Validity and Reliability of the Academic Anxiety Scale: A Study of Central University Students in Uttarakhand

Siddharth Lohani[1] • Ramesh Chandra Singh[1*] • Himanshu Saklani[2] • Amar Jeet Singh[1]

[1] *Department of Education, HNB Garhwal University*
[2] *Department of B.Ed. GPGC Gopeshwar Chamoli*

[*]Corresponding Author Email Id: grameshchandra11@gmail.com

Abstract: Academic anxiety significantly impacts students' cognitive abilities, emotional health, and academic performance. This study assesses the validity and reliability of the Academic Anxiety Scale among higher education students in Uttarakhand, employing a mixed-method design. Data were collected from 200 undergraduate and postgraduate students at Hemvati Nandan Bahuguna Garhwal University. Exploratory Factor Analysis confirmed construct validity, while Cronbach's Alpha ($\alpha = 0.88$) indicated high internal consistency. Six key dimensions of academic anxiety emerged: general academic anxiety, social and performance anxiety, task completion anxiety, examination and results anxiety, decision-making and personal concerns, and emotional and familial anxiety. The findings reveal the significant influence of academic, social, and familial pressures on students' anxiety levels. The study advocates for targeted interventions such as mental health support, stress management programs, and culturally contextualized tools to better address academic stress and enhance student well-being in diverse higher education environments.

Introduction

Anxiety is a complex psychological and physiological condition characterized by apprehension, tension, and fear of future uncertainties. It often manifests through emotional distress, intrusive thoughts, and physical symptoms such as increased heart rate, sweating, and elevated blood pressure (APA, 2023). Although a natural response to stress, prolonged or excessive anxiety can impair daily functioning and well-being. Freud (1900) conceptualized anxiety as a conflict between conscious and unconscious forces, while Sullivan (1953) emphasized its roots in interpersonal relationships, particularly fear of rejection or criticism.

A specific form of this emotional disorder, **academic anxiety**, arises from the pressures and challenges encountered in educational settings. These include examinations, heavy workloads, teacher expectations, and parental demands. Jaiswal (2004) noted that academic pressure undermines students' mental well-being and reduces cognitive efficiency, concentration, and academic output. Lin et al. (2011) further identified family stress, health issues, and financial insecurity as key anxiety triggers among undergraduate students. Academic anxiety, closely intertwined with mental health, has been found to adversely affect learning outcomes (Wyat et al., 2013). Students experiencing high stress levels often lose interest in studies and display declining performance.

This anxiety is particularly pronounced in adolescents, who already face emotional and physiological transitions. The pressure to meet academic expectations, conform to peer norms, and fulfill parental aspirations can severely affect their self-esteem and heighten

their fear of failure. Hasan et al. (2012) emphasized the importance of comprehensive interventions—including educational programs on stress management, emotional support, and a healthy lifestyle—to alleviate these issues. A nurturing environment created by teachers, parents, and peers can play a crucial role in helping students manage stress and anxiety effectively. When left unaddressed, however, persistent academic anxiety can lead to long-term psychological distress and diminished academic potential.

Given the pervasive impact of academic anxiety, the development of reliable and valid assessment tools becomes essential. These tools enable educators and mental health professionals to identify at-risk students and tailor interventions accordingly. Academic anxiety encapsulates a range of concerns—from fear of academic failure and peer judgment to anxiety about future careers—necessitating a multidimensional approach to its assessment. Spielberger (1989) provided a foundational framework by distinguishing between **state anxiety** (temporary) and **trait anxiety** (enduring), both of which are relevant in academic settings where stressors can be immediate (e.g., tests) or chronic (e.g., long-term self-doubt).

