

## Thematic Analysis to Measure Social Anxiety among Students

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**Abstract:** The occurrence of social anxiety among students in higher education has become a growing concern, necessitating a comprehensive understanding of effective assessment methods. To address this, a study was conducted utilizing thematic analysis to explain prevailing trends in the measurement of social anxiety. By analyzing ten scholarly articles sourced from the Web of Sciences (WOS) database, the research sought to identify common patterns and themes in the approaches employed to assess social anxiety. The findings of the thematic analysis highlighted several prevalent tools frequently utilized in assessing social anxiety, including the Liebowitz Social Anxiety Scale, the State-Trait Anxiety Inventory, the Social Interaction Anxiety Scale, the Social Anxiety Scale, the Social and Emotional Competencies Evaluation Questionnaire, and the Social Anxiety Scale. These established measurements signify essential resources for researchers and practitioners aiming to comprehensively evaluate social anxiety in university students. This comprehensive review of existing literature not only contributes to a deeper understanding of the methodologies employed in studying social anxiety but also emphasizes the importance of employing a variety of measurement techniques in future research endeavors. By incorporating these findings, scholars and mental health professionals can devise more tailored interventions and support mechanisms to address the growing concerns surrounding social anxiety within higher education settings.

**Keywords:** *Social Anxiety, Higher Learning Education, Anxiety, Thematic Analysis, Social Anxiety Scale.*

### 1. Introduction and Background

The COVID-19 pandemic is one of the factors that trigger anxiety and depression worldwide. The World Health Organization (WHO) published a scientific brief in 2022 stating that during the first year of the COVID-19 pandemic, the prevalence of anxiety and depression increased by 25% worldwide. 90% of the countries polled had previously incorporated mental health and psychosocial support into their COVID-19 response plans due to worries about potential increases in mental health issues. However, there are still significant gaps and worries. It is also reported that women are more severely impacted than men, and people with pre-existing physical health conditions are more likely to develop symptoms of mental disorders (WHO, 2022). In the United States alone, almost 15% of children and adolescents received mental health treatment in 2021. According to the statistics, 5.8 million children suffer from anxiety, while another 2.7 million suffer from depression (Kosmo, 2023). In Malaysia, the COVID-19 pandemic has significantly impacted all walks of life, especially those with pre-existing mental health and mental illness problems. 85.5% of the 145,173 calls received by government agencies from March 25, 2020, to May 20, 2021, involved mental health issues requiring emotional support and counselling, such as acute stress, anxiety, depression, abuse, and suicidal behavior.

The Ministry of Health Malaysia (MOH) reported that from January to December 2020, a total of 1,080 suicide attempts were reported in MOH hospitals (Roslan, 2021). Anxiety disorder is categorized into several types: a phobia of something, panic disorder, and social anxiety disorder. According to Datuk Dr. Andrew Mohanraj, President of The Malaysian Mental Health Association, about eight million people in the country aged 18 to 60 are diagnosed with anxiety or anxiety disorder, with female patients continuing to double that of men. However, the estimated eight million people may not have all the symptoms, but there are still one or two characteristics of anxiety (Adnan, 2023). Based on nationwide mental health screening conducted in 2022, The Federal Territory of Kuala Lumpur and Putrajaya recorded the highest rates of depression and anxiety disorders, which represented 70% of cases, followed by Johor (44%), Labuan (33%), and Sabah (23%). Terengganu (3%) and Kedah (6%), in that order, recorded the lowest percentage of cases in Kelantan (1%). From the 336,906 mental health screenings, 24,139, or 7.1% of cases, found depression symptoms, while

32,759 (9.7%) had anxiety symptoms that had already been treated with intervention and further treatment (Halid, 2023).

