Health, Faculty of Medicine and Health Sciences,  
Universiti Putra Malaysia*

**ABSTRAK**

**Pengenalan:** Masalah kesihatan mental adalah isu-isu yang biasa dalam semua rantau di dunia. Ia adalah penting terutamanya di kalangan pelajar sekolah menengah kerana mereka terpaksa berdepan dengan banyak perubahan dari segi fizikal, emosi, psikologi, atau sosial yang boleh dikaitkan dengan masalah kesihatan mental.

**Objektif:** Untuk mengkaji kelaziman kemurungan, keresahan dan stress di kalangan pelajar sekolah menengah dan untuk menentukan hubungan antara jantina, pendapatan keluarga, status perkahwinan ibu bapa dan tahap harga diri dengan kemurungan, keresahan dan tekanan di kalangan pelajar sekolah menengah.

**Kaedah:** Ini adalah satu kajian keratan rentas. Soal selidik yang ditadbir sendiri telah digunakan untuk mengumpul data daripada pelajar-pelajar sekolah menengah Tingkatan Satu, Dua dan Empat dari sekolah-sekolah tertentu. Semua data dianalisis dengan menggunakan perisian SPSS versi 21.

**Hasil:** Prevalens kemurungan di kalangan responden adalah kira-kira 44.3%, 67.5% untuk keresahan dan 43.9% bagi tekanan. Terdapat hubungan yang signifikan antara jumlah pendapatan keluarga dengan kemurungan ( $p=0.039$ ), harga diri dengan kemurungan ( $p<0.001$ ), keresahan ( $p=0.001$ ) dan tekanan ( $p<0.001$ ). Walau bagaimanapun, tidak terdapat hubungan yang signifikan antara jantina dengan kemurungan, keresahan dan tekanan, jumlah pendapatan keluarga dengan keresahan dan tekanan, status perkahwinan ibu bapa dengan kemurungan, keresahan dan tekanan.

**Kesimpulan:** Prevalens daripada responden yang mempunyai masalah mental dianggap agak tinggi terutamanya keresahan yang terdiri daripada 206 daripada 305 responden. Seks pelajar dan status perkahwinan ibu bapa mereka tidak mempengaruhi tahap kemurungan, keresahan dan tekanan mereka. Pendapatan keluarga juga tidak

memberi kesan yang besar ke atas tahap keresahan dan tekanan pelajar tetapi ketara yang dikaitkan dengan tahap tertekan mereka. Pada tangan yang lain, harga diri daripada responden tidak memberi kesan kepada tahap tertekan, keresahan dan tekanan mereka.

**Kata kunci:** Kemurungan, keresahan, tekanan



COPYRIGHT UPM

## TABLE OF CONTENTS

CHAPTER		PAGE
1	<b>INTRODUCTION</b>	
	1.1 Background	1-4
	1.2 Problem Statement	4-5
	1.3 Objectives	
	1.3.1 General Objectives	6
	1.3.2 Specific Objectives	6-7
	1.4 Research Hypothesis	7-8
2	<b>LITERATURE REVIEW</b>	
	2.1 Epidemiology of depression, anxiety and stress	9-12
	2.2 Depression, anxiety and stress with religiosity	12-13
	2.3 Factors Associated with Depression, anxiety and stress	13-22
	2.4 Other factors	22-24
	2.5 Conceptual Framework	25
3	<b>METHODOLOGY</b>	
	3.1 Study Location	26
	3.2 Study Design	26
	3.3 Study Duration	26
	3.4 Sampling	
	3.4.1 Study Population	26

3.4.2	Sampling Population	26
3.4.3	Sampling Frame	26
3.4.4	Sampling Unit	27
3.4.5	Sampling Size	27
3.4.6	Sample Technique	27
3.5	Data collection	
3.5.1	Study Instruments	28
3.5.2	Data collection Technique	28
3.6	Data analysis	29
3.7	Study ethics	29
3.8	Variables	
3.8.1	Dependant variable	29
3.8.2	Independent Variable	29
3.9	Definition of terms	30-31
3.10	Validity and reliability	31
3.11	Study flow chart	32
<b>4</b>	<b>RESULT</b>	
4.1	Response Rate	33
4.2	Socio-Demographic Characteristics	33-35
4.3	Self-Esteem	36
4.4	Prevalence of Depression, Anxiety and Stress	
4.4.1	Depression	37
4.4.2	Anxiety	38
4.4.3	Stress	39
4.5	Association between Socio-demographic Characteristics and Depression, Anxiety and Stress	
4.5.1	Association between Socio-demographic and	

	Depression	40-41
	4.5.2 Association between Socio-demographic and Anxiety	41
	4.5.3 Association between Socio-demographic and Stress	42
	4.6 Association between Self-Esteem and Depression, Anxiety and Stress	
	4.6.1 Association between Self-Esteem and Depression	43
	4.6.2 Association between Self-Esteem and Anxiety	44
	4.6.3 Association between Self-Esteem and Stress	45
5	<b>DISCUSSION AND CONCLUSION</b>	
	5.1 Discussion	46-51
	5.2 Limitation	51-52
	5.3 Conclusion	52
	5.4 Recommendation	53
6	<b>REFERENCES</b>	54-59
7	<b>APPENDIX</b>	
	Appendix 1 : Questionnaire	
	Appendix 2 : Approval letter from SMI ABIM	
	Appendix 3 : Approval letter from SMI AL-AMIN	

## LIST OF TABLES

<b>TABLE</b>	<b>TITLE</b>	<b>PAGE</b>
<b>I</b>	Socio-demographic characteristics	34-35
<b>II</b>	Association between Socio-demographic and Depression	40
<b>III</b>	Association between Socio-demographic and Anxiety	41
<b>IV</b>	Association between Socio-demographic and Stress	42
<b>V</b>	Association between Self-Esteem and Depression	43
<b>VI</b>	Association between Self-Esteem and Anxiety	44
<b>VII</b>	Association between Self-Esteem and Stress	45

## LIST OF FIGURES

FIGURE	TITLE	PAGE
I	Factors associated with Depression, Anxiety and Stress	25
II	Study Flow Chart	32
III	Frequency of Self-Esteem	36
IV	Prevalence of Depression	37
V	Prevalence of Anxiety	38
VI	Prevalence of Stress	39



## CHAPTER 1

### INTRODUCTION

#### 1.1 Background

Nowadays, mental health problems are common issues in all regions of the world, affecting every community and age group across all countries. Mental health covers broad aspects which not only affect the thinking, feeling and behaviour that may interfere with the normal functioning of the individuals but also determine how they solve their problems and cope with the stress (National Institute of Health, 2013). Depression, anxiety and stress are the examples of the mental health problems that are commonly faced by the population of the world.

According to the World Health Organization (WHO), many of the mental health problems emerge in late childhood and early adolescences. Adolescence is a transitional stage from childhood to adulthood which occurs between the ages of 10 to 19 years old. During this stage, they face a lot of changes not only physically, but also mentally and psychologically. Research has shown that the majority of adults who suffer from mental health problems indicate that their symptoms began in childhood and adolescence (Ringelstein et al., 2002).

Globally, Roberts et al. (1998) reported that the prevalence rates of mental health problems among children and adolescents range from 1% to 51% with a mean rate of 15.8% for adolescents. In the USA and Australia, one in five teenagers suffers from mental health problems. Several studies indicate that prevalence rates of individual disorders such as depression, anxiety and stress are rising and becoming more common among adolescents (Kessler et al., 1994). Harrington and Clark reported that

60% of adolescents developed depression symptoms (Harrington & Clark, 1998). An earlier study on Saudi secondary school boys indicated that 38.2% had depression, whereas 48.9% having anxiety and 35.5% suffered from stress (Gelban et al., 2009). Worldwide, overall rates of mental health problems in children was found to be 17.7% in Australia (Zubrick et al., 1995), 18.1% in Canada (Offord et al., 1987), 17.6% in New Zealand (Anderson et al., 1987), 26% in Netherlands (Verhulst et al., 1984) and 17.9% in Puerto Rico (Bird et al., 1988).

In Malaysia, mental disorder is very common especially among the adolescents which second leading disease in female and fourth leading disease in male (Institute for Public Health, 2004). According to Teoh et al (2008), the prevalence of adolescence suffers from mental health problem is 13%. According to Ministry of Health and Malaysian Psychiatric Association (1999), depression are one of the most common mental health problem in Malaysia as compare to others. According to statistics, mental health problem involving the adolescence group have rose to 13% in 1996, 19.4% in 2006 and 20% in 2011 (Ministry of Health, 2011). This shows that mental health have become one of the common problem that suffer by today adolescence.

According to World Health Organization (WHO), mental health is not defined just as the absence of mental disorder but also is a state of well being by which the individual realizes their abilities and could potentially cope with the normal stress of life and work productively. Depression is a common mental disorder characterized by sadness, loss of interest or pleasure, feeling of guilt or low self worth, disturbed sleep or appetite, feeling of tiredness, and poor concentration. Anxiety is a multifaceted emotional state involving feeling of uneasiness, dread, or fear about the future. Besides the emotional state, there also often associated with physical symptoms such

as sweating, dizziness, shortness of breath and etc., which result from action of autonomic nervous system. Stress by definition is a state of physiological or psychological strain caused by adverse stimuli, which can be physical, mental, internal or external that tends to disturb the normal functioning of the individual. There are good stress and bad stress. The one that promotes and facilitates learning is known as good stress. An optimal level of stress can enhance learning ability. On the other hand, stress that inhibits and suppresses learning process is known as bad stress. (Kaplan et al., 2000)

Poor mental health can affect the wider problem in health and development of adolescents and is associated with several health and social outcomes such as alcohol and tobacco abuse, adolescent pregnancy, school drop out and delinquent behaviours. Healthy development during childhood and adolescence can prevent mental health problems and can contribute to good mental health of the individuals. Besides, by enhancing individual social skills, problem solving skills and self-confidence can also help prevent mental health problems (WHO, 2013).

In 2007, more than 20% of youth ages 12-17 who were diagnosed as having a major depressive episode and also reported in at least one of the four major role domains (home, school/work, family relationship, or social life), and almost one half of youth reported with severe impairment in at least one of those domains [Substance Abuse and Mental Health Services Association (SAMHSA), 2008]. Therefore, mental health problems need to be detected earlier to help those with this kind of problem.

Thus, this present study is to study deeper about the prevalence of depression, anxiety and stress among the adolescence especially secondary school students also the association of the gender, family income, parents' marital status,

self-esteem with this mental health problems. We wish to know that, are these factors influence or affect the depression, anxiety and stress condition among the adolescence because this mental health problem have become one of the major and common problem facing by them nowadays.

## 1.2 Problem Statement

As time goes, mental health problem seem to be more serious and commonly suffers by not only in adult but also in school going adolescence. Globally, depression have become most common mental health problem that faced by adolescence followed by anxiety and stress. In 2007, there are more than 20% of adolescence having depression which due to at least one of the four major role (home, school/work, family relationship, or social life). This mental health problem commonly occur in adolescence because this period of time is very crucial for them. They will face a lot of changes not only emotionally but also physically, mentally and psychologically. Mental health problem can lead to inappropriate behaviour. For example, they tend to start smoking, drinking alcohol, bullying and etc. This is the one of the way they want to release their stress and escape their problem. Due to this problem, the authority have done a lot of afford in order to help those adolescence to reduce the mental health problem.

Thus, this study mainly concentrate on secondary school adolescence. More specifically among those going for sekolah menengah agama. As we know, those adolescence that studying in the religious school tend to have lower level of mental health problem as compare to adolescence that go to regular school. This is because those adolescence in religious school tend to have stronger religious belief as compare

to others. A lot of study believe that those individual with religiosity was associated with great self-esteem and self-care also lower risk of mental health problem such as depression. Besides, religiosity have said to be protective factors for mental health problems (Kark et al. 1996). Therefore, adolescence that go for religious school are said to be less depress, anxious and stress as compare to the others. This is because they not only learn the regular subject, they also learn more about the religiosity. This is because studying religious is believe to help in preventing the mental health problems to occur.

In Malaysia, there a lot of previous study done in regular school, but none of them focus on religious school. Therefore, this study is to compare with the previous study, whether the adolescence going to religious school have lower mental health problems as compare to those going for regular school.

### **1.3 Objective**

#### **1.1.1 General Objectives**

The general objective of this study are :

- 1.1.1.1 To study the prevalence of mental health problem among secondary school students.
- 1.1.1.2 To identify the association between the factors and the types of mental health problems among secondary school students.

#### **1.1.2 Specific Objectives**

The specific objective of this study are :

- 1.1.2.1 To determine the prevalence of depression among secondary school students.
- 1.1.2.2 To determine the prevalence of anxiety among secondary school students.
- 1.1.2.3 To determine the prevalence of stress among secondary school students.
- 1.1.2.4 To determine the association between gender and depression among secondary school students.
- 1.1.2.5 To determine the association between gender and anxiety among secondary school students.
- 1.1.2.6 To determine the association between gender and stress among secondary school students.
- 1.1.2.7 To determine the association between family income and depression among secondary school students.
- 1.1.2.8 To determine the association between family income and anxiety among secondary school students.

- 1.1.2.9 To determine the association between family income and stress among secondary school students.
- 1.3.2.10 To determine the association between parents' marital status and depression among secondary school students.
- 1.3.2.11 To determine the association between parents' marital status and anxiety among secondary school students.
- 1.3.2.12 To determine the association between parents' marital status and stress among secondary school students.
- 1.3.2.13 To determine the association between self-esteem and depression among secondary school students.
- 1.3.2.14 To determine the association between self-esteem and anxiety among secondary school students.
- 1.3.2.15 To determine the association between self-esteem and stress among secondary school students.

#### **1.4 Hypothesis**

The alternative hypotheses are:

- 1.4.1 There is an association between gender and depression among secondary school students.
- 1.4.2 There is an association between gender and anxiety among secondary school students.
- 1.4.3 There is an association between gender and stress among secondary school students.