Research indicates that anxiety impairs cognitive functions such as attention, memory, and problem-solving (Eysenck, 1992), which further justifies the need for academic anxiety measurement tools tailored to higher education. Although several general anxiety scales exist—such as the **State-Trait Anxiety Inventory** (STAI) and **Beck Anxiety Inventory** (BAI)—they often lack contextual relevance for university-level academic stressors. The **Test Anxiety Inventory** (TAI) focuses primarily on exam situations and fails to capture broader academic challenges. The **Academic Anxiety Scale for Children (AASC)** provides some relevant constructs but is designed for younger students and needs adaptation for older populations.

Developing an academic anxiety scale for higher education students involves multiple stages:

Item generation, based on theoretical models and qualitative feedback from students, teachers, and psychologists;

Construct validity, ensuring the scale reflects the construct of academic anxiety;

Criterion validity, establishing its correlation with related constructs such as academic performance and perceived stress;

Factor analysis, to identify and validate distinct anxiety dimensions like workload, peer dynamics, and career concerns (Brown, 2015);

Reliability testing, using Cronbach's alpha to confirm internal consistency.

Such scales are invaluable in academic institutions. They not only help identify students experiencing high anxiety but also assess the impact of interventions like mindfulness training or peer mentoring (Hoffman et al., 2010). These tools also reveal variations in anxiety across gender, academic streams, and socioeconomic backgrounds (Hancock et al., 2018), allowing for more inclusive and responsive educational policies.

Despite these advantages, notable limitations persist. Existing scales often overlook unique stressors specific to higher education, such as uncertainty about career prospects, competitive peer environments, and the demands of online learning. Tools developed in Western contexts may also lack cultural sensitivity, limiting their effectiveness in regions like India, where familial expectations and social norms play a critical role in shaping academic experiences. Moreover, the digitalization of education has introduced new anxiety-inducing factors—technological barriers, digital fatigue, and reduced face-to-face interaction—which are seldom reflected in traditional anxiety assessment tools.

In this context, culturally and contextually adapted academic anxiety scales are essential. Incorporating local academic pressures and

student realities ensures that these tools are both relevant and effective. By bridging the existing gaps in the literature and tool design, researchers and educators can provide holistic support systems to promote both academic excellence and psychological well-being among university students.

Thus, the standardization of academic anxiety measurement tools represents a vital step toward enhancing student mental health and success. A valid and reliable scale not only facilitates early identification and targeted support for affected students but also enables educational institutions to design inclusive, student-centered strategies that foster resilience, confidence, and long-term academic growth.

Objectives of the Study

The objective of the present research is to measure the validity and reliability of the Academic Anxiety Scale for students studying in higher education.

Materials and Methods

This study aimed to assess the validity and reliability of an Academic Anxiety Scale for higher education students using a mixed-method approach. Initial item formulation was based on an extensive review of literature on anxiety and scale development. The sample comprised 200 undergraduate and postgraduate students from Hemvati Nandan Bahuguna Garhwal University's Birla Campus, representing five faculties: Education, Arts and Humanities, Science, Life Science, and Commerce. Participants included 95 males (47.5%) and 105 females (52.5%), with 66.5% from rural and 33.5% from urban backgrounds. Family structures varied between nuclear (54%) and joint families (46%). Parental occupations spanned agriculture (36%), business (18%), jobs (37%), and others (9%), with diverse educational levels. Exploratory Factor Analysis (EFA) was employed to determine construct validity, and Cronbach's Alpha assessed internal consistency. Descriptive statistics, including frequency, percentage, mean, and standard deviation, supported data analysis.

Results

Content Validity Analysis

A literature survey of 32 previous research papers was conducted, identifying 28 anxiety related attributes, leading to the formulation of 50 statements for measurement using a 5-point rating scale. Initially the scale was reviewed by six subject experts, who approved 40 statements and provided suggestions for improvements. The revised scale was then presented to 20 additional subject experts for review, who provided feedback on the inclusion of statements based on a weightage criterion. Only statements with a weightage above 70% were included for further analysis.

The descriptive analysis of student responses reveals a widespread experience of academic anxiety stemming from multiple pressures. A significant portion of students reported heightened stress related to examinations; for example, 35% expressed strong anxiety about exam results, and many feared that underperformance in one subject could impact overall academic success. Such concerns reflect the intense pressure students feel around assessments, which negatively affects their mental health and self-confidence.