Based on the provided statistics, it is evident that the prevalence of social anxiety is a significant concern among young individuals. The phenomenon as mentioned above has the potential to exert a substantial influence on individuals' day-to-day experiences and impede their progress in social and emotional maturation (Law, 2022). According to Polat et al. (2022), social anxiety is a psychological condition characterized by excessive fear and apprehension in social contexts, which frequently leads to avoidance behaviors or intense discomfort during interpersonal interactions. The phenomenon might present itself in diverse manners, including challenges in public speaking, apprehension towards criticism or humiliation, and the tendency to avoid social events. To effectively treat and assist those who suffer from this condition, it is crucial to comprehend the fundamental themes and patterns associated with social anxiety in young people. Thematic analysis, as a qualitative research methodology, can provide valuable insights into the lived experiences, viewpoints, and coping strategies employed by young individuals grappling with social anxiety. By examining data collected from several studies and sources, scholars can discern prevailing patterns pertaining to social anxiety among young individuals.

## 2. Literature Review

Anxiety, a common mental health condition, affects individuals worldwide. Though mental health issues are prevalent, they remain underdiagnosed by healthcare providers (Iqbal et al., 2020). According to the National Health and Morbidity Survey 2019 in Malaysia, the prevalence of generalized anxiety disorder among adults is approximately 2.3%. However, it is important to note that this statistic may not fully capture the true extent of anxiety in Malaysia, as many cases go undiagnosed and unreported. Specifically, a recent study involving 1,821 university students across Malaysia revealed that the prevalence of anxiety among this population was as high as 29% (Mutang et al., 2021). This trend of high anxiety prevalence among university students is not unique to Malaysia, as studies conducted globally have shown similar findings (Lim et al., 2022; Mutang et al., 2021). Anxiety disorders often have their onset during adolescence, a crucial period of development. During adolescence, individuals are more susceptible to experiencing mental health disorders like anxiety, depression, and stress.

Social anxiety, also known as "social terror," is a common mental health issue that affects individuals in social interaction situations. It is characterized by the fear or apprehension of receiving negative evaluations from others, which can lead to negative experiences of anxiety (Lai et al., 2023). It is common for people with social anxiety to have negatively biased thoughts and persistent fears towards social situations and thus tend to avoid them (Abdollahi et al., 2022; Hirsch & Clark, 2004). Social anxiety is a common issue among undergraduate students that can have negative impacts on their academic performance and overall well-being. Numerous studies have highlighted the detrimental effects of social anxiety on students, including physical symptoms of anxiety, reduced cognitive functioning, and poor academic performance (Archbell & Coplan, 2022). The prevalence of social anxiety among undergraduate students in Malaysia is a concerning issue that warrants attention and support. The study on the prevalence of Social Anxiety Disorder among higher education students in Malaysia revealed that social anxiety is a significant mental health problem among undergraduate students. These students experience excessive fear of being negatively evaluated by others in social situations, which impacts their daily lives and interactions. The study found that the participants had experienced symptoms of social anxiety since childhood, although they only became aware of their disorder during their university years (Dialan & Almigo, 2021).

Social anxiety among undergraduate students can give rise to various issues and challenges, both academic and personal. Students with social anxiety might face difficulties in participating and engaging in classroom activities, such as speaking up during discussions or presenting in front of the class. They will also experience limited social engagement hence hindering students from concentrating and participating in group discussion that leads to lower academic performance and difficulty in completing assignments (Scanlon et al., 2020; Kim et al., 2022). This is because classroom environments are inherently social, thus, students with social anxiety will feel discomfort to communicate with others. Social anxiety can impact a student's ability to communicate effectively, which is a crucial skill for both academic and professional success. Teaching and learning

pedagogy used to enhance classroom engagement might also intensify anxiety (Archbell & Coplan 2022; Czekanski & Wolf, 2013). Social anxiety is also associated with maladaptive cognitive processes, social isolation and avoidance behavior in which students may avoid social gatherings and situations that trigger social anxiety as part of their coping mechanism (Kim, 2022; Campbell, 2016). This situation will affect students' ability to maintain meaningful social relationships lead to feelings of isolation and hinder their overall social development.