- 1.4.4 There is an association between family income and depression among secondary school students.
- 1.4.5 There is an association between family income and anxiety among secondary school students.
- 1.4.6 There is an association between family income and stress among secondary school students.
- 1.4.7 There is an association between parents' marital status and depression among secondary school students.
- 1.4.8 There is an association between parents' marital status and anxiety among secondary school students.
- 1.4.9 There is an association between parents' marital status and stress among secondary school students.
- 1.4.10 There is an association between self-esteem and depression among secondary school students.
- 1.4.11 There is an association between self-esteem and anxiety among secondary school students.
- 1.4.12 To determine the association between self-esteem and stress among secondary school students.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Epidemiology of Depression, Anxiety and Stress

##### 2.1.1 Depression

Depression is the commonest mental health problem that always occur among adolescence and high rates of depression had been reported during last fifteen years (Marcotte et al., 2006). 3 to 9% of adolescence meets the criteria for the depression at any one time, and at the end of the adolescents, as many as 20% of teenagers report a lifetime prevalence of depression (Zuckerbrotand Jensen, 2006). In Malaysia, the prevalence was found to be 13% among adolescence (Toh et al., 1997). Based on a study by local researcher Siti Nor Yaacob et al. (2009), there is about 24% of secondary school adolescence having depression. In addition, local researchers also reported the prevalence of possible depression among adolescence is 10.3% (Ramli et al., 2008). Besides, there are numbers of epidemiological studies reported that up to 8.3% of adolescence in US suffers from depression (Birmaher et al., 1996). In Hong Kong, some researchers found that the point prevalence of depression among adolescence was around 2.2% by structured diagnostic interviews with the sample (Stewart et al., 2002). The government documented an incidence rate of 0.4% - 2.5% in childhood and 0.4%-8.3% in adolescence in 2003 (Department of Health HKSAR, 2003). This shows a sharp rise in incidence rate from childhood to adolescence stages which implied that the population has been increasingly affected by depression. Vivek et al. (2009) conclude that, 15.2% of the adolescent had evidence of distress and 18.4% were found to be depressed which due to family, social and study problems. This showed that, depression among the adolescence is common globally and it is due to

the problem that happens in their daily life. Another study is US report that approximately 2% of adolescence having depression in 1960s and increasing in 1990s to almost 25% (Johnson et al., 2010). In Hong Kong, a relatively large proportion of young people tend to be depress (Chou et al., 2000).

### 2.1.2 Anxiety

Anxiety disorder is one of the most common psychiatric disorders among the children and adolescence, but they often do undetected or untreated. Approximately one in every four to five youth in US meets the criteria for the mental disorder with severe impairment across their lifetime (Kathleen et al., 2010). According to Kathleen et al. (2010), the most common mental disorder that occurs among the youth is anxiety disorders (31.9%), followed by behaviour disorders (19.1%), mood disorders (14.3%), and substance use disorders (11.4%). The overall prevalence of disorders with severe impairment and/or distress was 22.2%. The prevalence of any anxiety disorder in youths ranges from 2% to 4%, with 6- and 12-month estimates between 10% and 20%, and lifetime estimates only slightly higher (Costello et al., 2003). Furthermore, anxiety disorder often comorbid with other psychiatric disorder especially depression. Anxiety often precedes depression, the co-occurrence of anxiety and depression increase with age and is associated with grater impairment (Sucheta and Sonali, 2011). For example, the Bremen Adolescents study, 72% of the adolescence with both these disorder had anxiety before that of depression (Essau et al., 2000); only 12% had depression before anxiety, and 16% had anxiety and depression within the same years. Prevalence rate of anxiety among adolescence, range from 4% to 25%, with average rate of 8% worldwide, this based on Bernstein &

Borchardt (1991) and Boyd et al. (2000). These figures could be underestimated since anxiety among a large number of children and adolescence goes undiagnosed owing to internalized nature of its symptoms (Tomb & Hunter, 2004). Based on local study in Malaysia, prevalence rate of anxiety among adolescence was 14% (Toh et al., 1997). This shows the prevalence rate in Malaysia almost or near to other countries around the world. Anxiety always study together with other mental health problems especially depression as mention before. In addition, about 10% to 30% of school children found to experienced anxiety which severe enough to impaired performance (Johnson, 1979).

### 2.1.3 Stress

Stress is one of the important components in determining the mental health status. Several studies showed that, secondary education has always been regarded as a stressful environment to students. World Health Organization estimated that 20% of adolescent around the world having mental health problems. Studies of stress always been study together with other mental health problems mainly depression and anxiety. Based on study done by Sahoo and Khess (2010), the prevalence of depression, anxiety and stress among adolescence and young adults around the world is currently estimated to range from 5% to 70%. The stress level range from mild to severe is reported to be 20% (Sahoo et al., 2010). According to study done on Saudi secondary school students, the prevalence of the stress for male and female are 35.5% and 52.5% respectively. Based on the study, it shows that the stress mainly occur among children and adolescence especially female. Some studies also shows that during adolescence period, they might be vulnerable to stress, especially when exacerbated by the use of

uneffective coping strategies which later results in other mental health problems (Compas et al., 1993; Edgar et al., 2003). Based on local studies, the prevalence of stress among secondary school students in Malaysia was 26.1% and it is relatively higher compared to the normal population, which is less than 10% as mentioned by Flirth (1986). Academic related problem were the major stressors among the students (Yusoff, 2010). Another study done in Malaysia, stress (70%) was reported as the commonest reasons of continuing smoking (Khairani et al., 2007). This shows that stress lead to increasing the substance abuse among adolescence.

## 2.2 Depression, Anxiety And Stress With Religiosity

In years 2000, 93 observational studies have been done and two thirds of the studies shows significantly lower rates of depressive disorder or fewer depressive symptoms among the individual with more religious as compare to the less religious. The individual religiosity was associated with greater self-esteem and self-care also lower risk of depression. Which about 80% of the participants had attended religious services to help them in coping with their symptoms and frustration. (Aaron et al., 2006) This shows that, the more religious the individual are protected from getting depression. Some of the studies show that more religious are protective factors for mental health problems. (Kark et al., 1996) According to Amir Ali Tavabi, there are significant association between religious beliefs and mental health ( $p$  value $<0.001$ ). The results show the good mental health in weak, average, and strong religious beliefs with 7.2%, 49.6%, 43.2% respectively. (Amir and Elham, 2011)

Based on *Handbook of Religion and Health*, there are 299 quantitative studies that had examined the relationships between religious belief and behaviours and

anxiety. About 49% of those research shows inverse relationships between religiosity and anxiety or decrease in anxiety in response to religious interventions. Of the 41 experimental studies or randomized clinical trials, 71% reported that religious interventions lowered the anxiety (Koenig H, 2012)

## **2.3 Factors Associated With Depression, Anxiety And Stress**

### **2.3.1 Socio-Demographic And Depression, Anxiety And Stress**

#### **2.3.1.1 Gender And Depression**

In South Australian, a research was conducted by Black et al. (2012) on title Depression in rural adolescents: relationships with gender and availability of mental health services. Mental health problems are considered as a major burden of disease for adolescents, with approximately 20% of Australian 12-16 year-olds having some symptoms of mental health problems and reports signifying that between 4% to 25% of adolescents experience depression. A total of 23% of females and 11.8% of males screened positive for depression. The  $\chi^2$  value of 10.92 had an associated probability of  $p=0.001$ ,  $df=1$ . (Black et al., 2012)

In a ten-year longitudinal study using a New Zealand metropolitan sample, Hankin et al. (2012) discovered that at the age of 15 years, 4% of females were diagnosed with depression but only 1% of males had this diagnosis. Both genders experienced a speedy increase in depression rates from age 15 to 18 years. However, the rise in females was more intense, increasing the gender difference (23% of females and 11% of males) (Hankin et al., 2012). Another study on depression in adolescence also done by Sultana Zakiya Huq et al.(2005). From the result of the

study, there was a significant difference between gender and depression ( $F=29.72$ ;  $df=1,156$ ;  $p<0.01$ ). (Sultana Zakiya Huq, 2005)

Besides, Cindy et al. (2006) done a survey on the roles of sex, gender, and coping in adolescent depression. There is increase evidence of female adolescent has become depressed than that of their male peers. Furthermore, the association between stress and depression is more obvious in females than that of males. Result shows that, girls are more depressed than the boys, (girls,  $SD= 27.39$ ,  $n= 159$  ; boys,  $SD= 26.74$ ,  $n= 83$ ) with  $p= 0.002$ . (Li et al., 2006)

Jean and Susan (2002) done a research on Age, Gender, Race, Socioeconomic Status, and Birth Cohort Differences on the Children's Depression Inventory. From their research, starting at age 13, girls found to have significantly higher levels of depressive symptoms, with the CI not including zero ( $d=0.08$  at age 13). By age 14, the difference achieve 0.21. All of the gender differences favouring girls after age 13 which were statistically significant. (Twenge and Susan, 2002)

A research was conducted among two groups of adolescent in different area in Mexico by William G. Masten, A. Toy Caldwell-Colbert, Velma Williams, Wanda W. Jerome, Laura Mosby, Yolanda Barrios, and Joseph Helton. Previous research has showed adolescent females developed higher levels of depression compared to adolescent males. However, from the result of their study, male in group one had a mean score of 17 ( $SD = 8.2$ ) and females had a mean score of 16 ( $SD = 8.0$ ). The result indicated no significant differences ( $t(96) = .96$ ;  $p = .34$ ) between males and females. On the other hand, males in group two had a mean score of 10 ( $SD = 9.4$ ) and females had a mean score of 12 ( $SD = 10.5$ ) which also showed no significant differences,  $t(140) = 1.2$ ;  $p = 0.28$  (William et al., 2003). According to a recent study by Al-Sughayr and Ferwana (2012), they found that the prevalence of mental illness

was 48% (41% in males and 51% in females); more than 80% of these cases were mild to moderate. Females showed significantly more severe disorders compare to males ( $P = 0.017$ ). (Al-Sughayr and Ferwana, 2012)

### 2.3.1.2 Gender And Anxiety

A research which done by Deb et al. (2010) on title Anxiety among high school students in India. Results show that the mean anxiety score for adolescent boys (24.06) was found to be higher than that for adolescent girls (22.55) with 20.1% of boys and 17.9% of girls also found to be suffering from high anxiety. This result showed there is a significant difference between gender and the anxiety disorder since  $p < 0.05$  (Deb et al., 2010). Besides, Angela et al. had conducted a survey on Gender Differences in Test Anxiety. However, from her study result, there was no significant difference between gender on test anxiety, with  $F(1, 288)=0.586, p>0.05$ . (Fiore, 2013)

Another studies done by Tan et al. on Gender Difference of Unconscious Attentional Bias in High Trait Anxiety Individuals. The results indicated that the interaction between gender and anxiety state was significant ( $F(1, 44) = 4.77, p = 0.034$ ) (Tan et al., 2011). In 2004, a study was done by Ahmed and Bader on gender differences in anxiety among undergraduates from ten Arab countries. From the result, the female groups had higher mean anxiety scores in all the 10 countries than that of their male counterparts. However, significant differences were found in 7 out of the 10 countries, with  $p=0.001$ . Female preponderance of anxiety has been a constant result whether in children, adolescents, undergraduates, adults, the aged, or in community surveys. (Ahmed and Bader, 2004)

### 2.3.1.3 Gender And Stress

According to American Psychological Association (APA), women are found to be more likely than men to report that their stress levels are on the rise. Besides, women are more likely (28% versus. 20%) to report of having a great deal of stress (8, 9 or 10 on a 10-point scale). Almost half of all women (49%) surveyed said their stress has increased over the past five years, compared to four in 10 (39%) men. (APA, 2013)

Previous studies discovered that stress levels of adolescents differ in gender. Tajularipin et al. (2009) discovered that females have a significantly higher level of stress than males though the differences were small. In Singapore, Yeo, Ang, Chong and Huan (2007) conducted a study on 1,042 high school students to measure their concerns over emotional well-being. The findings showed that girls had higher emotional distress. In contrast, Kristel, Young and Chambliss (1997) carried out a survey with 798 high school students but discovered no significant gender difference in the stress level. (Tajularipin et al., 2009)

Tay Ee Lin and Tam Cai Lian also conducted a study on The relationship between perceived parenting styles and stress levels among Malaysian secondary school students. It was also hypothesised that females will display a higher stress level especially in the aspects of home life, peer pressure and school performance as compared to males. However, results analysis showed no significant differences between gender and the three stress subcomponents,  $p > .05$  for stress of home-life, peer pressure, school performance. However, there were gender differences for the stress of school attendance and the stress of romantic relationships instead. Males scored 6.94 (SD = 2.89) while females scored 5.99 (SD = 2.78) for stress of school

attendance with  $t(138) = 1.99, p < .05$ . As for the stress of romantic relationship, males scored 11.40 (SD = 4.03) while females scored 9.16 (SD = 4.51) with  $t(138) = 3.10, p < .01$ . (Tay and Tam, 2011)

A study on The level of stress among students in urban and rural secondary schools in Malaysia was done by Tajularipin Sulaiman et.al. From the result, it showed that there is a significant difference in stress level among males and females students,  $p=0.01$  with  $t=2.55$  (Tajularipin Sulaiman et al., 2009). From the study conducted by Yaacob et al. (2009), title on stress, self esteem and depression among Malaysian adolescents, the result showed that female respondents obtained higher scores in stress compared to males which means that female are more stressed than males. The differences in scores of stress between males and females were significant ( $t=-8.69, p \leq .001$ ). (Yaacob et al., 2009)

Ghaderi, A.R., Venkatesh Kumar, G., and Sampath Kuma also done a survey on Depression, Anxiety and Stress among the Indian and Iranian Students. From the result obtained, it showed there is no significant difference observed between male and female students towards the stress,  $p > 0.05$ . Male and female students equally experience the stress irrespective the countries. (Ghaderi et al., 2009)

#### **2.3.1.4 Family Income And Depression**

A research was conducted by Melissa Tracy et.al on the relation between family poverty and childhood (aged 11-13) depressive symptoms. From the result, family income was significantly associated with depressive symptoms, with those in the lowest income group reporting a mean of 8.12 symptoms compared to 6.27 symptoms in the middle income group ( $p=0.033$ ) and 5.13 symptoms in the highest income group ( $p < 0.001$ ). (Melissa et al., 2009)

### **2.3.1.5 Family Income And Anxiety**

From the study conducted by Deb, Sibnath; Chatterjee, Pooja; Walsh, Kerryann on Anxiety among high school students in India: Comparisons across gender, school type, social strata and perceptions of quality time with parents, adolescents found to belong to the middle class (middle socio-economic group) suffered more anxiety than those from both high and low socio-economic groups ( $p < 0.01$ ). (Deb et al., 2010)

### **2.3.1.6 Family Income And Stress**

From the study conducted by Geeta S. Pастey and Vijayalaxmi A. Aminbhavi on Impact of Emotional Maturity on Stress and Self Confidence of Adolescents, the result showed that the mean of stress for adolescents with lower parents income was 84.18 while 83.27 for those with higher parents income ( $t \text{ value} = 1.55$ ). (Pastey and Aminbhavi, 2009)

### **2.3.1.7 Parents' Marital Status And Depression**

Melissa Tracy et.al had done a study on the relation between family poverty and childhood (aged 11-13) depressive symptoms. According to the result, the children with double-parents has the mean of depression of 6.14 which is lower compared to those with single- parents with the mean of depression, 7.49 ( $p = 0.021$ ). (Melissa et al., 2009)

### **2.3.1.8 Parents' Marital Status And Anxiety**

Parents divorce actually brings a great impact to their children. For teenagers, they may start to think, worry about themselves and also their parents as separation of their parents will cause a changes in their lives and their places in their family units.