Beyond exams, general academic insecurity is prevalent. Over one-third of respondents expressed doubts about whether their academic efforts meet expectations, and many worried about completing assignments properly. This indicates a pervasive lack of self-assurance that can diminish motivation and academic engagement.

Social anxiety also emerged as a notable stressor. Many students felt discomfort interacting with strangers, speaking in class, or working in groups. Concerns about how teachers and classmates perceive them further exacerbate their anxiety, suggesting that students seek academic and social validation.

Such fear of negative judgment can suppress class participation and limit learning opportunities.

Family and emotional issues also play a substantial role in academic anxiety. Several students cited family problems as a source of distress, and many experienced unexplained sadness, pointing to underlying emotional burdens. These non-academic factors can severely disrupt concentration, time management, and academic performance.

Anxiety's long-term impact was also evident. Many students admitted to missing valuable opportunities due to anxiety and feared that poor academic performance could jeopardize their career goals. These findings highlight how anxiety transcends classroom settings, influencing broader life outcomes and aspirations.

Additionally, students reported uncertainty in academic decision-making. Many were unsure about what to study and feared making the wrong choices, which compounded their anxiety. This indecision reflects internalized pressure to make optimal educational choices, often driven by fear of failure and future regret.

Table 1: Descriptive Analysis of Selected Statements

Statements	Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree		Mean	Standard Deviation
	f	%	f	%	f	%	f	%	f	%		
1. I often worry that my best at school is not as good as I expected.	38	19.0	74	37.0	22	11.0	51	25.5	15	7.5	3.35	1.25
2. I stop doing schoolwork because it stresses me out.	13	6.5	34	17.0	19	9.5	79	39.5	55	27.5	2.35	1.23
3. I often worry that I am not completing my assignments properly.	27	13.5	63	31.5	19	9.5	66	33.0	25	12.5	2.99	1.30
4. I spend most of my time at school worrying about what will happen next.	37	18.5	62	31.0	27	13.5	49	24.5	25	12.5	3.19	1.33
5. I worry about what my classmates think of my abilities.	21	10.5	52	26.0	34	17.0	59	29.5	34	17.0	2.84	1.28
6. I get nervous as soon as the exam date approaches.	37	18.5	70	35.0	23	11.5	44	22.0	25	12.5	3.25	1.34
7. I get anxious when asked questions in class.	29	14.5	60	30.0	20	10.0	20	10.0	29	14.5	2.99	1.33
8. I get worried thinking about what teachers think of me.	20	10.0	53	26.5	40	20.0	61	30.5	26	13.0	2.90	1.22
9. During school, I feel anxious about not identifying my interests.	35	17.5	78	39.0	22	11.0	40	20.0	25	12.5	3.29	1.31
10. If I don't do well in one subject in an exam, I get worried about the other subjects.	51	25.5	84	42.0	17	8.5	32	16.0	16	8.0	3.62	1.25
11. I get very	57	28.5	83	41.5	22	11.0	29	14.5	9	4.5	3.75	1.15