### 3. Methodology

Thematic analysis is a valuable approach in conducting literature reviews as it allows for the identification of patterns and themes within the selected subject matter (Riebschleger Grove, Cavanaugh, & Costello, 2017). By using thematic analysis, researchers are able to gain a comprehensive understanding of the topic by extracting key concepts and ideas from various sources. This method allows for the integration of findings from multiple qualitative studies, providing a comprehensive overview of the existing literature on a particular subject. Furthermore, thematic analysis is a flexible research method that can be used when other qualitative methods may not be suitable for the proposed work. The process of conducting a thematic analysis for a literature review typically involves several steps (Fadzil, Taib, & Ishak, 2021). First, researchers must define the specific theme or topic they wish to explore. This could be focused on a specific discipline or field of study, or it could be a broader theme that spans across multiple disciplines. Once the theme is identified, researchers conduct a thorough literature search to gather relevant studies and articles. These studies are then analyzed using the thematic analysis approach, which involves a systematic coding and categorization of the data (Lai, Deber, Jadad & Kuziemsky, 2021). This process aims to identify recurring patterns, concepts, and themes within the literature. The thematic analysis approach is particularly useful in identifying and comparing the use of key concepts across different studies. This method allows researchers to uncover common themes and variations in how certain concepts are understood and utilized within the literature. Thematic analysis also provides a structured and organized way to synthesize and summarize the findings from multiple qualitative studies (Naidoo et al., 2018). By conducting a thematic analysis, researchers are able to identify and highlight key ideas and patterns presented within the literature sources.

In this paper, there are 10 journal articles extracted from Web of Science (WOS) library databases and aims to explore the several measurements used in recent research in the range of 2022 and 2023. The finding as shown in Table 1 depicts the sources of the information extraction and there are different measurements to examine the social anxiety among university students. The findings discussion will be further explained in the next discussion.

**Table 1: Factors of Social Anxiety**

No	Journal Sources	Sources	Year	Measurement	References
1	The relationship between social anxiety and academic engagement among Chinese college students: A serial mediation model. <i>Journal of Affective Disorders</i> , 311, 247-253.	WOS	2022	The Liebowitz Social Anxiety Scale (LSAS) was used to assess social anxiety symptoms (Liebowitz, 1987).	Mou, Zhuang, Gao, Zhong, Lu, Gao, & Zhao, (2022).
2	Social Support and Post-Injury Depressive and Anxiety Symptoms among College-Student Athletes. <i>International Journal of Environmental Research and Public Health</i> . 2022; 19(11):6458. <a href="https://doi.org/10.3390/ijerph19116458">https://doi.org/10.3390/ijerph19116458</a>	WOS	2022	State-Trait Anxiety Inventory (STAI), (Spielberger, C.D.; Gorsuch, R.L.; Lushene, 1970; 1983)	Sullivan L, Ding K, Tattersall H, Brown S, Yang J, (2022).
3	Peer coach support in internet-based cognitive behavioral therapy for college students with social anxiety disorder: efficacy and acceptability, <i>Cogent</i>	WOS	2022	The Social Interaction Anxiety Scale (SIAS-6; Peters et al., 2012)	Chandra L. Bautista, Allura L. Ralston,