From the research on Prevalence of psychological symptoms in Saudi Secondary School girls in Abha, Saudi Arabia which is conducted by Khalid S. Al Gelban, the result indicated that the odd ratio was 1.8 for those with double-parents and single parents. This showed there is an association between parental status and the anxiety among the secondary school students. (Khalid, 2009)

### **2.3.1.9 Parents' Marital Status And Stress**

A study by Laumann and Emery (2010) stands out for its distinction between psychological disorder and psychological distress. They found that children are more distressing feelings about their parents' divorces. (Laumann-Bilings and Emery, 2010). According to numerous studies performed over the past 40 years, the effects of stress post-divorce are widespread in children compared to those whose parents are still married. (Adeniyi et al., 2011)

Teenager from divorcing family are three times more likely (35% ) required to seek for psychological help due to emotional stress. (Peter Hill - Recent Advances in Selected Aspects of Adolescent Development- Journal of Child Psychology and Psychiatry 1993)

### 2.3.1.10 Self-Esteem And Depression

Depression has always been studied together with self-esteem. According to local study by Ikechukwu et al. (2010), the participants range age from 13 to 16 years. From the studies shows that the prevalence of depression of 18.2% among the students and 61.2% of the samples reported to be low self-esteem. Besides, this studies also suggested that a negative and medium correlation between depression and self-esteem ( $r=-0.497$ ,  $p<0.01$ ) with high self-esteem associated with a lower level of depression. This study therefore, emphasizes on the role of the self-esteem in the increase of depression level. Another local studies done by Siti Nor Yaacob et al. (2009), found that the self-esteem had an inverse relationship with depression ( $r=-0.465$ ,  $p<0.01$ ). This result almost similar to the previous studies, which indicates that high self-esteem level tend to have lower depression level. A study done by Nasir et al., also reported that there is a negative significant relationship between depression and self-esteem among adolescence ( $r=-0.522$ ,  $p<0.001$ ). All in all, many local studies suggest that there are inverse relationship between depression and self-esteem, which high depression associated with low self-esteem or vice versa. Self-esteem has been suggested to be an important role in developments of depression. According to Lim et al. (2013), his also reported that there are negative relationship between self-esteem and depression ( $r=-0.446$ ,  $p<0.01$ ). Based on study done by Orth et al. (2013), which indicates that low self-esteem lead to development of depression symptoms ( $r=-0.14$ ,  $p<0.01$ ) and also concluded that low self-esteem is one of the risk factor of depression.

### 2.3.1.11 Self-Esteem And Anxiety

A numbers of studies have examined the comorbidity of anxiety disorder and externalizing disorder among adolescents such as self-esteem. Co-occurrence of externalizing disorder with anxiety has been found to be range from 2% to 21% (Russo & Beidel, 1994). According study done by Byren et al. (2000), for both boy and girl at age of 12, there is significant ( $p < 0.01$ ) negative correlation between anxiety and self-esteem  $r = -0.45$  (boys) and  $r = -0.68$  (girls) (Byren et al., 2000). Another study which, case control based study has been done by Peter et al., reported that the control had significantly higher self-esteem as compared to anxiety disorder group ( $p < 0.001$ ) (Peter et al., 2003). A study done in Iran by Asadi et al. (2010), the result of the study reveals a significant inverse correlation between anxiety and self-esteem with  $r = -0.566$ ,  $p < 0.01$ . This finding agree with the finding of Bijstra et al. (1994) and other investigators who have shown that self-esteem decrease with increasing anxiety (Taylor and Pilar, 1992). All of the studies indicate that the higher the self-esteem level, the lower the level of anxiety will manifest.

### 2.3.1.12 Self-Esteem And Stress

Research has been done between self-esteem and stress. Self-esteem is important protective factor in reducing stress level. Research has shown that individual with high self-esteem will adapt with their problem, whereas low self-esteem individuals will avoid from their problem and will emotionally react. Based on a lot of study that been done, the relationship of stress with self-esteem is similar with relationship of self-esteem with depression and also anxiety. Stress is significantly inverse correlation with self-esteem. Some of the local study support that stress

inversely correlate with self-esteem, for example, Hashim et al. (2007) state there is negative correlation between stress and self-esteem with  $r=-0.049$ ,  $p<0.01$  (Hashim et al., 2007). Another local study also reported the same result with  $r=-0.434$ ,  $p<0.01$  (Yaacob et al., 2009). According to Michelle and Marc (1999), negative correlations were found between self-esteem and depression ( $r=-0.66$ ,  $p<0.001$ ) and self-esteem and daily hassles ( $r=-0.51$ ,  $p<0.001$ ). In addition, Wilburn and Smith (2005) also reported that stress and self-esteem is inversely correlated with  $r=-0.35$ ,  $p<0.001$  (Wilburn and Smith, 2005). All of the studies suggest that self-esteem as protective factor againsts depression and stress (Michelle and Marc, 1999).

## **2.4 Others Factor**

### **2.4.1 Physical Activity And Depression**

From the research conducted by Catherine Rethon et.al on Physical activity and depressive symptoms in adolescents, the result revealed that there is a significant association between physical activity and depression, with  $p= 0.003$ . There was 11% decrease in the odds of depressive symptoms as if 1 hour more physical activity per week was carried out (OR = 0.89, 95% CI 0.85 to 0.93). (Rethon et al., 2010)

Ade F Adeniyi, Nkechi C Okafor and Celia Y Adeniyi had done a study on Depression and physical activity in a sample of Nigerian adolescents: levels, relationships and predictors. From their study, it showed that more severe depression were related with lower levels of physical activity ( $r = -0.82$ ,  $p < 0.001$ ) and moderate physical activity was associated with reduced risk of depressive symptoms (OR = 0.42, 95% CI = 0.29-0.71). (Adeniyi et al., 2011)

### 2.4.2 Physical Activity And Anxiety

From the research carried out by Süreya Yonca Biçer et.al on The Effect of Exercise on Depression and Anxiety of Students, the result showed that there was a significant difference between the effect of exercises on the level of anxiety of male and female students. ( $p= 0.0057$ )

This result was similar as the results of Wyshak (2001) and Norris et al. (1992) who stated that regular exercise can improve anxiety.

Marco Tulio De Mello et.al had conducted a study on Relationship between physical activity and depression and anxiety symptoms. From the result, people who do not or less involved in physical activity are twice likely to have anxiety compared to those who exercise regularly. Higher prevalence (9.8%) of developing symptoms also being observed among those who were less active.

### 2.4.3 Physical Activity And Stress

From the research done by Ali Reza Soltanian et.al on Association between physical activity and mental health among high-school adolescents in Boushehr province, the result indicated that those with HEPA-activity reduces the odds of stress than those who were inactivity ( $p=0.031$  and  $0.001$ , respectively). (Ali Reza Soltanian et al., 2011)

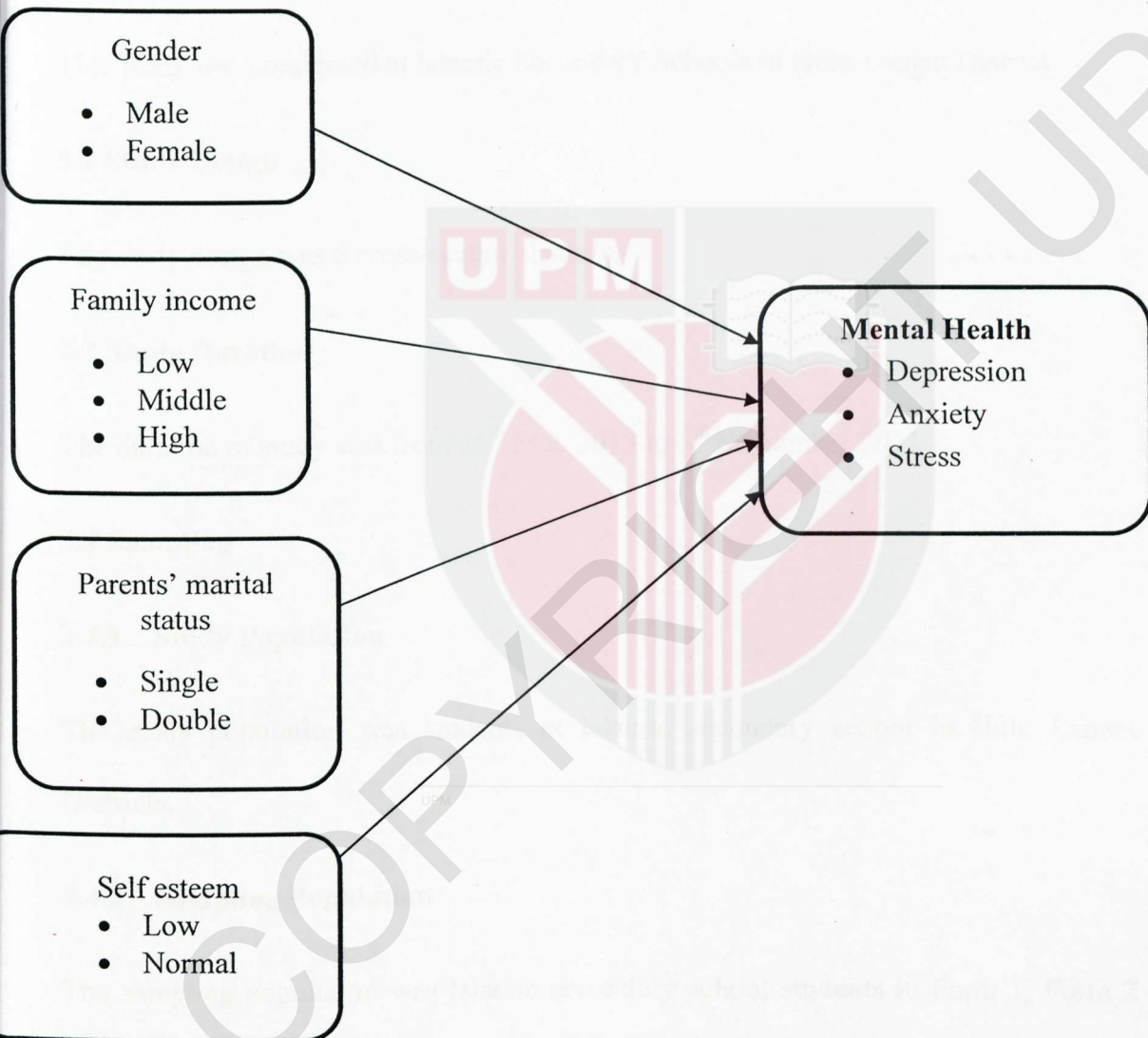
#### 2.4.4 Mental Health Promotion

School is an important role in providing mental health services to children and adolescents. There are strong evidence shows that school based mental health services have greater impact on the behavioural and emotional problems. (Rones, 2000)

Important of promoting mental health component since to have been increasing due to seen as fundamental to physical health. By promoting mental health, it not only result in low rates of mental disorder improved physical health but also improve the educational performance, greater productivity of workers, and also improve relationship within families and communities. (Herman et al., 2005)

## 2.5 Conceptual Framework:

The conceptual framework is used to describe the association of gender, family income, parents' marital status and self- esteem with depression, anxiety and stress.



**Figure 1 : Factors associated with depression, anxiety and stress**

## CHAPTER 3

### METHODOLOGY

#### 3.1 Study Location

This study was conducted at Islamic Secondary Schools in Hulu Langat District

#### 3.2 Study Design

The study design was a cross-sectional study.

#### 3.3 Study Duration

The duration of study was from 25<sup>th</sup> Mac 2013 to 5<sup>th</sup> September 2013

#### 3.4 Sampling

##### 3.4.1 Study Population

The study population was students at Islamic secondary school in Hulu Langat Districts.

##### 3.4.2 Sampling Population

The sampling population was Islamic secondary school students in Form 1, Form 2 and Form 4.

##### 3.4.3 Sampling Frame

Form 1, form 2, and form 4 students from Sekolah Menengah Agama, Hulu Langat.

### 3.4.4 Sampling Unit

The sampling unit was a student in Form 1, Form 2, and Form 4 in Hulu Langat districts.

