

ORIGINAL ARTICLE

**PREVALENCE AND ASSOCIATED FACTORS OF PHOBIA  
AND SOCIAL ANXIETY AMONG UNIVERSITY STUDENTS**

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**Abstract**

**Objective:** The objective of this study was to determine the prevalence of the most common phobias and associated factors among university students. **Methods:** This cross-sectional study was carried out at Management and Science University (MSU). Random sampling was performed throughout all faculties. The questionnaires were distributed randomly at classes, library and university cafe within MSU. Diagnosis of anxiety disorders were established according to DSM-IV criteria. These criteria are included in Liebowitz Social Anxiety Scale (LSAS). The questionnaire consists of two sections. The first section consists of socio-demographic characteristics such as (age, sex, race, type of faculty and income); the second section is LSAS standard questionnaire. Multiple linear regression using backward analysis was performed to obtain the associated factors. **Results:** A total number of four hundred sixty eight (468) students participated in this study. The majority of them were older than 20 years old, female, Malay and from non-medical and health faculties (59.6%, 69.6%, 77.8%, 68.8%; respectively). Regarding history of abuse during childhood, the majority of the university students reported that there was no sexual, physical and emotional abuse during childhood (98.5%, 97.4%, 82.1%; respectively). The majority of the students (53.85%) reported that they have phobia. The highest type of phobia reported among university students was phobia from snake (11.5%), followed by speaking in front of crowd (9.2%) and the lowest were phobia of speed, dolls phobia, ropes phobia. Types of faculty, smoking status and history of physical abuse during childhood were the factors that significantly influence the social anxiety among university students in univariate and multivariate analysis. **Conclusion:** The prevalence of phobic symptoms among university students was high types of faculty; smoking status and history of physical abuse during childhood significantly influenced social anxiety among university students. Education and counseling university students is necessary to educate the students who suffer from phobia to cope with different situations during study period. *ASEAN Journal of Psychiatry, Vol. 13 (2): July – December 2012: XX XX.*

**Keywords:** Social Phobia, University Students

**Introduction**

Social phobia is reported to be among the most common anxiety disorders with lifetime prevalence rates ranging from 2 to 16% in the

general population and characterized by fear of one or more situations in which a person may be exposed to possible scrutiny by others and fear that he or she will act in an embarrassing or humiliating and fear of negative evaluation.

Sufferers become anxious when they perceive themselves as the centre of attention, finding it difficult to speak in public, attend social events and deal with authority figures [1, 2].

Social phobia usually develops in early adolescence or young adulthood, a period when there is a normal increase in self-consciousness. It tends to impair productive learning, social interactions, interpersonal difficulties, leading to reduced quality of life, increased number of social fears, increased disability and results in significant distress [3-7].

Any type of mental illness can have a negative impact on cognitive development and learning, and involves a very high cost to both the individual and society. Studies reported that social phobia contributed to medical school dropout [8], deterioration in relationships [9], marital problems and an impaired ability to work effectively [10]. However, researchers also agree that a moderate degree of anxiety may well motivate the student and encourage them towards better academic achievement. Hence, some degree of anxiety is considered a necessity for learning and high academic achievement. The contrary is unfortunately also true, as a high anxiety score may be a severe obstacle to academic achievement.

There are several types of phobias, such as specific phobia which is fear of a single specific panic trigger such as spiders, dogs, elevators, water, flying, catching a specific illness [11]. Another type of phobia is agoraphobia which is characterized by intense anxiety about being in a place or situation from which escape might be difficult or embarrassing in the event of a panic attack. Agoraphobia is commonly associated with panic disorder. 'Medical' phobia is the fear of physical illness, medical tests and procedures.

According to the Diagnostic and Statistical Manual of Mental Disorders [11] 4th Edition (DSM-IV), social phobia, specific phobia and agoraphobia are subgroups of anxiety disorders. Several studies reported the high prevalence of specific phobias in the general population, especially in children [12]. Children's fears differ in nature across different ethnic groups

and culture; beliefs, values and traditions may play a role in their expression. Researchers believe that a combination of genetic and environmental influences results in the emergence and maintenance of social phobia. If left untreated, individuals with social phobia rarely recover.