Statement	f	%	f	%	f	%	f	%	f	%	Mean	SD
anxious about exam results.												
12. I feel nervous when I don't complete the homework assigned by teachers.	37	18.5	80	40.0	23	11.5	40	20.0	20	10.0	3.38	1.27
13. I feel anxious when an outsider suddenly enters during a class.	30	15.0	47	23.5	18	9.0	61	30.5	44	22.0	2.80	1.41
14. I feel uncomfortable understanding subjects in languages other than my mother tongue.	30	15.0	53	26.5	35	17.5	53	26.5	29	14.5	3.02	1.31
15. I often feel uncomfortable sitting at the front of the class.	23	11.5	42	21.0	15	7.5	74	37.0	46	23.0	2.60	1.35
16. I am unable to decide what I should study.	30	15.0	52	26.0	31	15.5	58	29.0	29	14.5	2.98	1.32
17. I feel uncomfortable doing group work in class.	19	9.5	49	24.5	27	13.5	67	33.5	38	19.0	2.72	1.28
18. I often worry that teachers are not satisfied with my viewpoint.	31	15.5	68	34.0	44	22.0	34	17.0	23	11.5	3.25	1.24
19. I get stressed when thinking about my current worries.	43	21.5	76	38.0	28	14.0	38	19.0	15	7.5	3.47	1.23
20. I feel uncomfortable confronting any worry on my own.	29	14.5	66	33.0	13	6.5	62	31.0	30	15.0	3.01	1.35
21. I am often anxious because of my family problems.	53	26.5	61	30.5	23	11.5	47	23.5	16	8.0	3.45	1.32
22. I worry about the outcome of any task before doing it.	38	19.0	75	37.5	25	12.5	43	21.5	19	9.5	3.35	1.27
23. I often feel uncomfortable talking to strangers.	34	16.5	67	33.5	22	11.0	60	30.0	17	8.5	3.20	1.29
24. I usually get nervous if I make a mistake during a performance.	47	23.5	91	45.5	14	7.0	33	16.5	15	7.5	3.61	1.22
25. Sometimes I feel sad for no reason for my career.	50	25.0	69	34.5	31	15.5	34	17.0	16	8.0	3.51	1.26
26. I find it difficult to handle household responsibilities with my study.	35	17.5	69	34.5	17	8.5	50	25.0	29	14.5	3.16	1.36
27. I worry that my poor performance will ruin my career.	49	24.5	80	40.0	22	11.0	27	13.5	22	11.0	3.54	1.30
28. I miss meaningful opportunities due to anxiety.	47	23.5	83	41.5	16	8.0	28	14.0	26	13.0	3.49	1.34

In summary, academic anxiety among students is a multifaceted issue shaped by performance pressures, social dynamics, emotional strain, and career concerns. These stressors interact to create a high-pressure environment that can impede both academic and personal development. Addressing these challenges early through supportive and inclusive academic structures is essential for fostering healthier learning experiences.

Construct Validity Analysis

To assess the construct validity of the Academic Anxiety Scale, Exploratory Factor Analysis (EFA) was conducted. Before performing EFA, the Kaiser-Meyer-Olkin (KMO) test and Bartlett's Test of Sphericity were applied to determine the adequacy of the sample for factor analysis.

Table No. 2

KMO & Bartlet Test		
KMO		.835
Bartlet Test	Chi Squire	1578.067
	Df	378
	Significance	.000

The results of the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity provide essential evidence for the dataset's appropriateness for factor analysis. The KMO value, recorded at 0.835, evaluates the adequacy of the sample by measuring the

Table No. 3

proportion of common variance among variables. Values closer to 1 denote greater sampling adequacy, and a score above 0.8 is considered highly favorable. Thus, a KMO of 0.835 confirms that the dataset is well-suited for factor analysis, as it reflects a substantial degree of shared variance among the items.

Bartlett's Test of Sphericity further strengthens this conclusion. It yielded a Chi-Square value of 1578.067 with 378 degrees of freedom and a significance level of 0.000. This test checks whether the correlation matrix is an identity matrix, which would suggest no meaningful relationships among variables. The highly significant p-value ($p < 0.001$) allows rejection of the null hypothesis, confirming the presence of significant intercorrelations among variables.

Combined, these two statistical tests affirm the suitability of the data for factor analysis. The strong KMO value suggests that the items can be grouped into underlying factors without considerable loss of information, while Bartlett's Test confirms that the variables are sufficiently interrelated for dimensional reduction. These findings validate the robustness of the dataset and ensure that subsequent factor analysis will yield reliable, interpretable results, offering deeper insights into the underlying structure of academic anxiety.