### 3.4.5 Sample Size Estimation

The formula for hypothesis testing (Lemeshow et al., 1990) was used to estimate the sample size for this study.

$$n = \frac{Z^2 p(1 - p)}{d^2}$$

Where n = sample size,

Z = level of confidence of 95% = 1.96

P = Prevalence of depression in the population of 24% (Teoh et al., 2010)

d = precision = 0.05

$$n = \frac{(1.96)^2 [(0.24)(1-0.24)]}{(0.05)^2}$$

$$n = 280.3 \sim 280$$

Total sample size needed was 280 students.

### 3.4.6 Sampling Technique

Cluster sampling was used as a sampling technique to select the schools.

### **3.5 Data Collection**

#### **3.5.1 Study Instrument**

This study used Questionnaire as the study instrument. There were three sections in this Questionnaire which were section A, B, C. For Section A mainly regarding the socio-demographic profiles of the respondents which included the age of the respondents, gender, parental background of the respondents including parent employment status, parent income status and marital status.

In Section B consisted of the Malay-versions of Depression Anxiety Stress Scale-21 (DASS). It also had been widely used across the globe as a research tool to measure psychological aspects including Malaysia. Items on the DASS are rated on 4-point Likert - type, ranging from 0 (Did not apply to me at all) to 3 (Applied to me very much, or most of the time).

Section C was the Rosenberg Self-esteem Scale which had ten items with responses in Likert scale from the strongly agree to strongly disagree (Rosenberg et al., 1965). Each of the items was given a score of 3, 2, 1 or 0 based on the response. However, it had 5 reverse items and those items were reversed before the final score was obtained.

#### **3.5.2 Data Collection Technique**

The researchers were self-administered the questionnaire to the participants during the data collection period from 14<sup>th</sup> July to 31<sup>st</sup> July 2013 and their required to complete the questionnaire and return the questionnaire back to us. Before that, the participants were given the consent form to be filled in order to obtain their consent to take part in this study.

### **3.6 Data Analysis**

Statistical Package for the Social Sciences (SPSS) version-21 was used to analyse the data. Descriptive analysis was used to analyse the frequency and percentage whereas chi-square test was used to determine any association between the dependent and independent variables. The level of significance was set at  $\alpha = 0.05$ .

### **3.7 Study Ethics**

Ethical clearance was obtained from Ethical Committee of Faculty of Medicine and Health Science. Approval from Sekolah Menengah Agama, Hulu Langat District was acquired. Consent form was sent to the students and their parents for the permission of their children to involve in our research project. Confidentiality of information of all the respondents were ensured without spreading of any information to others.

### **3.8 Variables**

#### **3.8.1 Dependent Variables**

The dependent variables were depression, anxiety and stress.

#### **3.8.2 Independent Variable**

The independent variables were gender, family income, parents' marital status and self-esteem level.

### **3.9 Definition of Terms**

#### **3.9.1 Depression**

According to Depression Anxiety Stress Scale (DASS), scoring between 0-9 indicates that there is no symptom of depression; scoring between 10-13 indicates mild depression; scoring between 14-20 indicates moderate depression; scoring 21-27 indicates severe depression and 28 and above indicates extremely severe depression. (Lovibond et al., 1995)

#### **3.9.2 Anxiety**

As stated in Depression Anxiety Stress Scale (DASS), scoring between 0-7 indicates that there is no symptom of anxiety; scoring between 8-9 indicates mild anxiety; scoring between 10-14 indicates moderate anxiety; scoring 15-19 indicates severe anxiety and 20 and above indicates extremely severe anxiety. (Lovibond et al., 1995)

#### **3.9.3 Stress**

According to Depression Anxiety Stress Scale (DASS), scoring between 0-14 indicates that there is no symptoms of stress; scoring between 15-18 indicates mild stress; scoring between 19-25 indicates moderate stress; scoring 26-33 indicates severe stress and 37 and above indicates extremely severe stress. (Lovibond et al., 1995)

#### **3.9.4 Gender**

Gender are divided into male and female. The respondents are required to fill in their gender in the respondents' questionnaire.

### **3.9.5 Family Income**

The categorisation of income in most of the cities in Malaysia includes lower-middle, middle and upper-middle. For lower-middle, the income is below RM 2000; middle income is between RM 2000- RM 4000 and for upper middle income is above RM 4000. (Wan Nor Azriyati et al.)

### **3.9.6 Parents' Marital Status**

Parents' marital status is the state whereby the partners still together or divorced.

### **3.9.7 Self-Esteem**

The lowest possible score would be 0 while the highest 30. This was divided into two equal class intervals. We used median which is 18 as our cut-off point. Scores of 19-30 were categorized as normal range while scores below 19 were categorized as low self-esteem.

### **3.10 Validity and Reliability**

The reliability and validity of DASS-21 are determined by the internal consistency and the exploratory factor analysis respectively. For reliability, the internal consistency shows good Cronbach's alpha values in several studies. For validity, it is determined by Confirmatory Factor Analysis (CFA). Besides, the questionnaires will be double-checked by the researcher for the quality after the respondents hand in their questionnaires. (Ramli et al, 2009)

### 3.11 Study Flow Chart

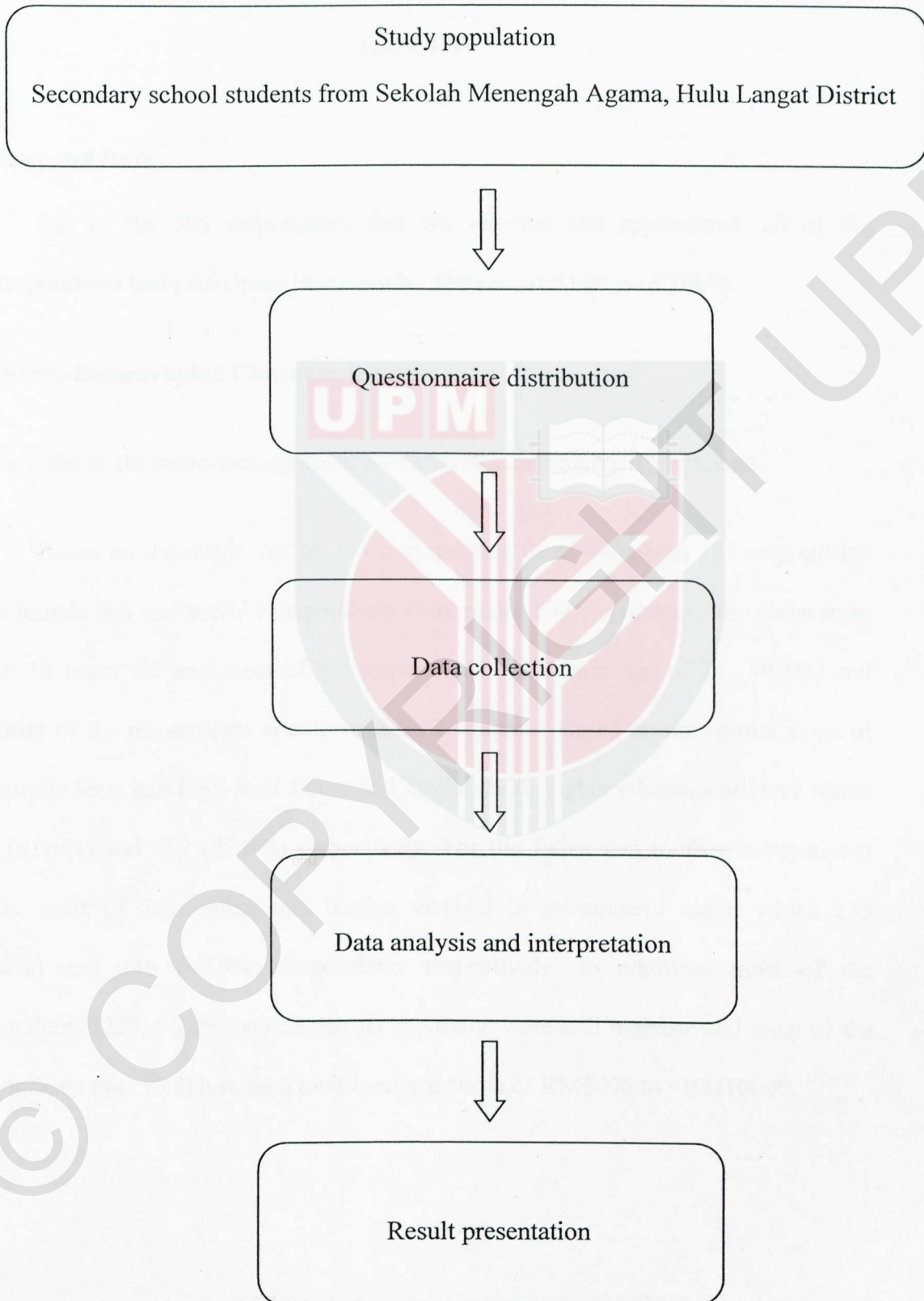


Figure 2: Study Flow Chart

## CHAPTER 4

### RESULT

#### 4.1 Respond Rate

Out of the 305 respondents that we selected and approached, all of the respondents had participate in our study. The respond rate is of 100%.

#### 4.2 Socio-Demographic Characteristics

Table 1 shows the socio-demographic characteristic among the respondents.

Based on the result, out of 305 respondents, there was about 182 respondents were female and another 123 respondents were male. The respondents age range from 13 to 18 years old and most of the respondents were from age of 14 (40.3%) and majority of the respondents was from form 2 students. Based on the results, most of the respondents had both their father and mother with higher educational level which 278 (91.1%) and 252 (82.6%) respectively. For the father and mother occupational status, most of their father and mother worked in government sector which 133 (43.6%) and 146 (47.9%) respondents respectively. In addition, most of the respondents (295, 96.7%) stated that their parents were still together and most of the respondents (94, 30.8) having a total family income of RM5000 to <RM10000.

**Table 1 : Socio-demographic characteristics (n=305)**

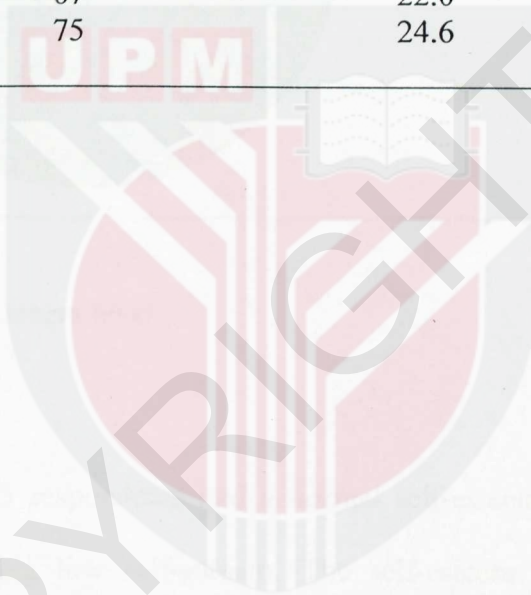
Socio-demographic Characteristic	Frequency	Percentage
<b>Gender</b>		
Male	123	40.3
Female	182	59.7
<b>Age</b>		
13	118	38.7
14	123	40.3
15	2	0.7
16	54	17.7
17	5	1.6
18	3	1.0
<b>Form</b>		
1	120	39.3
2	121	39.7
4	64	21.0
<b>Father Educational Level</b>		
Higher Education	278	91.1
Upper Secondary School	21	6.9
Lower Secondary School	2	0.7
Primary School	2	0.7
No Formal Education	2	0.7
<b>Mother Educational Level</b>		
Higher Education	252	82.6
Upper Secondary School	46	15.1
Lower Secondary School	5	1.6
Primary School	1	0.3
No Formal Education	1	0.3
<b>Father Occupational</b>		
Government	133	43.6
Private	106	34.8
Own Business	46	15.1
Pensioner	12	3.9
Not working	2	0.7
Others	5	1.6
Father past away	1	0.3
<b>Mother Occupational</b>		
Government	146	47.9
Private	57	18.7
Own Business	30	9.8
Pensioner	4	1.3

Not working	64	21.0
Others	3	1.0
Mother past away	1	0.3
<b>Parents' Marital Status</b>		
Still together	295	96.7
Divorce	7	2.3
Father Past away	2	0.7
Mother Past away	1	0.3
<b>Total Family Income</b>		
<RM2500	12	3.9
RM2500 - <RM5000	57	18.7
RM 5000 - <RM 10000	94	30.8
RM10000 – <RM15000	67	22.0
≥ RM15000	75	24.6