Increasing attention is being paid to anxiety disorders worldwide because of their common occurrence in primary care settings and in the general population [13] and the degree of disability found in sufferers. The impairment from anxiety disorders is comparable with long term physical illnesses like arthritis, hypertension and diabetes, but then, unlike these illnesses, anxiety disorders have an earlier age of onset and hence a longer duration of ill-health [14]. It is common, with an annual prevalence of 2.7% in Australia [15], but elsewhere in the western world it is higher (3-4%) and has a lifetime incidence of 7-13% [16]. It has significant impact on education and employment, with lower levels of educational achievement and lower incomes [17]. In developing countries 10-44% suffers from depression and anxiety disorders, less than 35% receive medical care and according to an estimate 50.8 million people suffer from major depression [18]. Studies about anxiety among Malaysian university students are lacking. Therefore, the current study aimed to determine the prevalence of the most common phobias and associated factors among university students.

## **Methods**

This cross-sectional study was carried out at Management and Science University (MSU), Shah Alam, Malaysia during the period from September 2011 until January 2012. A total number of 468 students were randomly selected from five different faculties which are Faculty of Health and Life Sciences (FHLS), International Medical School (IMS), Faculty of Business Management and Professional studies (FBMP), Faculty of Information Sciences and Engineering (FISE) and Centre of Foundation Studies (CFS). Inclusion criteria were Malaysian, aged more than 18 years old. The questionnaires were distributed randomly using

simple random sampling at classes, library and university cafe within MSU. Diagnosis of anxiety disorders were established according to DSM-IV criteria. These criteria are included in Liebowitz Social Anxiety Scale (LSAS). The questionnaire consists of two sections. The first section consists of socio-demographic characteristics such as (age, sex, race, type of faculty and income); the second section is LSAS standard questionnaire. The protocol of this study was approved by the ethics committee of Management and Science University. Consent was obtained from students before they answered the questionnaire. T-test was used in univariate analysis. Multiple linear regression using backward analysis was performed to obtain the final model. The final model was chosen depending on R<sup>2</sup> and the p value of the model. A p value less than 0.05 is considered significant.

## Results

A total number of four hundred sixty eight students (468) participated in this study from all faculties at Management and Science University (MSU), Malaysia. The majority of them were older than 20 years old, female, Malay and from non-medical and health faculties (59.6%, 69.6%, 77.8%, 68.8%; respectively). The majority of them were from urban areas, with family monthly income less than or equal to 4500 Ringgit Malaysia (RM) and no family history of social anxiety (90.4%, 64.7%, 94.9%; respectively). Regarding lifestyle among the study participants, the majority of them were non-smokers and non-alcohol drinkers (89.7%, 95.9; respectively). Regarding history of abuse during childhood, the majority of the university students reported that there was no sexual, physical and emotional abuse during childhood (98.5%, 97.4%, 82.1%; respectively). Majority of the students (53.85%) reported that they have phobia (Table 1).

**Table 1. Socio-demographic Characteristics of the Study Participants (n=468).**

Variables	Categorize	Number	Percentage (%)
Age	≤20	189	40.4
	>20	279	59.6
Sex	Male	141	30.1
	Female	327	69.6
Race	Malay	364	77.8
	Non-Malay	104	22.2
*Faculty	Medical and health faculties	146	31.2
	Non-medical and health faculties	322	68.8
Residency	Urban	423	90.4
	Rural	45	9.6
Family monthly income (RM)	≤4500	303	64.7
	>4500	165	35.3
Family history of social phobia	Yes	24	5.1
	No	444	94.9
Smoker	Yes	48	10.3
	No	420	89.7
Consume alcohol	Yes	19	4.1
	No	449	95.9
History of sexual abuse during childhood	Yes	7	1.5
	No	461	98.5
History of physical abuse during childhood	Yes	12	2.6
	No	456	97.4
History of emotional abuse during childhood	Yes	84	17.9
	No	384	82.1

Social phobia	No phobia	216	46.15
	Phobia	252	53.85

*\*Medical and health faculties such as FHLS and IMS; non-medical and health faculty such as FBMP, FISE and CFS.*

Regarding the types of phobias, the most common type of phobia reported among university students was phobia from animals in general (26.1), followed by phobia from snake

(11.5%), followed by speaking in front of crowd (9.2%) and the lowest was snow phobia (Table 2).