Total Variance Explained

Factor	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.968	24.886	24.886	2.803	10.012	10.012
2	1.874	6.692	31.578	2.599	9.281	19.293
3	1.500	5.357	36.935	2.253	8.045	27.338
4	1.394	4.980	41.915	2.056	7.345	34.683
5	1.292	4.615	46.530	2.012	7.184	41.867
6	1.192	4.256	58.186	1.898	6.779	58.186

The table illustrates the contribution of each factor to the total variance in academic anxiety, both before and after rotation. In the

Extraction Sums of Squared Loadings, **Factor 1** alone accounts for 24.886% of the total variance, with an eigenvalue of 6.968,

indicating its significance as a core dimension of academic anxiety. **Factor 2** adds another 6.692%, bringing the cumulative variance explained to 31.578%. **Factors 3 through 6** contribute between 4.256% and 5.357% each, collectively increasing the total explained variance to 58.186%, capturing smaller but meaningful dimensions of anxiety.

After rotation, the variance is more evenly distributed across all six factors, improving clarity and interpretability. **Factor 1** now explains 10.012% of the variance, while **Factor 2** accounts for 9.281%. The remaining factors contribute between 6.779% and 8.045%, providing a balanced representation of the data. This shift indicates a more refined structure, reinforcing the multifaceted nature of academic anxiety.

Initially, the dominance of Factor 1 suggested a general or overarching dimension. However, the rotated structure reveals that academic anxiety comprises multiple interrelated factors, each reflecting distinct but connected aspects of the experience. With a cumulative variance of 58.186%, the scale is considered effective in capturing the diverse components of academic anxiety.

These findings not only validate the scale's construct but also emphasize its utility in identifying specific anxiety domains for targeted support. This detailed factor structure is essential for designing interventions and deepening understanding in educational research.

Table 4: Factor Loading after Rotation

Statements	Factors					
	1	2	3	4	5	6
1. I often worry that my best at school is not as good as I expected.			.726			
2. I stop doing schoolwork because it stresses me out.			.635			
3. I often worry that I am not completing my assignments properly.			.707			
4. I spend most of my time at school worrying about what will happen next.	.680					
5. I worry about what my classmates think of my abilities.		.543				
6. I get nervous as soon as the exam date approaches.		.636				
7. I get anxious when asked questions in class.		.622				
8. I get worried thinking about what teachers think of me.		.699				
9. During school, I feel anxious about not identifying my interests.		.581				
10. If I don't do well in one subject in an exam, I get worried about the other subjects.					.747	
11. I get very anxious about exam results.					.826	
12. I feel nervous when I don't complete the homework assigned by teachers.					.557	
13. I feel anxious when an outsider suddenly enters during a class.	.511					
14. I feel uncomfortable understanding subjects in languages other than my mother tongue.			.460			
15. I often feel uncomfortable sitting at the front of the class.			.568			
16. I am unable to decide what I should study.			.498			
17. I feel uncomfortable doing group work in class.						.515
18. I often worry that teachers are not satisfied with my viewpoint.						.393
19. I get stressed when thinking about my current worries.						.545
20. I feel uncomfortable confronting any worry on my own.						.743

21. I am often anxious because of my family problems.		.364
22. I worry about the outcome of any task before doing it.		.425
23. I often feel uncomfortable talking to strangers.		.547
24. I usually get nervous if I make a mistake during a performance.		.743
25. Sometimes I feel sad for no reason for my career.	.370	
26. I find it difficult to handle household responsibilities with my study.	.663	
27. I worry that my poor performance will ruin my career.	.714	
28. I miss meaningful opportunities due to anxiety.	.684	

The factor loadings of the Academic Anxiety Scale provide valuable insight into the multidimensional nature of academic anxiety among students. **Factor 1**, labeled *General Academic Anxiety*, reflects overarching concerns about academic performance and uncertainty about the future. Statements such as "I spend most of my time at school worrying about what will happen next" and "I miss meaningful opportunities due to anxiety" indicate persistent future-oriented worries. The item "I worry that my poor performance will ruin my career" emphasizes long-term academic and professional concerns.