	Psychology, 9:1, 2040160, DOI:10.1080/23311908.2022.2040160					Rebecca L. Brock & Debra A. Hope (2022)
4	Courage: A Potential Mediator of the Relationship Between Personality and Social Anxiety. <i>Psychol Stud</i> 67, 53–62 (2022). <a href="https://doi.org.ezaccess.library.uitm.edu.my/10.1007/s12646-022-00641-2">https://doi.org.ezaccess.library.uitm.edu.my/10.1007/s12646-022-00641-2</a>	WOS	2022	The Liebowitz Social Anxiety Scale (Heimberg et al., 1999)	Abdollahi, A., Ahmed, A.A.A., Suksatan, W. et al. (2022)	
5	The association between flipped learning readiness, engagement, social anxiety, and achievement in online flipped classrooms: structural equation modeling. <i>Education and Information Technologies</i> , 27(8), 11781-11806.	WOS	2022	The SASE was developed by Keskin et al., (2020)	Polat, E., Hopcan, S., & Arslantaş, T. K. (2022).	
6	Height dissatisfaction and loneliness among adolescents: the chain mediating role of social anxiety and social support. <i>Current Psychology</i> , 1-9., <a href="https://doi.org/10.1007/s12144-022-03855-9">https://doi.org/10.1007/s12144-022-03855-9</a>	WOS	2022	The Social Anxiety Scale for Adolescents (SASA; La Greca & Lopez, 1998)	Mo, Q. Z. L., & Bai, B. Y. (2022).	
7	The Effect of Appearance Anxiety on Social Anxiety among College Students: Sequential Mediating Effects of Self-Efficacy and Self-Esteem. <i>Behavioral Sciences</i> , 13(8), 692.	WOS	2023	Social Anxiety Scale, which was compiled by Peng and Gong (2004).	Liao, J., Xia, T., Xu, X., & Pan, L. (2023).	
8	Can a Universal School-Based Social Emotional Learning Program Reduce Adolescents' Social Withdrawal and Social Anxiety? <i>J. Youth Adolescence</i> 52, 2404–2416 (2023). <a href="https://doi.org.ezaccess.library.uitm.edu.my/10.1007/s10964-023-01840-4">https://doi.org.ezaccess.library.uitm.edu.my/10.1007/s10964-023-01840-4</a>	WOS	2023	Social and Emotional Competences Evaluation Questionnaire (QACSE; Coelho, Sousa, et al., 2015)	Sousa, V., Silva, P.R., Romão, A.M. et al. (2023).	
9	The double-edged sword effect of social networking use intensity on problematic social networking use among college students: The role of social skills and social anxiety. <i>Computers in Human Behavior</i> , 140, 107555.	WOS	2023	Social Anxiety Subscale for Self-Consciousness Scale (SASS-CS) (Fenigstein et al., 1975).	She, R., han Mo, P. K., Li, J., Liu, X., Jiang, H., Chen, Y., & fai Lau, J. T. (2023).	
10	The relationship between social anxiety and self-injury of junior high school students: Mediation by intolerance of uncertainty and moderation by self-esteem. <i>Front. Public Health</i> 11:1046729.doi:10.3389/fpubh.2023.1046729	WOS	2023	The Social Anxiety Scale (SAS) is a subscale derived from the self-awareness scale compiled by Fenigstein et al. (1975).	Yao Z, Pang L, Xie J, Shi S and Ouyang M (2023)	

#### 4. Results and Discussion

From the above discussion, there are 10 approaches of journal articles that measure social anxiety among students in higher learning education. Researchers may use the approaches and choose the appropriate to produce a significant result to measure society's anxiety.

**The Liebowitz Social Anxiety Scale (LSAS):** The Liebowitz Social Anxiety Scale (LSAS) was used to assess social anxiety symptoms. LSAS has a 24-item scale that measures the level of fear and avoidance of social situations on a 4-point Likert. The fear scale assesses levels of intensity ranging from 0 (none) to 3 (severe fear), while the avoidance scale assesses the frequency of avoidance ranging from 0 (never) to 3 (usually). The total score in the study was created by summing all the fear and avoidance scores, with higher scores reflecting more severe social anxiety symptoms. The Chinese version of LSAS has been validated in previous studies with good reliability and validity (Li, 2018). The Cronbach's  $\alpha$  of LSAS in the study was 0.97.