**Table 2. Types of Phobias among University Students (n=468).**

Type of phobia	Number	Percentage (%)
Animals such as (Lizard, snake, cats/ cockroaches/spider/bees)	122	26.1
Snake	54	11.5
Speaking in front of crowd	43	9.2
Situations (closed space/height/speaking/funerals/flying)	36	7.7
Cockroach	28	6.0
Other type of phobia	23	4.9
Height	19	4.1
Closed space	19	4.1
Cats	16	3.4
Lizard	11	2.4
Blood	9	1.9
Funeral, corpses	7	1.5
Bees	7	1.5
Spider	6	1.3
Army	3	0.6
Flying	3	0.6
Speed	2	0.4
Dolls	2	0.4
Ropes	2	0.4
Snow	1	0.2
No phobia	55	11.8

Regarding the factors that significantly influence the social anxiety among university students were type of faculty, smoking status and history of physical abuse during childhood ( $p=0.030$ ,  $p=0.001$ ,  $p=0.039$ ; respectively). Other factors did not show any significant influence towards

social anxiety such as (age, race, sex, residency, income, family history of social anxiety, alcohol consumption, history of childhood sexual abuse, and history of childhood emotional abuse ) (Table 3).

**Table 3. Factors Associated with Social Phobia among University Students (n=468)**

Variables	Categorize	Mean SD	t	p-value
Age	$\leq 20$	2.08±1.24	0.041	0.967
	$> 20$	2.09±1.28		
Race	Malay	2.06±1.25	0.780	0.436
	Non-Malay	2.17±1.31		
Sex	Male	1.97±1.3	1.30	0.194
	Female	2.14±1.2		

Faculty	Medical and health faculties Non-medical and health	1.91±1.11 2.17±1.32	2.03	0.030
Residency	Urban Rural	2.08±1.27 2.19±1.22	0.37	0.706
Income	≤4500 >4500	2.12±1.28 2.03±1.22	0.72	0.464
Family history of social anxiety	Yes No	2.46±1.56 2.07±1.24	1.47	0.239
Smoker	Yes No	1.52±0.8 2.15±1.2	3.30	0.001
Consume alcohol	Yes No	2.26±1.5 2.08±1.2	0.61	0.538
History of sexual abuse during childhood	Yes No	3.00±1.5 2.07±1.2	1.92	0.05
History of physical abuse during childhood	Yes No	2.83±1.8 2.07±1.2	2.07	0.039
History of emotional abuse during childhood	Yes No	2.21±1.34 2.06±1.24	1.02	0.312

In multivariate analysis (Table 4), type of faculty, smoking status and history of physical abuse during childhood were significantly

associated with social anxiety (p=0.023, p=0.001, p=0.023; respectively).

**Table 4. Predictive Model of Social Anxiety among University Students by Multiple Linear Regression (n=468).**

Predictive factors	b	SE	Beta	p- value
Constant	1.943			
Faculty Medical Non-Medical	Ref. 0.284	Ref. 0.125	Ref. 0.104	0.023
Smokers No Yes	Ref. -0.705	Ref. 0.191	Ref. 0.169	0.0001
History of childhood physical abuse No Yes	Ref. 0.830	Re. 0.365	Re. 0.104	0.023

F=7.3 p=0.0001 R<sup>2</sup>=0.45

## Discussion

The present study focused on anxiety level and its associated factors among university students in Malaysia. Anxiety and depression were ranked first and third as presenting problems among university students and previous studies

suggest high rates of psychological morbidity, especially depression and anxiety, among university students all over the world [19-22]. The prevalence of anxiety in this study among university students was 53.85%. Similar finding was reported by Khan et al. (2006) [23] which found that there was a high prevalence of

anxiety and depression (70%) among students. Inam et al. (2003) [24] found that 60% of students suffered anxiety and depression. This may be due to several factors such as unfamiliarity with a university environment for first-time students, first time that students were away from their family, dissatisfaction with the course of study that they had registered for, inability to adjust among other students and insufficient income.

Social phobia is a heterogeneous disorder, and various subgroups of patients who exhibit social-evaluative fears in different situational contexts have been described in the literature [25-30].

Some patients report fears that are limited to one or more performance situations (e.g., speaking or writing in front of others), while others experience a broader array of social fears that often include fears of social interaction (e.g., meeting new people, attending parties, or talking to people in authority).

