

ORIGINAL ARTICLE 

# Prevalence of social phobia among university students and sociodemographic factors associated with it: A cross-sectional study from Perak, Malaysia

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**ABSTRACT**

**Introduction:**

Social phobia, or social anxiety disorder (SAD), is a psychiatric condition marked by an intense fear of social interactions and the worry of being judged or evaluated by others. It ranks as the third most commonly reported mental health disorder, impacting one's self-esteem and perception of their body. It usually begins in early adulthood, especially among college or university students, impacting academic achievement, social abilities, and overall well-being. This study aimed to find the prevalence of social phobia and the key demographic factors associated with it.

**Methods:**

A total of 305 students from the foundation, diploma, degree, and postgraduate courses, aged between 18-30 years participated in this study. The Social Phobia Inventory (SPIN) questionnaire was used to assess social phobia.

**Results:**

The majority of the students were in the age group of 18-24 years (70.8%), female students were 59%, Malaysian 86.9%, and non-medical participants comprised 76.4%. Females had significantly higher levels of social phobia compared with males. The other factors, like nationality, faculty, and level of education, were found insignificant.

**Conclusion:**

The research reveals that females had significantly higher social phobia, highlighting the need for further investigation into the complex interplay of biological, psychological, and societal factors. Understanding these relationships can help to develop effective prevention and intervention strategies for different gender groups, thereby addressing social phobia's prevalence and impact on individuals' lives.

**Keywords**

Education, factors, females, phobia, prevalence, social, students

## Introduction

Social phobia, also known as social anxiety disorder (SAD), is a mental health disorder characterised by persistent fear of social situations when individuals are exposed to unfamiliar people or scrutiny. It leads to shyness or discomfort in social settings and is associated with unattainable perfection and constant peer scrutiny. [1] The lifetime prevalence rate for SAD in the general population is 13.3%, making it the third most frequently reported mental health illness, following depression (17%) and alcohol addiction (14%). [2, 3]

It has widespread implications and is a significant concern in clinical psychology. Individuals afflicted with social phobia have diminished self-esteem and a greater propensity for distorted body image. [4] The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) defines social phobia as a generalised subtype, with nongeneralized social phobia characterised by specific circumstances. [5] Social phobics experience excessive concern over routine tasks, exhibit avoidance or heightened anxiety towards social engagements, consistently fret over potentially embarrassing actions, and encounter difficulty performing tasks under the observation of others. They feel apprehensive about receiving criticism, refrain from making direct visual contact with others, and experience episodes of panic attacks. [6] Social phobia is also associated with avoidant personality disorder, a pattern of social inhibition and hypersensitivity to negative evaluation that significantly impairs social functioning and results in a decreased quality of life.

The onset of social phobia is typically observed in adolescence or early adulthood. [3] Social phobia among undergraduates is a significant concern due to their at-risk age and struggle with identity and independence issues. Social phobia affects various aspects of daily life, including academic performance, interpersonal skills, and the general quality of life. [7] Social phobia leads to poor communication skills and dissatisfaction with various aspects of life. Social phobia may cause alcohol dependence, oral presentation avoidance, clinical assessments, and depressive symptoms. Commonly feared social situations include being criticised, fear of social events, and public speaking. The main causes of social phobia include presentations, exams, language barriers, criticism in public, overprotection, and family provocation. [3, 8-10]

People with social anxiety and social phobia display impaired skills in marital status, educational attainment, and employment and display distinctive and less functional social behaviour, with interpersonal variability and overly dependent behaviour. This leads to fewer positive impressions and negative reactions, further reducing their quality of life. Reports suggest that about 66% of respondents with social phobia reported at least one comorbid condition. Social phobia is strongly associated with obsessive-compulsive disorder, bipolar disorder,

agoraphobia without panic disorder, and panic disorder. [8, 9] Less likely undergraduate students come forward to seek psychological help, which makes them anxiolytic and more vulnerable. [11] The recent COVID-19 pandemic made the situation worse when all teaching learning activities switched from the physical face to face to online. [12]

The research on social phobia among university students, especially in Malaysia, has been sparse, and more information is needed to understand the prevalence of this disease in our future generation. The issue of social phobia being left untreated and undiagnosed among university students is a matter of great importance, and through this research, we will be able to determine the severity of this disease as well as the key demographic factors that may influence the development of this disease for the purpose of early detection and prevention among the students in this university.

## Methods

### Study period, study design, and participants

This cross-sectional descriptive study was conducted at Quest International University (QIU) from December 2022 to July 2023. A structured questionnaire was distributed among the students of different faculties. A total of 305 students participated in this research.