---

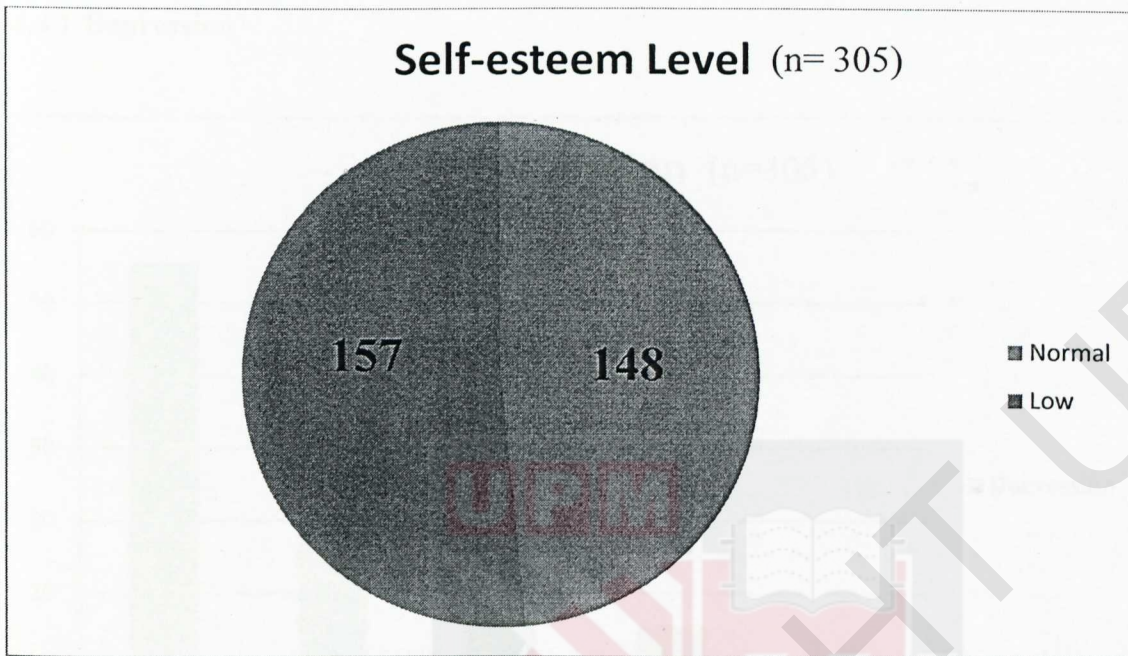


COPYRIGHT



UPM

### 4.3 Self-Esteem Level

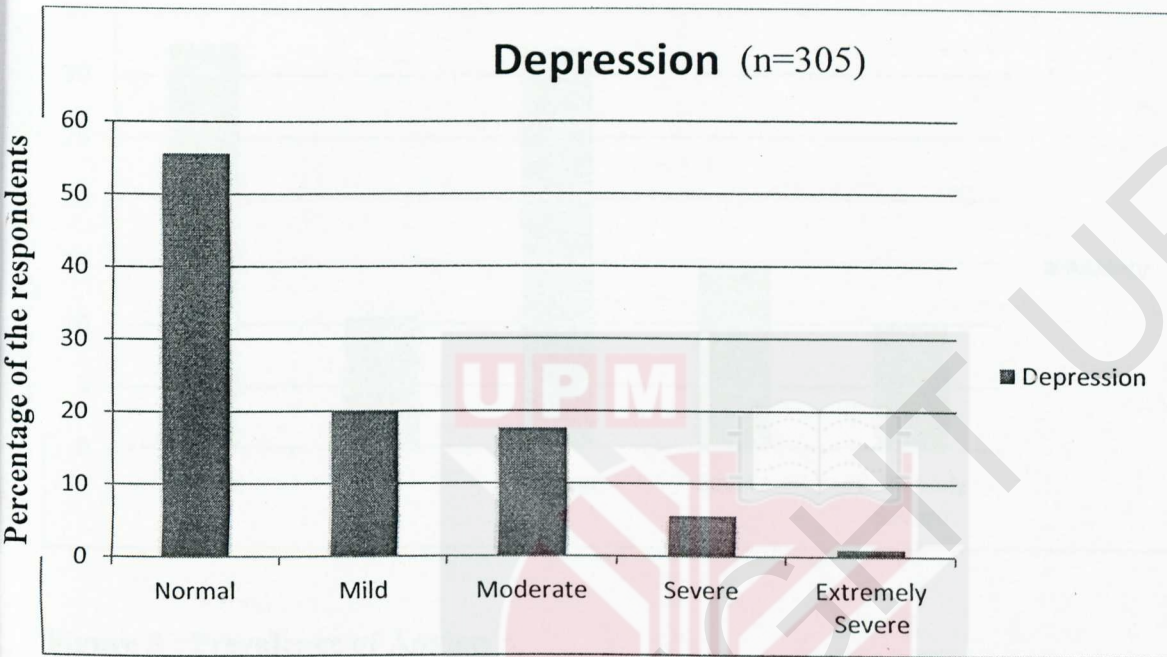


**Figure 3: Frequency of Self-Esteem level**

148 (48.5%) out of 305 respondents had a normal self-esteem score, while another 157 respondents having low self-esteem. The self-esteem score for the respondents ranged from 8-27 with median of 18.0 and interquartile range of 5.

## 4.4 Prevalence Of Depression, Anxiety And Stress

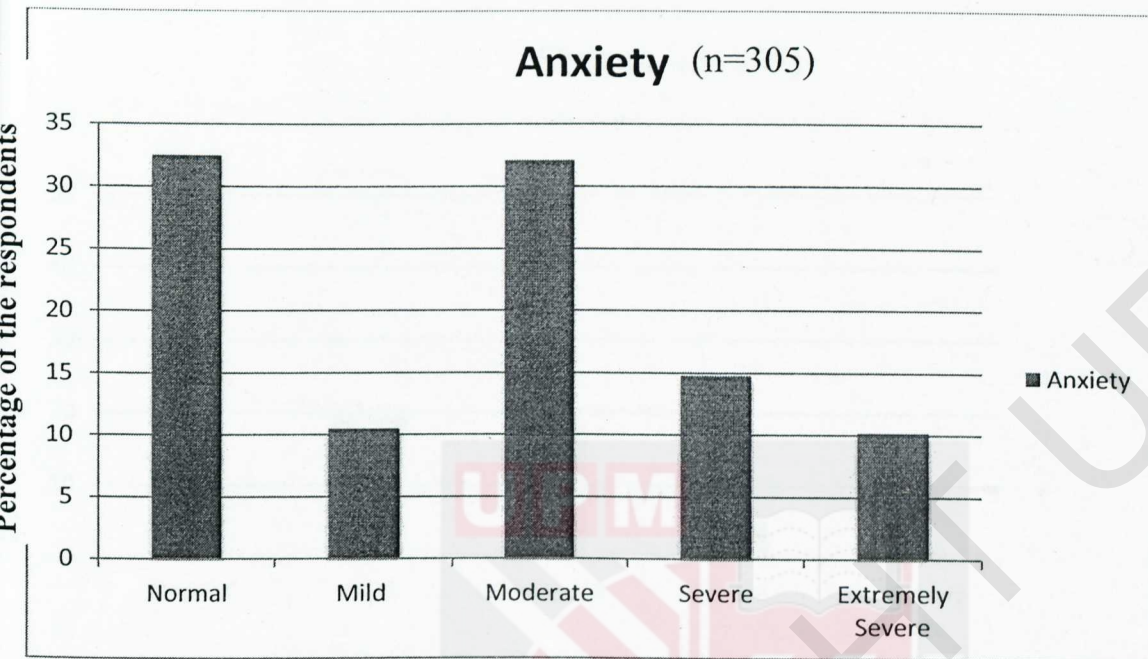
### 4.4.1 Depression



**Figure 4 : Prevalence of Depression**

Based on the result, most of the respondents which about 170 (55.7%) respondents had no depression, 61 (20%) respondents with mild depression, 54 (17.7%) respondents with moderate depression , 17 (5.6%) respondents with severe depression and 3 (1%) respondents with extremely severe depression. Overall, the prevalence of the depression among the respondents was about 44.3% (n=135).

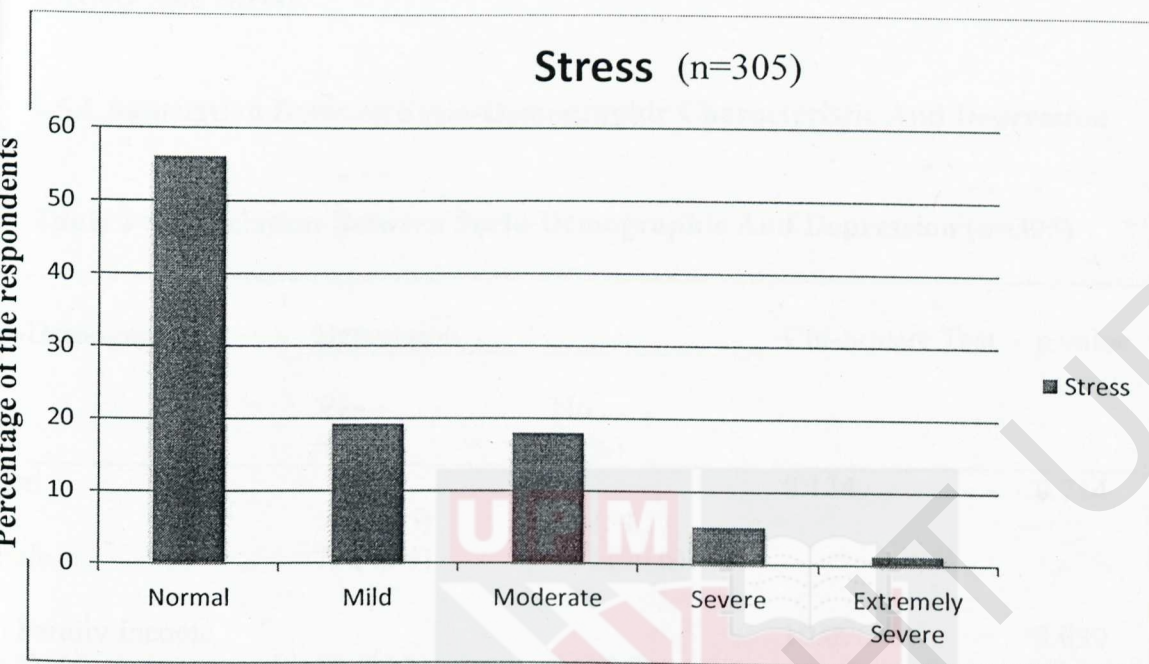
#### 4.4.2 Anxiety



**Figure 5 : Prevalence of Anxiety**

According to the figure 5, most of the respondents (99, 32.5%) fall in the group with no anxiety level followed by, moderate anxiety with 98 (32.1%) respondents, severe anxiety with 45 (14.8%) respondents, mild anxiety with 32 (10.5%) respondents and lastly extremely severe group with 31(10.2%) respondents. All in all, there were about 206 out of 305 respondents having anxiety with prevalence of 67.5%.

#### 4.4.3 Stress



**Figure 6 : Prevalence of Stress**

There were 171 (56.1%) respondents with no stress which considered the highest frequency among the others group followed by, mild stress with 59 (19.3%) respondents, moderate stress with 55 (18.0%), severe stress with 16 (5.2%) and 4 (1.3%) respondents with extremely severe stress. Overall, there were about 134 respondents having stress which the prevalence of the stress among the respondents was 43.9%.

## 4.5 Association Between Socio-Demographic Characteristic And Depression, Anxiety And Stress.

### 4.5.1 Association Between Socio-Demographic Characteristic And Depression

**Table 2 : Association Between Socio-Demographic And Depression (n=305)**

Socio-Demographic	Depression		Chi-Square Test	p value
	Yes n (%)	No n (%)		
Gender			0.134	0.714
Male	56 (45.5)	67 (54.5)		
Female	79 (43.4)	103 (56.6)		
Total Family Income			10.096	0.039
<RM2500	10 (83.3)	2 (16.7)		
RM2500 – <RM5000	22 (38.6)	35 (61.4)		
RM5000 - <RM10000	43 (46.2)	50 (53.8)		
RM10000 - <RM15000	32 (47.8)	35 (52.2)		
≥ RM15000	28 (37.7)	47 (62.7)		
Parents' Marital Status			0.138	0.710
Still together	130 (44.1)	165 (55.9)		
Others	5 (50.0)	5 (50.0)		

Table 2 showed the association between the socio-demographic of respondents with level of depression. Based on the result, depression was commonly occur in female, also occurred among those whose their parents were still together and respondents with total family income of RM5000 to <RM10000. According to Pearson Chi-Square Test, it revealed that there was no association between the gender and parents' marital status with depression. However, there was strong association between the total family income of respondents with level of the depression. Therefore, the research hypothesis for association between the gender with depression and association between parents' marital status with depression was rejected. While,

the research hypothesis regarding the association between total family income and depression was accepted.

#### 4.5.2 Association Between Socio-Demographic And Anxiety

**Table 3 : Association between Socio-demographic and Anxiety (n=305)**

Socio-demographic	Anxiety		Chi-Square Test	p value
	Yes n (%)	No n (%)		
Gender				
Male	81 (65.9)	42 (34.1)	0.268a	0.605
Female	125 (68.7)	57 (31.3)		
Total Family Income			1.194	0.879
<RM2500	9 (75.0)	3 (25.0)		
RM2500 – <RM5000	37 (64.9)	20 (35.1)		
RM5000 - <RM10000	62 (66.7)	31 (31.3)		
RM10000 - <RM15000	48 (71.6)	19 (19.2)		
≥ RM15000	49 (65.3)	26 (34.7)		
Parents' Marital Status			0.029	0.866
Still together	199 (67.5)	96 (32.5)		
Others	7 (70.0)	3 (30.0)		

Based on the result above, anxiety was usually occur in female, also occurred among those whose their parents were still together and also respondents with total family income of RM5000 to <RM10000. Based on Pearson Chi-Square Test, it showed that there was no association between the gender, total family income and parents' marital status with anxiety. Therefore, the research hypothesis for association between the gender with anxiety, association between total family income with anxiety, and association between parents' marital status with anxiety were rejected.

### 4.5.3 Association Between Socio-Demographic And Stress

**Table 4 : Association Between Socio-Demographic And Stress (n=305)**

Socio-Demographic	Stress		Chi-Square Test	p value
	Yes n (%)	No n (%)		
Gender				
Male	47 (38.2)	76 (61.8)	2.741	0.098
Female	87 (47.8)	95 (52.2)		
Total Family Income				
<RM2500	7 (58.3)	5 (41.7)	4.819	0.306
RM2500 – <RM5000	27 (47.4)	30 (52.6)		
RM5000 - <RM10000	38 (40.9)	55 (59.1)		
RM10000 - <RM15000	34 (50.7)	33 (49.3)		
≥ RM15000	27 (36.0)	48 (64.0)		
Parents' Marital Status				
Still together	128 (43.4)	167 (56.6)	1.083	0.298
Others	6 (60.0)	4(40.0)		

Based on the result above, stress commonly occurred in female, also occur among those whose their parents were still together and also respondents with total family income of RM5000 to <RM10000. Pearson Chi-Square Test revealed that there was no association between the gender, total family income and parents' marital status with anxiety. Therefore, the research hypothesis for association between the gender with anxiety, association between total family income with anxiety, and association between parents' marital status with anxiety were rejected.