Similarly reported in this study, the highest type of phobia reported among university students was phobia from animals in general (26.1), followed by phobia from snake (11.5%), followed by speaking in front of crowd (9.2%) and the lowest was snow phobia. Similar findings reported by a study from Qatar reported that the most commonly reported phobias among children and adolescents were social phobia, agoraphobia, specific phobia and medical phobia [31]. Izgic et al. (2004) [32] found the one year prevalence of social phobia in university students to be 7.9% and life-time prevalence to be 9.6%. Studies in different countries have placed the prevalence of social phobia in the range of 5% to 8%, making it the most common anxiety disorder and one of the most common psychiatric disorders. In another study agoraphobia was found to be the second most common phobia with a prevalence rate of 8.6%. Agoraphobia is a generalized fear of leaving home or a familiar 'safe' area, and of possible panic attacks that might follow. The study findings revealed that the sample had such fears and the prevalence increases with age. Agoraphobia was significantly more prevalent in

the 16-18 years age group than in the 6-11 age group (11.7%; vs.5.6%,  $p=0.002$ ) [31].

This study showed that more females than males suffer from social anxiety. There was no gender difference in the prevalence of social phobia in this study, a finding similar to studies of college students in other countries [32]. Similarly, the National Co-morbidity Survey carried out on over 8,000 respondents in the United States, a general health care survey looking at 405 attendees in France and a population study in the Netherlands found higher rates of social phobia in females [4, 3, 6]. Similar study reported that phobias were more prevalent in female students (21.9%) than in males (16.8%), with a female to male sex ratio of 1.3:1 which is similar to other epidemiologic studies that have observed a higher frequency among females [33]. Explanations proposed for the higher rates in older females are that social expectations of gender behaviour accept and reinforce social inhibition in females while males are pushed to mask or seek treatment to overcome it [34, 35]. Findings of this study agreed with the findings of other studies which found that females suffered a higher level of anxiety or social anxiety [36-38]. Conversely, some studies demonstrated higher lifetime prevalence rates for social phobia [39] and obsessive compulsive disorders (OCD) [40] in men as compared to women. Some other studies reported no significant differences with regard to anxiety among female and male students [23, 24]. The possible reasons for high female anxiety are explained by Verbuegge (1985), [41] namely that females are more likely to report concerns about the volume and complexity of the study material they have to cover, they are more likely to report stress due to self-expectations and a feeling of lack of competence, and women tend to over-report medical and psychological symptoms. The other possible reason may be due to physiological factors and the sex roles of women in social and interpersonal relationships. Female physiology entails that women go through hormonal changes and that they may experience problems in the reproductive age, or when they reach menopausal status in their life. Women are at risk of mental disorders due to the

robust effect of biological factors or because of greater social inconveniences.

In this study, smoking significantly influences the social anxiety among university students. A study by Coogan et al. (1998) [42] reported that younger children may smoke to cope with anxiety and depression. Clinical studies have shown a higher frequency of smoking among psychiatric patients than among control groups [43]. Psychiatric predictors of initiation of smoking include use and abuse of alcohol and other drugs, major depressive disorder, anxiety disorders, adult attention deficit hyperactivity disorder and bulimia/binge-eating [43-45]. Sonntag et al. (2000) [46] investigated associations between social anxiety disorder and smoking behavior in order to explore whether social anxiety predicts the onset of cigarette smoking, regular smoking and the development of nicotine dependence. These investigators performed a cross-sectional retrospective baseline analysis and a prospective- longitudinal survey during a 4-year follow-up. Social anxiety disorder was significantly associated with nicotine dependence in both cross-sectional retrospective and prospective-longitudinal analyses. Some literature evidence supports a close relationship between social anxiety disorder and nicotine dependence and the comorbidity of both disorders with alcohol abuse/dependence.

Regarding childhood abuse, it has been associated with psychiatric disorders such as depression and anxiety disorders [47-50].

Limitations of this study are that the sample was limited to undergraduates and therefore cannot be inferred to the general population and the cross-sectional design limits any causal inferences. However, this is the first study describing social phobia among university students in Malaysia.

### **Recommendation**

The high prevalence of phobia among university students needs education about social phobia and its impact and for the development of more widely available treatment resources for persons

with social phobia. Thus, early diagnosis of first social anxiety symptoms may assist in the prevention of more severe psychiatric symptoms. The study findings are of interest and national study should investigate, in a more detailed manner, the pattern of risk factors associated with phobias in children.

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