### Inclusion and exclusion criteria

All students in this research were from the QIU foundation, diploma, degree, and postgraduate courses, aged between 18-30 years, were well-versed in English, and volunteered to participate. Those who were unwilling to participate and were not given informed consent were excluded.

### Sample size calculation

The selection of study participants was voluntary, and a convenient sampling method was used for this research. The sample size was calculated based on a previous study by Tillfors *et al.* [13] The sample size was calculated as 300 for a confidence interval of 95 percent and an absolute precision of 5%.

### Collection of data and questionnaire

The Social Phobia Inventory (SPIN) questionnaire was used to assess social phobia, which is a 17-item tool for screening and measuring the severity of SAD. SPIN assesses different aspects related to social phobia – fear, avoidance, and physiologic symptoms. It is suitable for the adult population. Each item is measured on a 5-point Likert scale, ranging from 0 (not at all) to 4 (extremely). Respondents indicated how much each item bothered them during the past week. A categorical interpretation is suggested, where scores less than 20 are considered no social phobia (SP), 21-30 mild SP, 31-40 moderate SP, 41-50 severe SP, and 51 or higher or very severe SP. [14]

**Independent variables**

Age, gender, ethnicity, nationality, and fields of study were independent variables.

**Dependent variables**

Attitudes towards psychological help-seeking such as stigma, access, privacy, trust, etc.

**Data management and statistical analysis**

Statistical analysis was done using the Statistical Package for Social Sciences (SPSS, version 26). The Chi-square and Fisher exact tests were performed. p-value < 0.05 was considered statistically significant.

**Ethical committee approval**

We obtained permission from the Joint Research Ethics Committee (JREC) at QIU. Confidentiality and anonymity were maintained throughout the project. Detailed information about the research was provided to the participants, who gave informed consent. Investigators declared that participation was voluntary, and participants were allowed to ask any questions and had the freedom to participate, decline, or stop participating at any moment.

**Results**

**Table 1: Sociodemographic characteristics of Participants (n=93)**

Demographic profile	n	(%)
<b>Age</b>		
18-21	216	70.8
22-25	83	27.2
26-30	6	2.0
Total	305	100
<b>Gender</b>		
Male	125	41.0
Female	180	59.0
Total	305	100
<b>Nationality</b>		
Malaysian	265	86.9
Non-Malaysian	40	13.1
Total	305	100
<b>Faculty</b>		
Medical	72	23.6
Non-Medical	233	76.4
Total	305	100
<b>Level of education</b>		
Pre-University	119	39.0
Undergraduate	180	59.0
Post-Graduate (Fischer)	6	2.0
Total	305	100

Table 1 describes the demography of the students who participated in this study. The majority of them were in the age group of 18-24 years (70.8%), female students were 59%, the majority of the students were Malaysian (86.9%), and non-medical participants comprised 76.4%.

Table 2 shows the association between sociodemographic factors and the prevalence of social phobia. Females had significantly higher levels of social phobia compared with

males [ $Chi(df) = 9.28 (1), P \text{ value} = 0.002$ ]. The factors such nationality of the respondent, faculty, and level of education were found statistically insignificant.

**Discussion**

**Social phobia and gender**

We observed a significant relationship between the presence of social phobia and gender at QIU. Social phobia was found to be more prevalent in females, which is consistent with a previous study, where females were found to have a 2.3 times higher risk of developing social phobia. [15] It could be due to child-rearing practices and orthodox beliefs regarding the setting of traditional gender-role expectations. [16] Based on the sociocultural setting in Malaysia, which includes a distinctive fusion of cultural, religious, and traditional practices, gender roles and expectations cannot be overlooked. This, in turn, may have an impact on the prevalence and development of social phobia in students. In an Ethiopian study, it was discovered that females are less likely to participate equally in all activities due to cultural influences. It was noted that it might be related to authoritarian differences between male and female students and negligent parenting methods, where most males received special attention from their parents. [15] This leads to a higher prevalence of social phobia seen in females than in males.