## 4.6 Association Between Self-Esteem And Depression, Anxiety And Stress

### 4.6.1 Association Between Self-Esteem And Depression

**Tables 5 : Association between Depression and Self-Esteem (n=305)**

Variables	Depression		Chi-Square Test	p value
	Yes n (%)	No n (%)		
Self-Esteem Score			49.521	p<0.001
Normal	35 (23.6)	113 (76.4)		
Low	100 (63.7)	57 (36.3)		

The most of the respondents who were suffered from depression have low self-esteem score. Pearson Chi-Square Test revealed that there was an association between depression and self-esteem ( $p<0.001$ ). Therefore, the research hypothesis for association between self-esteem and depression was accepted.

#### 4.6.2 Association Between Self-Esteem And Anxiety

**Table 6 : Association between Self-Esteem and Anxiety (n=305)**

Variables	Anxiety		Chi-Square Test	p value
	Yes n (%)	No n (%)		
Self-Esteem Score			11.669	0.001
Normal	86 (58.1)	62 (41.9)		
Low	120 (76.4)	37 (23.6)		

The result showed that majority of the respondents was among low self-esteem level. Therefore, those with low self-esteem level was higher as compare to normal level of self-esteem. According to Pearson Chi-Square Test, there was an association between anxiety and self-esteem ( $p=0.001$ ). Therefore, the research hypothesis for the association between self-esteem and anxiety was accepted.

### 4.6.3 Association Between Self Esteem And Stress

**Table 7 : Association between Self-Esteem and Stress (n=305)**

Variables	Stress		Chi-Square Test	p value
	Yes n (%)	No n (%)		
Self-Esteem Score			23.552	p<0.001
Normal	44 (29.7)	104 (70.3)		
Low	90 (57.3)	67 (42.7)		

Based on the result from the table above showed that, there was an association between self-esteem and stress ( $p < 0.001$ ) which the low self-esteem was higher as compare to normal self-esteem. Therefore, the research hypothesis for association between self-esteem and stress was supported.

## CHAPTER 5

### DISCUSSION, LIMITATION, CONCLUSION AND RECOMMENDATION

#### 5.1 Discussion

##### 5.1.1 Association Between Gender And Depression, Anxiety And Stress

From our study, the prevalence of depression was higher in female (58.5%) compared to male (41.5%). A research was conducted by Black et al. among Australian 12-16 year-olds students. The result showed that a total of 23% of females and 11.8% of males screened positive for depression. In a ten-year longitudinal study by Hankin et al., they discovered that 4% of females were diagnosed with depression but only 1% of males had this diagnosis. Besides, Cindy et al. have done a survey by which their result also showed that girls were more depressed than the boys. In our study, there was no significant association between gender and depression. Based on a study conducted by Quyen Dinh Do, the result showed that females were more depressed (43.5%) compared to males (36.8%). but there was no significantly difference between prevalence of male and female who get depression, with p-value =0.201. From a research conducted among two groups of adolescent in different area in Mexico by William et.al, the result also indicated no significant differences between males and females with depression.

Based on our result, there were more female respondents (60.7%) have anxiety compared to male respondents (39.3%). A study done was by Ahmed and Bader among ten Arab countries. From the result, the female groups had higher mean anxiety scores in all the 10 countries than that of their male counterparts. In another

study by Lopez et.al, the girls exhibited higher levels of anxiety than the boys. In our study, it revealed that there was no significant association between gender and anxiety. From a study conducted by Cristian and Felix also showed that females had a higher mean scores (19.96) than that of males (19.71) but this gender difference in means was not significant, with  $p\text{-value}=0.87$ . Besides, Angela et al. study result showed that there was no significant difference between gender on test anxiety ( $p>0.05$ ). From another study by Ghaderi, who also discovered that there was no significant association between gender with anxiety.

In this study, there was more female respondents (64.9%) who suffer from stress than male respondents (35.1%). Researchers, Tajularipin et al. discovered that females had a significantly higher level of stress than males. From the study conducted by Yaacob et al., the result showed that female respondents obtained higher scores in stress compared to males which mean that female were more stressed than males. In this study, there was no significant association between gender and stress level. Based on Ghaderi's study, his result showed that there was no significant association between gender with stress. In another study by by Pастey et.al., it can be observed that adolescent males tend to have significantly higher stress than adolescent females. However, males and females do not differ significantly in their stress level ( $p>0.05$ ). From Tay and Tam's study, results analysis also showed no significant differences between gender and stress.

These study results were different from our hypothesis. This was because of all the respondents either male or female were also receiving the religious education beside formal education. Both of them may equally experienced the feeling of depression, anxiety and stress regardless the gender.

### 5.1.2 Association Between Family Income And Depression, Anxiety And Stress

Based on our study, most of the respondents (31.9%) whose family income were between RM 5000-< RM 10000 has depression whereas only 10 respondents (7.4%) whose family income were less than RM2500 has depression. From a study by Melissa Tracy, the result showed that lower income group more prone to suffer from depression. In another study, the result showed that family income with higher mean levels of symptoms reported by children in lower income families. These different results might be due to our limited respondents with lowest family income, which only comprised of 3.9% and this caused an inequality of respondents correspond to the family income. Both of the studies revealed that there were an association between family income and depression. From our study, the result also showed there was an association between family income and depression with  $p\text{-value} = 0.039$ .

In our study, there was 62 respondents (30.2%) whose family income was between RM 5000-< RM 10000 had anxiety whereas only 9 respondents (4.4%) whose family income was less than RM2500 had anxiety. Based on a research done by Deb in India, the result showed that adolescents belonging to the middle socio-economic group suffered more anxiety than those from both high and low socio-economic groups. There was a significant association between family income and anxiety ( $p < 0.001$ ). In another study done by Erin et,al, anxiety disorder was significantly and negatively associated with parent income. In this study there was no significant association between family income and anxiety ( $p = 0.879$ ). This might be also due to the limited respondents with lowest family income.

Based on our study, it showed that most of the respondents whose family income were between RM 5000-< RM 10000 feel stress but only 7 respondents whose family income were less than RM2500 feel stress. From the study conducted by Pастey et.al., the result showed that the mean of stress for adolescents with lower parents income was 84.18 while 83.27 for those with higher parents income, which mean that adolescents with higher parents income was less stressed. However, there was no significant association between family income and stress which was similar with our study result. This indicated that family income did not cause students to feel stress.

The difference in the results with our hypothesis was due to the ratio inequality of family income of the respondents. There were more respondents with family income of RM 5000 - <RM 10000 compared to other groups of family income.

### **5.1.3 Association Between Parents' Marital Status And Depression, Anxiety And Stress**

According to our study result showed that, majority of the respondents their parent were still together. However there was no association between the parents' marital status with depression. Our result was different as compared to previous study by Melissa et al (2009), which showed that there was an association between the parents' marital status with depression. The respondents with single parent tend to be more depressed than both parent that still together. Therefore, our study showed that depression among the respondents was not likely due to parents' marital status.

Based on our study, it showed that there was no association between parents' marital status of respondents with anxiety. Differ from our previous study done by

Gelban et al (2009), the result showed that there was an association between the parents' marital status with anxiety. Which respondents with single parents tend to be more anxious as compared to those with both parents' still together.

Our study showed that there was no association between the parents' marital status and stress. Unlike our study, previous study showed significant association between the parents' marital status with stress. Respondents were more stress when their parents were divorced (Adeniyi et al, 2011). Therefore, based on our study result, parents' marital status of respondents will not influence the development of depression, anxiety and stress.

These study results were different from our hypothesis. This was because of most of our respondents' parents are still together (96.7%) which caused the ratio of the parents' marital status among the respondents to be unequal.

#### **5.1.4 Association Between Self-Esteem And Depression, Anxiety And Stress**

According to the result of our study, there was a significant association between the self-esteem and depression which low self-esteem can cause depression among the respondents. From several previous study supported the result, which there were negative correlation between the self-esteem and depression [Siti et al (2009); Lim et al. (2013)]. This indicated that respondents with low self-esteem had higher tendency to be depressed.

Based on the study, there was an association between self-esteem and anxiety among the respondents. Similar to depression, previous study also showed that there was an association and negative correlation between self-esteem with anxiety [Beyren

et al. (2000); Asadi et al. (2010)]. Which indicate that low self-esteem respondents tend to be more anxious.

In this study showed that, there was a significant association between the self-esteem of the respondents with development of stress. In a study conducted by Hashim et al (2007), showed that there was an association between self-esteem and stress and this two are inversely correlated. Which indicated that respondents with low self-esteem tend to be more stress as compared to respondents with high or normal self-esteem.

These results were similar with our study hypothesis. Those with low self-esteem level were easier to get depression, anxiety and stress compared to those with normal self-esteem level.

## **5.2 Limitations**

This was a cross-sectional study, so it can only represent the population in the study at the period the research was conducted. The results are not valid for any other time period.

Since the finding of this study was representative of the secondary school students from Sekolah Menengah Islam Abim and Sekolah Menengah Islam Alamin, it may not representative of others secondary schools in Malaysia.

Our respondents only comprised of secondary school students of Form One, Two and Four, by which we exclude Form Three and Form Five to participate in our study. This was because we have to consider their mental health or psychological condition which may influenced by the examinations (PMR/ SPM). This may caused our result not representative among all secondary school students.

As this research used a self-administered questionnaires, the message in the questionnaires might be misunderstood and therefore, giving rise to information bias.

### 5.3 Conclusion

As a conclusion, maintaining a healthy mental health is crucial for students as it is able to influence their physical health, psychological development, personalities and also their learning ability. From our study, the prevalence of the depression among the respondents were about 44.3%, 67.5% for anxiety and 43.9% for stress. The prevalence of respondents having mental problems were considered quite high especially anxiety which comprised of 206 out of 305 respondents. Sex of the students and their parents' marital status did not influence their depression, anxiety and stress level. Income of the family also had no significant impact on the anxiety and stress level of the students but do significantly associated with their depressed level. On the other hands, self-esteem of the respondents did affect their depressed, anxiety and stress level.

#### 5.4 Recommendation

For future study, it should be more focus on the cause of the mental health problems and study should be more deeper. In addition, other causes of mental health problems can also be study for example physical activity, academic marks, health status and etc. Besides, future research can also focus on the ways to prevent the mental health to occur and also can study the effectiveness of the prevention method.

School have an important role in providing mental health services to children and adolescents. Several campaign and motivational camp can be done to those students that have been identified to suffer from mental health problems. Counsellors in the school play an important role in counselling the students who face any problem by giving advices and provide ways to solve their problems. The burden should not be carried by the counsellors only, teachers also should be able to identified the students that having mental health problems and aware about their condition. Perhaps these efforts can help in comforting their condition. Besides, students themselves should not hide any of their problems from others. They can seek help from their family members, friends or teachers. They can also find an appropriate ways to relieve their stress such as involving in sports or listening to music. Refer to doctor for advices or medication if the conditions are getting worst.

## REFERENCES

- AAP* (2008). Stress, Anxiety, Depression: High School Students in Australia. Retrieved from <http://burdenshared.wordpress.com/2008/06/03/stress-anxiety-depression-high-school-students-in-australia/>
- Abdulrhman M. Al-Sughayr and Mazen S. Ferwana (2012). Prevalence of mental disorders among high school students in National Guard Housing, Riyadh, Saudi Arabia. *Journal of Family and Community Medicine*, 19(1), 47–51.  
doi: [10.4103/2230-8229.94015](https://doi.org/10.4103/2230-8229.94015)
- Abdulrhman M. Al-Sughayr and Mazen S. Ferwana (2012). Prevalence of mental disorders among high school students in National Guard Housing, Riyadh, Saudi Arabia. *Journal of Family and Community Medicine*, 19(1), 47–51.  
doi: [10.4103/2230-8229.94015](https://doi.org/10.4103/2230-8229.94015)
- Ade F Adeniyi, Nkechi C Okafor and Celia Y Adeniyi (2011). Depression and physical activity in a sample of Nigerian adolescents: levels, relationships and predictors. *Child and Adolescent Psychiatry and Mental Health*, 5:16
- Süreya Yonca Biçer et.al (2012). The Effect of Exercise on Depression and Anxiety of Students. *Annals of Biological Research*, 3 (1):270-274
- Ahmed M Abdel-Khalek and Bader M. Alansar (2004). Gender differences in anxiety among undergraduates from ten arab countries. *Social behavior and personality*, 32(7), 649-656
- Ali Reza Soltanian et.al (2011). Association between physical activity and mental health among high-school adolescents in Boushehr province. *Iranian Journal of Psychiatry*. 6(3): 112–116
- American Psychological Association. (2013). Gender and Stress. Retrieved from <http://www.apa.org/news/press/releases/stress/gender-stress.aspx>
- Anderson J, Williams S, McGee R et al. DSM-III disorders in preadolescent children. *Arch of General Psychiatry* 1987; 44: 69-76
- Angela M. Fiore (2013). Gender Differences in Test Anxiety. Retrieve from [http://wvusolar.wvu.edu:8881/exlibris/dtl/d3\\_1/apache\\_media/L2V4bGlicmlzL2R0bC9kM18xL2FwYWNoZV9tZWRRpYS82NjA2.pdf](http://wvusolar.wvu.edu:8881/exlibris/dtl/d3_1/apache_media/L2V4bGlicmlzL2R0bC9kM18xL2FwYWNoZV9tZWRRpYS82NjA2.pdf)
- Asadi SA, Basirani N, Asadi BE, Panahi MA, Amirshahi M, Salehin S (2010). Prevalence of Anxiety and its Relationship with Self-Esteem Among Zabol University Students, Iran; *Educational Research Vol. 1(5) pp. 140-144 June 2010*
- Bernie Froese-Germain and Richard Riel (2012). STUDENT MENTAL HEALTH. Retrieve from <http://www.ctf-fce.ca/Documents/Priorities/EN/mental%20health/StudentMentalHealthReport.pdf>
- Bernstein GA and Borchardt CM (1991). Anxiety Disorder of Childhood and Adolescence: A Critical Review. *Journal of the American of Child and Adolescent Psychiatry*, 30, 519-532.