**State-Trait Anxiety Inventory (STAI):** The State-Trait Anxiety Inventory (STAI) is a psychological assessment tool comprising 40 items. Spielberger, Gorsuch, and Lushene developed STAI in 1970 and 1983. The inventory includes two distinct measures: state anxiety, which is assessed using 20 items, and trait anxiety, which is assessed using 20 items. The scale has demonstrated internal consistency coefficients ranging from 0.86 to 0.95, indicating a high level of reliability. Additionally, test-retest reliability coefficients have been observed to range from 0.65 to 0.75 across a 2-month interval, further supporting the scale's reliability. The trait anxiety subscale measures an individual's general emotional disposition towards different situations that can potentially affect anxiety levels. This assessment uses a 4-point Likert Scale, where respondents indicate their frequency of experiencing these emotions, ranging from "never" to "always" on a scale of 1 to 4. The state-anxiety subscale requires participants to assess their current emotional state about circumstances that could impact their anxiety levels. Participants rate each event on a 4-point Likert scale, ranging from 1 (not experiencing any anxiety) to 4 (experiencing a high level of anxiety). A composite trait-anxiety score (with a potential range of 20–80) and state-anxiety score (with a potential range of 20–80) were computed by summing the responses for each item within their respective subscales. Higher scores on these scales indicate a higher level of anxiety.

**The Social Interaction Anxiety Scale:** The Social Interaction Anxiety Scale (SIAS) was derived from the study by Peter, Sunderland, Andrews, Rapee, and Mattick (2012). The Social Interaction Anxiety Scale (SIAS) assesses individuals' levels of fear towards general social interactions, employing a Likert-type scale of five points. The SIAS-6 has demonstrated comparable levels of internal consistency (Cronbach's  $\alpha = 0.90$ ), reliability, and sensitivity compared to the extended version of the assessment tool reported by Peters et al. (2012). The scores ranged from 0 to 24, whereas higher scores indicated greater social anxiety.

### **Social Anxiety Scale (SASA)**

The researchers employed the Social Anxiety Scale for teenagers was derived from the study by La Greca & Lopez, 1998) as a means of assessing social anxiety in teenagers. The participants provided ratings using a five-point Likert scale ranging from 1 (not at all) to 5 (all the time). In the current investigation, the value of Cronbach's alpha provided is 76.

**Social Appearance Anxiety Scale:** The Social Appearance Anxiety Scale was used to examine the overall level of appearance anxiety among college students which has good reliability and applicability in studies of Chinese student populations (Li, 2020). The scale uses a 5-point scale (1 = strongly disagree, 5 = strongly agree) and has a total of 16 items. The internal consistency coefficient of the scale in this study was 0.94.

**Social and Emotional Competences Evaluation Questionnaire (QACSE):** In their study, the researchers utilized the social anxiety and social disengagement subscales of the Social and Emotional Competences Evaluation Questionnaire (QACSE; Coelho, Sousa, et al., 2015). The subscales consist of seven items, specifically addressing social anxiety and withdrawal. The offered items are formulated as declarative statements, intended to be evaluated using a four-point rating scale ranging from 0 (representing "Never") to 3 (representing "Always"). The questionnaire was validated for its applicability among teenagers aged 11 to 16. This validation process involved the use of exploratory and confirmatory factor analyses.

**The Social Anxiety Scale (SAS):** The researchers utilized the Social Anxiety Subscale for the Self-Consciousness Scale (SASS-CS) as a tool to assess the level of subjective anxiety experienced by individuals, as well as their challenges in expressing themselves linguistically and behaving in social situations. The instrument comprises six elements that are assessed using a five-point Likert scale, with response options

ranging from 1 to 5. The range of total scores spans from 6 to 30, with higher scores denoting elevated levels of social anxiety. In the present investigation, the SASS-CS demonstrated Cronbach's alpha and McDonald's omega values of 0.76 and 0.80, respectively.

## 5. Conclusion

Social anxiety is a prevalent issue among undergraduate students in Malaysia, with a significant impact on their academic performance, personal relationships, and overall well-being (Mazelan & Choi, 2022). Awareness of social anxiety among undergraduate students in Malaysia is crucial to provide support and appropriate intervention. Creating awareness about social anxiety is essential to ensure that society and educational institutions are more sensitive and do not overlook the mental health-related challenges faced by students with social anxiety disorder (Isa et al., 2021). By raising awareness, educational institutions can implement strategies to support students with social anxiety and create an inclusive environment. Furthermore, universities in Malaysia need to provide appropriate treatment and support for students struggling with social anxiety. This research implies to the researchers to further examine the social anxiety among different settings of the research area.

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