The presentation of social phobia may also vary between males and females. Altemus *et al.* reported in neuroimaging studies investigating gender differences in reactions to threatening social cues, such as angry looks, that females are consistently more sensitive to interpersonal threats and show a stronger reaction to social rejection when compared to males, who were more responsive to achievement stress. This increased sensitivity to social signals may have an impact on the development and presentation of social phobia in females. On the other hand, social phobia in males is more influenced by performance-related concerns. Some researchers have documented that females are more inclined to attribute their performance to external factors and are generally more concerned with how others perceive them. This tendency could be a factor in the development of social phobia, which is characterised by an elevated fear of judgement and increased self-consciousness in social settings. [17]

Gender differences in help-seeking behaviour can also contribute to the observed prevalence rates. In comparison to females, males frequently display less emotion, are reluctant to admit vulnerability, and seek professional assistance considerably less frequently. [18] Males are typically socialised into a masculine gender role that requires them to uphold a traditionally accepted masculine norm that values independence, emotional stillness, independence, and a lack of awareness of one's weaknesses. As a result, these norms are against the idea of getting professional help for one's problems, which may result in a

**Table 2: Association between sociodemographic factors and the prevalence of social phobia (n=305)**

Demographic profile	Yes		No		chi	(df)	P value
	n	(%)	n	(%)			
<b>Age</b>							
18-21	116	(53.7)	100	(56.3)			0.483 <sup>a</sup>
22-25	48	(57.8)	35	(42.2)			
26-30	2	(54.4)	4	(45.6)			
<b>Gender</b>							
Male	55	(44.0)	70	(56.0)	9.283	1	0.002 <sup>b</sup>
Female	111	(61.7)	69	(38.3)			
<b>Nationality</b>							
Malaysian	146	(55.1)	119	(44.9)	0.364	1	0.546 <sup>b</sup>
Non-Malaysian	20	(50.0)	20	(50.0)			
<b>Faculty</b>							
Medical	39	(54.2)	33	(45.8)	0.003	1	0.96 <sup>b</sup>
Non-Medical	127	(54.5)	106	(45.5)			
<b>Level of Education</b>							
Pre-University	55	(64.8)	64	(54.2)			0.052 <sup>a</sup>
Undergraduate	108	(60.0)	72	(40.0)			
Post-Graduate	3	(50.0)	3	(50.0)			

\*p<0.05, x p>0.05

<sup>a</sup> Fisher exact test was applied, <sup>b</sup> Pearson’s chi square test was applied

possible underdiagnosis or underreporting of social phobia in males. A study regarding gender differences with a large sample of people with social phobia reported that females exhibited more severe social fears using several assessment instruments. The study had a stark contrast in the report for differences between males and females concerning the severity of fear in specific situations. In the female’s case, the specificities ranged from talking to authority figures, performing or talking in front of an audience, being observed while working, setting foot into a room with others seated already, expressing disapproval or disagreement to others, and generally being the centre of attention. In comparison, the males reported much fewer specific fears. [19]

**Social phobia and nationality**

We did not find any significant relationship between the presence of social phobia among Malaysians and non-Malaysians, which refers to international students studying at QIU. This may be because a critical feature that influences social phobia is cultural norms, and daily life routines impact a person’s outlook and ability to perform in a social setting. A study by Kleinknecht *et al.* detailing the impact of culture on social phobia has pointed out the same. Considering this, students at a university tend to adopt the cultural norms of the country they are currently staying in. That might contribute to the result that shows no significant relationship between nationality and social phobia because they are exposed to similar cultural norms and adapt accordingly. The cultural norms in universities often reflect

the culture and surroundings of the environment around them. Students being enclosed in a similar environment are subject to adhering to the rules of society imposed on them, especially being a part of a student community, which is contradictory to another study, where cultural variables can mediate the expression of social anxiety. [20]

We found that almost a similar percentage of Malaysians and non-Malaysians experienced social phobia, once again highlighting that nationality is not a critical factor in determining the prevalence of social phobia in a student community, where other factors have more bearing on the conditions that encourage the development of social phobia, such as socioeconomic background, lower employment rates, and household income. [21]

**Social phobia and level of education**

We observed that level of education has no significant relationship with the presence of social phobia, and this could be a result of several reasons. Socioeconomic background and cultural upbringing could be the determining factors of social phobia that exist outside of the level of education in a student community. [20, 22]

Another reason might be that social engagement and social situation exposure do not influence the different levels of education, although it may be worthy of note that even though students of postgraduate studies have been exposed to more complex and demanding social situations, they do not show any increase in the prevalence of social phobia. Further research is recommended to explore this phenomenon. Regarding the prevalence of social phobia in each category, we found that all the varying levels of

education exhibit similar results, once again reaffirming that this factor does not have any major bearing on the prevalence of social phobia.