Bijstra J.O, Bosma H.A, Chapman J. (1994). The relationship between social skills and psycho-social functioning in early adolescence. *Pres. Individ. Dif. 16(5): 767-776*

Bird HR, Canino G, Rubio-Stipec M et al. Estimates of the prevalence of childhood maladjustment in a community survey in Puerto Rico. *Arch of General Psychiatry 1988; 45: 1120-1126*

Boyd CP, Kostanski M, Gullone E, Ollendick TH & Shek DTL (2000). Prevalence of Anxiety and Depression in Australia Adolescents: Comparisons with worldwide data. *The Journal of Genetic Psychology 161, 479-492*

Byren and Bruce (2000). Relationship between anxiety, fear, self-esteem, and coping strategies in adolescence. (Mac 2000)

Canadian Mental Health Association. (2010). Mental Health and High School. Retrieve from [http://www.cmha.ca/highschool/s\\_intro.html](http://www.cmha.ca/highschool/s_intro.html)

Catherine Rethon et.al (2010). Physical activity and depressive symptoms in adolescents. *BMC Med. 8: 32*

Children and divorce.com. Children Divorce Statistics. Retrieve from <http://www.children-and-divorce.com/children-divorce-statistics.html>

Cindy Ellen Li, Raymond DiGiuseppe, and Jeffrey Frohman (2006). The roles of sex, gender, and coping in adolescent depression. *ADOLESCENCE, Vol.41, No.163*

Costello, E. J., Egger, H. L., & Angold, A. (2003). Developmental epidemiology of anxiety disorders. In T. H. Ollendick & J. S. March (Eds.), *Phobic anxiety disorders in children and adolescents: A clinician's guide to effective psychosocial and pharmacological interventions* (pp. 61-91). Oxford, UK: Oxford University Press

Cristian and Felix (2006). Anxiety Characteristics: Relationships with Age, Gender, and Performance Outcomes, *Journal of Sport Behavior. 34(3)*

Deb, Sibnath; Chatterjee, Pooja; Walsh, Kerryann (2010). Anxiety among high school students in India: Comparisons across gender, school type, social strata and perceptions of quality time with parents. *Australian Journal of Educational & Developmental Psychology; 2010, Vol. 10, p18*

Essau CA, Conradt J, Petermann F (2000). Frequency, Comorbidity and Psychosocial Impairment of Anxiety Disorder in German Adolescents. *Journal of Anxiety Disorder, 14, 263-279*

G Black, RM Roberts, T Li-Leng (2012). Depression in rural adolescents: relationships with gender and availability of mental health services. Retrieve from [http://www.rrh.org.au/publishedarticles/article\\_print\\_2092](http://www.rrh.org.au/publishedarticles/article_print_2092)

Grohol J. (2008). What is Good Mental Health?. *Psych Central*. Retrieved from <http://psychcentral.com/blog/archives/2008/06/02/what-is-good-mental-health/>

Ghaderi A.R., Venkatesh Kumar, G., and Sampath Kuma.(2009). Depression, Anxiety and Stress among the Indian and Iranian Students. *Journal of the Indian Academy of Applied Psychology*, Vol. 35, No.1, 33-37

Geeta S. Pастey and Vijayalaxmi A. Aminbhavi (2006). Impact of Emotional Maturity on Stress and Self Confidence of Adolescents . *Journal of the Indian Academy of Applied Psychology*,, Vol. 32, No.1, 66-70

Herman H, Saxena S, Moodie R, *Promoting Mental Health: Concepts, Emerging Evidence, Practice* WHO 2005

Harrington R & Clark A Eur (1998). Prevention and early intervention for depression in adolescence and early adult life; *Arch Psychiatry Clin Neurosci*. 1998; 248(1):32-45.

Hunt J, Eisenberg D. Mental health problems and help-seeking behavior among college students. *J Adolesc Health*. 2010;46(1):3-10.

Intan Hashimah Mohd Hashim (2007). Stress, Coping and Social Supports In The Adolescent Years; *Kajian Malaysia, Jilid XXV, No. 1, Jun 2007*

James M. Frabutt, Will Clark, & Melissa Regan (2011). Students' Mental Health and Wellness. Retrieve from [http://www3.nd.edu/~jfrabutt/documents/MentalHealthandWellness\\_CommonMentalHealthIssues.pdf](http://www3.nd.edu/~jfrabutt/documents/MentalHealthandWellness_CommonMentalHealthIssues.pdf)

Jean M. Twenge and Susan Nolen-Hoeksema (2002). Age, Gender, Race, Socioeconomic Status, and Birth Cohort Differences on the Children's Depression Inventory. *Journal of Abnormal Psychology* Vol. 111, No. 4

Kathleen et al. (2010). Lifetime Prevalence of Mental Disorder in US Adolescents: Results from National Comorbidity Survey Replication-Adolescent Supplement (NCS-A); *Journal of the American Academy of Child & Adolescent Psychiatry* Vol. 49, Issue 10, October 2010, 980-989.

Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen HU, Kendler KS (1994). Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States. Results from the National Comorbidity Survey. *Arch Gen Psychiatry*. 1994 Jan; 51(1):8-19.

Khairani et al. (2007) Prevalence and Reasons for Smoking Among Upper Secondary Schoolboys in Hulu Langat, Malaysia; *Med & Health* 2007 : 80-85

Khalid S. Al-Gelban,<sup>1,\*</sup> Hasan S Al-Amri,<sup>2</sup> and Ossama A Mostafa<sup>1</sup> (2009). Prevalence of Depression, Anxiety and Stress as Measured by the Depression, Anxiety, and Stress Scale (DASS-42) among Secondary School Girls in Abha, Saudi Arabia Sultan Qaboos Univ Med J. 9(2): 140-147

Khalid S. Al-Gelban (2009). *Annals of Saudi Medicine*. Prevalence of psychological symptoms in Saudi Secondary School girls in Abha, Saudi Arabia. 29(4): 275-279 Portnoy Associates. The Psychology of Divorce: A Lawyer's Primer Part 2 - The Effects of Divorce on Children, Retrieve from <http://www.portnoyassociates.com/resources/articles/psychology2.html>

Lai KL, Paul Chen CY, Lee KK, Jagmohni K, Violence-related behavior among Malaysia adolescents: a cross sectional survey among secondary school students in Negeri Sembilan, March 2007 Vol 36 No. 3

Lauran M.W, Susan L.M, Doyle M.C, The association between perceived weight status and suicidal thoughts and attempts in middle school youth, *journal of school health* Vol. 77, No.2, American school health association 2007

Lopez et,al (2008)SOCIAL BEHAVIOR AND PERSONALITY. Society for Personality Research, 36(3), 385-390

Lovibond, S.H. & Lovibond, P.F. (1995). Manual for the Depression Anxiety Stress Scales. (2nd. Ed.) Sydney: Psychology Foundation

Marco Tulio De Mello et.al (2013). Relationship between physical activity and depression and anxiety symptoms. Retrieve from <http://www.sciencedirect.com/science/article/pii/S0165032713000906>

Melissa Tracy et al (2009). What explains the relation between family poverty and childhood depressive symptoms? *Journal of Psychiatric Research*, Volume 42, Issue 14, Pages 1163-1175

Michelle Dumont and Marc A. Provost (1999). Resilience in Adolescents : Protective Role of Social Support, Coping Strategies, Self-Esteem, and Social Activities on Experience of Stress and Depression; *Journal of Youth and Adolescence*, Vol.28, No. 3, 1999

Muhamad Saiful Bahri Yusoff (2010). Stress, Stressors And Coping Strategies Among Secondary School Students In A Malaysian Government Secondary School: *Initial Findings ASEAN Journal of Psychiatry*, Vol.11(2) July – December 2010

National Institute of Health,2005, Information about Mental Illness and the Brain. Retrieve from <http://science.education.nih.gov/supplements/nih5/mental/guide/info-mental-a.html>

National Institutes of Health (2013). Mental Health. Retrieve from <http://www.nlm.nih.gov/medlineplus/mentalhealth.html>

Offord DR, Boyle MH, Szatmari P et al. Ontario child health study. II. Six-month prevalence of disorder and rates of service utilization. *Arch of General Psychiatry* 1987; 44: 832-836

Paul CY Chen et al., Factor relating to adolescent suicidal behavior, *journal of adolescent health* 37 337.e11-337.e16, 2005

Peter H. Silverstone and Mahnaz Salsali (2003). Low Self-Esteem and Psychiatric Patients: Part I – The Relationship Between Low Self-Esteem and Psychiatric Diagnosis. (2003)

Quyen Dinh Do (2007). Depression and Stress Among the First Year Medical Students in University of Medicine and Pharmacy Hochiminh City, Vietnam.

Retrieve from <http://faculty.mu.edu.sa/public/uploads/1348562986.2136stress%20%20first%20year.pdf>

Ramli. M et.al, 2009, Validation and psychometric properties of bahasa Malaysia version of the depression, anxiety and stress scales (DASS) among Diabetic Patients

Ringeisen H, Oliver KA, Menvielle E (2002). Recognition and treatment of mental disorders in children: considerations for pediatric health systems. *Paediatr Drugs*. 2002; 4(11):697-703.

Rohini Vikas Tadas (2011). Mental Health among Secondary School Students in Rural and Urban Area. *International Referred Research Journal*. VOL-II \*ISSUE 24

Rones M, Hoagwood K, School-based mental health services, *Clinical Child and family Psychology Review*, Vol.3, No.4, 2000

Samantha Kemp. Stress & Family Divorce Results and Statistics. Retrieve from [http://www.ehow.com/list\\_7367135\\_stress-family-divorce-results-statistics.html](http://www.ehow.com/list_7367135_stress-family-divorce-results-statistics.html)

Sedigheh Sadat Tavafian, Teamur Aghamolaei (2013). Mental Health of High School Students. *International Quarterly Journal*. 1(4). 202-204. DOI: 10.5812/jhs.8397

Sibnath Deb, Pooja Chatterjee, and Kerryann Walsh (2010). Anxiety among high school students in India. *Australian Journal of Educational & Developmental Psychology*. Vol 10, pp18 – 31

Siti Nor Yaacob, Rumaya Juhari, Mansor Abu Talib, Ikechukwu Uba (2009). Loneliness, stress, self-esteem and depression among Malaysian adolescents. *Jurnal Kemanusiaan Bil.14*

Sultana Zakiya Huq and Nazma Afroz (2005). Depression in adolescence. *J. Life Earth Science*, Vol 1(1): pp.11-13,578-588

Tajularipin Sulaiman et.al (2009). The level of stress among students in urban and rural secondary schools in Malaysia. *European Journal of Social Sciences*. Volume 10, No 2

Tan J, Ma Z, Gao X, Wu Y, Fang F (2011) Gender Difference of Unconscious Attentional Bias in High Trait Anxiety Individuals. *PLoS ONE* 6(5): e20305. doi:10.1371/journal.pone.0020305

Tay Ee Lin and Tam Cai Lian. The relationship between perceived parenting styles and stress levels among Malaysian secondary school students. Retrieved from [http://eprints.sunway.edu.my/85/1/Tay\\_E\\_L\\_-final\\_edit\\_16\\_1\\_2011.pdf](http://eprints.sunway.edu.my/85/1/Tay_E_L_-final_edit_16_1_2011.pdf)

Taylor D.N. and Del Pilar J. (1992). Self-esteem, anxiety, and drug use. *Psychol Rep*. 1992 Dec;71(3 Pt 1): 896-8

Toh CL, Ding LM, Peng R et al. Psychiatric morbidity in children and adolescents. Public Health Institute, Ministry of Health : Malaysia. 1997

Tomb M. & Hunter L. (2004). Prevention of anxiety in children and adolescents in a school setting: The role of school-based practitioners. *Children & School*, 26, 87-101

Verhulst FC, Berden GFM, Sanders Woudstra J. Mental health in Dutch children : (II) The prevalence of psychiatric disorder and relationship between measures. *Acta Psychiatrica Scandinavica* 1984; 324 (72), 1-45

Wan Nor Azriyati Wan Abd Aziz et.al. A Study On Affordable Housing Within The Middle Income Households In The Major Cities And Towns In Malaysia

Wilburn V.R. and Smith D.E. (2005). Stress, Self-Esteem, and Suicidal Ideation In Late Adolescents; *ADOLESCENCE*, Vol. 40, no.157, 2005

William G. Masten et.al (2003). Gender differences in depressive symptoms among Mexican adolescents. *Anales de psicología*, vol. 19, 91-95

World Health Organization. (2001). Mental Health :A Call for Action. Retrieve from [http://www.who.int/mental\\_health/advocacy/en/Call for Action MoH Intro.pdf](http://www.who.int/mental_health/advocacy/en/Call_for_Action_MoH_Intro.pdf)

World Health Organization. (2007). What is mental health. Retrieve from <http://www.who.int/features/qa/62/en/index.html>

World Health Organization, 2013. Adolescence and mental health. Retrieve from [http://www.who.int/maternal\\_child\\_adolescent](http://www.who.int/maternal_child_adolescent) on July 2013

Zawaha HI., Yogambikai V., Siti Sa'adiyah HN., Sulaiman CR. & Mohd Nasir A. (2011). Depression and Schizophrenia: The Young Adults' Perspectives. Retrieve from <http://www.ihm.moh.gov.my/images/files/15th-NIH-Scientific-Meeting/NIHSM-2012-LecNotes/SP2-Depression%20and%20Schizophrenia-Pn%20Zawaha.pdf#page=9&zoom=auto,0,116>

Zubrick SR, Nguyen H, Silburn S et al. Linkages between child health and child adversity. Commonwealth Department of Health, Housing and Community Services: Canberra, Australia. 1995



**UPM**  
UNIVERSITI PUTRA MALAYSIA

## **BORANG SOAL-SELIDIK**

### **TAJUK KAJIAN:**

Prevalens Kemurungan, Keresahan dan Tekanan dan Faktor-Faktor Yang Mempengaruhinya Di kalangan Pelajar Sekolah Agama di Daerah Hulu Langat