Education settings, especially in higher education institutions, often involve socialising with peers and engaging in various social activities. These social interactions can be anxiety-provoking and challenging for individuals with social phobia. Difficulties in forming social connections, participating in group work, or joining extracurricular activities due to social anxiety can impact the overall educational experience. This factor stays true throughout a student's course in higher education without accounting for different stress levels experienced by the students and how they choose to cope with them without exhibiting signs of social phobia. [23] A previous study showed that students who pursued medicine experienced anxiety and depression during their clinical years. [24]

Social phobia may be a reason to create stress among students. Social phobia, being a condition that stems from individual characteristics that rely heavily on external factors and how they respond to anxiety, reinforces the fact that although the level of education may directly affect the amount of pressure and stress faced by a student, it does not negatively impair a student's ability to act accordingly in various social settings. [25]

The level of education may be a predetermining factor in other aspects of anxiety disorders, but it does not have a significant relationship with the prevalence of social phobia theoretically because the conditions at higher levels of education in relation to social situations do not provide a significant variation but rather stay the same throughout. Russell *et al.* reported that social anxiety was present in a relatively small cohort of subjects but in a significant proportion of students who were pursuing higher education. [26]

### **Social phobia and field of study**

We did not find a significant relationship between social phobia and the faculty of study of the students at QIU. This is likely due to the influence of other factors, such as negative experiences, social difficulties, and emotional distress, which influence the frequency of social phobia, irrespective of the field of study. [27]. So, there may not be a coherent association between social phobia and the faculty of study among university students. A study by Reta *et al.* showed that the prevalence of social phobia followed various trends, but a correlation between faculty and social phobia was absent [28].

Russell reported that students feel that the faculty can have an impact on their social performance. Because it can cause a person's reluctance or aversion to social situations, which leads to decreased social exposure [27]. Moreover, the individual perspective on social phobia is different, and how people align themselves in different situations based on their strengths and coping strategies, i.e., management of individual situations, vastly differs. External influences

such as family backgrounds, societal expectations, personal goals, and interests obscure the faculty's influence on social phobia. Although the possibility of establishing a direct correlation was challenging, Russell *et al.* found that the relation between faculty and social phobia was highest on average for the Faculty of Technology and was the lowest for the Faculty of Medicine. [26] Different faculties have unique levels of social interactions, group work, presentations, etc., and in some instances, there could be a supportive academic environment that can foster a favourable academic atmosphere for the students. Social interactions make them more comfortable, which can vastly vary between the faculty and even between different subjects or disciplines within the same faculty. Likewise, counselling services offered by faculty, mentor-mentee relationships, and student-lecturer associations may also influence students' social phobia. Additionally, some subjects could be more academically challenging or less competitive or evaluative within the same faculty, which can heighten or lower social anxiety.

### **Social phobia and age**

In our research, there was no significant relationship between social phobia and age. Although previous research has found a relationship between the onset of social phobia and adolescence, since most university students have already passed this stage, they do not exhibit any signs of social phobia. [29] There seem to be more pertinent and salient factors at play in regard to influencing the prevalence of social phobia and the minute age difference between the samples studied.

### **Conclusion**

Social phobia is a complex condition that depends on a wide range of factors. This research has shed light on the prevalence of social phobia and the associated contributory factors. Faculty, level of education, nationality, and age did not contribute significantly; only one factor, gender, demonstrates a significant correlation with social phobia. This emphasises the importance of recognising the role of gender in understanding social phobia's prevalence. This may be attributed to a complex interplay of biological, psychological, and societal factors requiring further investigation. Understanding these underlying mechanisms is crucial for developing effective prevention and intervention strategies tailored to different gender groups. Our research highlights the need for enhanced pedagogical assistance for students with social anxiety. Future multicenter research should explore the nuanced relationships between social phobia and these factors, as they may still play a role in shaping the condition's expression and severity. By gaining a deeper understanding of the interplay between these factors, we can better tailor interventions and support strategies to effectively address social phobia's prevalence and its impact on individuals' lives.

## Limitations and future scope

Our research underscores the need for a more comprehensive, multicenter approach to understanding social phobia among students. A larger sample size and using other different questionnaires to measure social phobia will give more accuracy.

## Abbreviations

Diagnostic and statistical manual of mental disorders (DSM-5), Joint Research Ethics Committee (JREC) Statistical Package for Social Sciences (SPSS), Quest International University (QIU), social anxiety disorder (SAD), Social Phobia Inventory (SPIN)

## Relevance of the study

This research revealed various factors associated with social phobia and delved deeper into its underlying cause. The present study is significant as it emphasises the necessity of immediate support for students experiencing social phobia, which detrimentally impacts their psychological well-being.

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## Authors' contribution

All authors made equal contributions to the study in terms of planning, data collecting, data analysis/interpretation, paper writing, manuscript revision, and final approval of the manuscript. All authors also agreed to be responsible for all parts of the work.

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## Availability of data and materials

All data underlying the results is available as part of the article, and no additional source data is required.

## Competing interests

None declared.

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