### **PENYELIDIK:**

Muhammad Nizam Bin Mohd Haris (No. Matrik: 158683)  
Soon Hie Ying (No. Matrik: 161340)

Pelajar Perubatan Tahun 2  
Program Doktor Perubatan  
Fakulti Perubatan dan Sains Kesihatan  
Universiti Putra Malaysia

### **PENYELIA:**

Dr. Salmiah Md Said  
Dr. Titi Rahmah Hamedon  
Jabatan Kesihatan Kommuniti, FPSK, UPM

Maklumat yang ditanya dalam borang soal-selidik ini adalah semata-mata untuk tujuan penyelidikan dan identiti anda akan dirahsiakan

**ARAHAN:** Sila jawab semua soalan dan tandakan (√) di dalam petak yang disediakan.

**BAHAGIAN A: MAKLUMAT SOSIO-DEMOGRAFI**

1. Jantina:

- Lelaki
- Perempuan

2. Umur : \_\_\_\_\_ (Tahun)

3. Tingkatan:

- Satu
- Dua
- Empat

4. Sejarah pendidikan sekolah rendah:

- Sekolah kebangsaan kerajaan
- Sekolah agama negeri
- Sekolah agama swasta
- Sekolah antarabangsa
- Lain-lain (nyatakan): \_\_\_\_\_

5. Status perkahwinan ibubapa:

- Iubapa masih tinggal bersama
- Ibu dan bapa bercerai
- Bapa telah meninggal dunia
- Ibu telah meninggal dunia
- Ibu dan bapa telah meninggal dunia

6. Status pendidikan bapa:

- Institut Pengajian Tinggi (Diploma/Ijazah/Sarjana/Doktor Falsafah)
- Sekolah Menengah Atas (SPM/STPM dan setara)
- Sekolah Menengah Rendah (SRP/PMR dan setara)
- Sekolah Rendah (Tamat Darjah 6)
- Tiada pendidikan formal

7. Status pendidikan ibu:

- Institut Pengajian Tinggi (Diploma/Ijazah/Sarjana/Doktor Falsafah)
- Sekolah Menengah Atas (SPM/STPM dan setara)
- Sekolah Menengah Rendah (SRP/PMR dan setara)
- Sekolah Rendah (Tamat Darjah 6)
- Tiada pendidikan formal

8. Status pekerjaan bapa:

- Bekerja dengan jabatan kerajaan
- Bekerja dengan pihak swasta
- Berniaga / syarikat sendiri
- Pesara
- Tiada pekerjaan
- Lain-lain (nyatakan): \_\_\_\_\_
- Bapa telah meninggal dunia

9. Status pekerjaan ibu:

- Bekerja dengan jabatan kerajaan
- Bekerja dengan pihak swasta
- Berniaga / syarikat sendiri
- Pesara
- Tiada pekerjaan / Suri-rumah
- Lain-lain (nyatakan): \_\_\_\_\_
- Ibu telah meninggal dunia

10. Jumlah pendapatan keluarga (Ringgit Malaysia):

- Kurang dari RM2500
- RM2500 - < RM5000
- RM5000 - < RM10000
- RM10000 - < RM15000
- RM15000 dan ke atas

**BAHAGIAN B: SKALA KEMURUNGAN, KERESAHAN DAN TEKANAN (DASS21)**

Sila baca setiap kenyataan di bawah dan **BULATKAN** pada **NOMBOR 0, 1, 2 ATAU 3** bagi menggambarkan keadaan anda sepanjang **MINGGU YANG LALU**. Tiada jawapan yang betul atau salah. Jangan mengambil masa yang terlalu lama untuk menjawab mana-mana kenyataan. **NILAI SKALA** adalah seperti berikut:

- 0: Tidak langsung** menggambarkan keadaan saya
- 1: Sedikit atau jarang-jarang** menggambarkan keadaan saya
- 2: Banyak atau kerap kali** menggambarkan keadaan saya
- 3: Sangat banyak atau sangat kerap** menggambarkan keadaan saya

11.	Saya dapati diri saya sukar ditenteramkan	0	1	2	3
12.	Saya sedar mulut saya terasa kering	0	1	2	3
13.	Saya tidak dapat mengalami perasaan positif sama sekali	0	1	2	3
14.	Saya mengalami kesukaran bernafas (contohnya: pernafasan yang laju, tercungap-cungap walaupun tidak melakukan senaman fizikal)	0	1	2	3
15.	Saya sukar untuk mendapatkan semangat bagi melakukan sesuatu perkara	0	1	2	3
16.	Saya cenderung untuk bertindak keterlaluan dalam sesuatu keadaan	0	1	2	3
17.	Saya rasa menggeletar (contohnya: pada tangan)	0	1	2	3
18.	Saya rasa saya menggunakan banyak tenaga dalam keadaan cemas	0	1	2	3
19.	Saya bimbang keadaan di mana saya mungkin menjadipanik dan melakukan perkara yang membodohkan diri sendiri	0	1	2	3
20.	Saya rasa saya tidak mempunyai apa-apa untuk diharapkan	0	1	2	3
21.	Saya dapati diri saya semakin gelisah	0	1	2	3
22.	Saya rasa sukar untuk relaks	0	1	2	3
23.	Saya rasa sedih dan murung	0	1	2	3
24.	Saya tidak dapat menahan sabar dengan perkara yang menghalang saya meneruskan apa yang saya lakukan	0	1	2	3
25.	Saya rasa hampir-hampir menjadi panik/cemas	0	1	2	3
26.	Saya tidak bersemangat dengan apa jua yang saya lakukan.	0	1	2	3
27.	Saya tidak begitu berharga sebagai seorang individu	0	1	2	3
28.	Saya rasa yang saya mudah tersentuh	0	1	2	3
29.	Saya sedar tindakbalas jantung saya walaupun tidak melakukan aktiviti fizikal (contohnya: kadar denyutan jantung bertambah, atau denyutan jantung berkurangan)	0	1	2	3
30.	Saya berasa takut tanpa sebab yang munasabah	0	1	2	3
31.	Saya rasa hidup ini tidak bermakna	0	1	2	3

**BAHAGIAN C: PENGHARGAAN KENDIRI**

Arahan: Bagi setiap pernyataan di bawah sila tandakan (√) di dalam petak yang disediakan bagi tahap persetujuan anda berdasarkan pada skala yang diberi iaitu samada anda sangat setuju hingga sangat tidak setuju bagi setiap pernyataan di bawah.

BIL	PENYATAAN	SKALA PERSETUJUAN			
		Sangat setuju	Setuju	Tidak setuju	Sangat tidak setuju
i.	Saya rasa bahawa saya seorang yang berharga, sekurang-kurangnya setanding dengan orang lain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii.	Saya rasa bahawa saya mempunyai beberapa ciri yang baik .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii.	Keseluruhannya, saya cenderung merasakan bahawa saya seorang yang gagal.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv.	Saya berupaya melakukan perkara-perkara sebaik orang lain.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v.	Saya rasa saya tidak mempunyai apa-apa sangat untuk dibanggakan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vi.	Saya bersikap positif terhadap diri saya sendiri.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vii.	Secara keseluruhannya, saya berpuashati dengan diri saya.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
viii.	Saya berharap saya sepatutnya mempunyai lebih rasa hormat pada diri sendiri.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ix.	Saya benar-benar rasa tidak berguna pada masa-masa tertentu .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
x.	Ada masanya saya rasa tiada apa yang baik tentang diri saya.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Rujukan : SPP3621/Kump\_8/(1)  
Tarikh : 28. 05. 2013

Pengetua  
Sekolah Menengah Islam ABIM  
Lot 1662, Kg. Sg. Ramal Dalam  
433000 KAJANG  
SELANGOR DARUL EHSAN  
(u/p: Bahagian Sekolah Menengah)

Puan,

**MEMOHON KEBENARAN UNTUK MENJALANKAN KAJIAN DIKALANGAN  
PELAJAR SEKOLAH MENENGAH ISLAM ABIM**

Saya dengan segala hormatnya merujuk perkara di atas. Sukacita dimaklumkan bahawa satu kumpulan pelajar dibawah penyeliaan saya ingin menjalankan kajian dikalangan pelajar Tingkatan 1, Tingkatan 2 dan Tingkatan 4, Sekolah Menengah Islam ABIM. Untuk makluman pihak puan juga, kajian ini dijalankan bagi memenuhi keperluan Kursus SPP3621-Projek dan Kaedah Penyelidikan bagi Program Doktor Perubatan Tahun 2, Fakulti Perubatan dan Sains Kesihatan (FPSK), Universiti Putra Malaysia (UPM). Butiran mengenai kajian tersebut adalah seperti berikut:

**Nama Pelajar:** 1) Muhammad Nizam Bin Mohd Haris (No. Matrik: 158683)  
2) Soon He Ying (No. Matrik: 161340) ,

**Tarikh** : Diantara 1Julai hingga 19 Julai 2013

**Tajuk Kajian :** *Prevalence and Factors Associated with Depression, Anxiety and Stress among Islamic Secondary School Students in Hulu Langat District, Selangor*

**Kaedah** : Pelajar perlu mengisi borang soal selidik (*questionnaire*)

Sekiranya terdapat sebarang pertanyaan, pihak puan boleh menghubungi saya ditalian 03-89472415 (pejabat), 013-6362574 (telefon bimbit) atau email saya dialamat [salmiah@medic.upm.edu.my](mailto:salmiah@medic.upm.edu.my).

Sehubungan dengan itu, saya ingin memohon kebenaran daripada pihak puan bagi menjalankan kajian ini. Kerjasama daripada pihak puan bagi menimbang dan meluluskan permohonan ini didahului dengan ucapan ribuan terima kasih.

Zimbra

salmiah@medic.upm.edu.my

---

**PERMOHONAN KEBENARAN UNTUK MENJALANKAN KAJIAN DI KALANGAN  
PELAJAR SEMI ABIM SG.RAMAL**

---

**From :** Rogayah Sebli <rogayahsebli@gmail.com>

Thu, May 30, 2013 12:12 PM

**Subject :** PERMOHONAN KEBENARAN UNTUK  
MENJALANKAN KAJIAN DI KALANGAN PELAJAR  
SEMI ABIM SG.RAMAL

**To :** salmiah@medic.upm.edu.my

Salam Dr.,

Surat permohonan telahpun diterima. Saya rasa tiada masalah utk pelajar2 puan utk jalankan kajian ini. Di akhir kajian, saya mohon dikongsikan dapatan demi kebaikan para pelajar kami.

Sekian. Terima kasih.

---

Rujukan : SPP3621/Kump\_8/(1)

Tarikh : 28. 05. 2013

Pn. Rohida Jamaludin  
Pengetua  
Sekolah Menengah Islam Al-Amin Bangi  
PT 39519, Lot 8796, Kampung Sungai Tangkas  
Batu 18 Jalan Reko  
43000 KAJANG  
SELANGOR DARUL EHSAN  
(u/p: Bahagian Sekolah Menengah)

Puan,

**MEMOHON KEBENARAN UNTUK MENJALANKAN KAJIAN DIKALANGAN  
PELAJAR SEKOLAH MENENGAH ISLAM AL-AMIN**

Saya dengan segala hormatnya merujuk perkara di atas. Sukacita dimaklumkan bahawa satu kumpulan pelajar dibawah penyeliaan saya ingin menjalankan kajian dikalangan pelajar Tingkatan 1, Tingkatan 2 dan Tingkatan 4, Sekolah Menengah Islam Al-Amin, Bangi. Untuk makluman pihak puan juga, kajian ini dijalankan bagi memenuhi keperluan Kursus SPP3621-Projek dan Kaedah Penyelidikan bagi Program Doktor Perubatan Tahun 2, Fakulti Perubatan dan Sains Kesihatan (FPSK), Universiti Putra Malaysia (UPM). Butiran mengenai kajian tersebut adalah seperti berikut:

**Nama Pelajar:** 1) Muhammad Nizam Bin Mohd Haris (No. Matrik: 158683)  
2) Soon He Ying (No. Matrik: 161340)

**Tarikh** : Diantara 1Julai hingga 19 Julai 2013

**Tajuk Kajian** : *Prevalence and Factors Associated with Depression, Anxiety and Stress among Islamic Secondary School Students in Hulu Langat District, Selangor*

**Kaedah** : Pelajar perlu mengisi borang soal selidik (*questionnaire*)

Sekiranya terdapat sebarang pertanyaan, pihak puan boleh menghubungi saya ditalian 03-89472415 (pejabat), 013-6362574 (telefon bimbit) atau email saya dialamat [salmiah@medic.upm.edu.my](mailto:salmiah@medic.upm.edu.my).

Sehubungan dengan itu, saya ingin memohon kebenaran daripada pihak puan bagi menjalankan kajian ini. Kerjasama daripada pihak puan bagi menimbang dan meluluskan permohonan ini didahului dengan ucapan ribuan terima kasih.

Zimbra

salmiah@medic.upm.edu.my

---

**Kajian ke atas pelajar**

---

**From :** Rohida Jamaludin <rohidajamaludin@gmail.com> Wed, Jun 26, 2013 10:06 AM

**Subject :** Kajian ke atas pelajar

**To :** salmiah@medic.upm.edu.my

Assalamualaikum wrt  
kepada Dr Salmiah Md Said, semoga sentiasa dalam rahmat Allah swt.

Perkara di atas dirujuk. Saya tiada keberatan untuk membenarkan kajian tersebut dijalankan ke atas pelajar2 saya.

Surat Dr Salmiah sebenarnya telah saya panjangkan kepada PIC yang dilantik. Menurutnya, beliau pernah hubungi Dr tetapi tiada respon. InsyaAllah perkara ini akan dilihat semula dan diambil tindakan segera.

PIC yang dilantik ialah Muallimah Norlida Abu Shari 019 269 6224.

Terima kasih. Semoga Allah memudahkan semua urusan kita.

Muallimah Rohida Jamaludin  
Pengetua  
019 228 2014

---