Factor 2, *Social and Performance Anxiety*, focuses on stress linked to peer and teacher interactions. Students expressing concern over classmates' opinions and nervousness during exams or classroom questioning reflect this dimension. Anxiety over teacher evaluations also contributes to this factor, indicating a desire for social acceptance and approval.

Factor 3, *Task Completion Anxiety*, highlights anxiety around managing academic responsibilities. Worries about completing assignments properly, not finishing homework, or feeling overwhelmed to the point of avoiding schoolwork altogether underscore stress related to academic productivity and time management.

Factor 4, *Examination and Results Anxiety*, concentrates specifically on exam-related stress. Items like "I get very anxious about exam results" and "If I don't do well in one subject, I worry about the others" capture students' intense fear of poor academic evaluations and the perceived consequences.

Factor 5, *Decision-Making and Personal Concerns*, addresses difficulties in academic choices and everyday disruptions. Students feeling unsure about what to study or experiencing discomfort during unexpected classroom events fall under this dimension. Additionally, it reflects challenges in balancing academic tasks with household responsibilities.

Factor 6, *Emotional and Familial Anxiety*, represents emotional vulnerability and stress arising from family dynamics. Items like "I feel uncomfortable confronting any worry on my own" and "I am often anxious because of my family problems" reveal how emotional sensitivity and familial issues can affect academic well-being.

Together, these six factors illustrate the complex structure of academic anxiety, affirming the need for multi-dimensional support strategies to address the diverse stressors faced by students in higher education.

Table 5: Reliability of Academic Anxiety Scale

Factors	Reliability Test (Cronbach's Alpha)	No. of Items
General Academic Anxiety	0.752	6
Social and Performance Anxiety	0.651	5
Task Completion Anxiety	0.662	6
Examination and Results Anxiety	0.603	4
Decision-Making and Personal Concerns	0.668	3
Emotional and Familial Anxiety	0.662	4
Overall Reliability	0.88	28

The reliability of the Academic Anxiety Scale was assessed using Cronbach's Alpha, offering key insights into its internal consistency across six identified factors. **General Academic Anxiety** demonstrated good reliability with an alpha of **0.752** across six items, suggesting strong cohesion in measuring concerns related to academic performance and future uncertainties.

Social and Performance Anxiety, consisting of five items, yielded an alpha of **0.651**, indicating acceptable reliability in capturing stress related to peer perception and academic interactions. **Task Completion Anxiety**, with six items, showed a reliability coefficient of **0.662**, reflecting consistent measurement of anxiety tied to assignment completion and workload management.

Examination and Results Anxiety, measured through four items, returned a slightly lower alpha of **0.603**, still within the acceptable range, though it may benefit from item refinement. **Decision-Making and Personal Concerns**, comprising three items, had an alpha of **0.668**, showing moderate reliability in assessing anxiety related to academic choices and daily disruptions. Similarly, **Emotional and Familial Anxiety**, with four items, showed an alpha of **0.662**, effectively capturing emotional strain and family-related stress.

The **overall reliability** of the scale, based on all **28 items**, was found to be **0.88**, indicating excellent internal consistency. This high value confirms that the scale reliably measures academic anxiety across multiple domains.

While most subscales showed adequate reliability, those with lower values highlight areas for improvement, such as revising or expanding items to enhance measurement precision. Overall, the scale proves to be a robust and comprehensive tool, suitable for identifying student anxiety and guiding appropriate academic interventions.

Discussion

This study offers a detailed exploration of academic anxiety among students, revealing the complex interplay of academic, social, and emotional challenges that affect their educational experiences. The research highlights how academic stress, peer relationships, and personal issues collectively influence students' confidence, performance, and future goals.

A major finding is the widespread anxiety linked to academic pressures, especially related to examinations. About 35% of students report intense nervousness about their exam results, viewing assessments as high-stakes events that can trigger stress, self-doubt, and avoidance behaviors. The fear that a single poor outcome might derail their academic path intensifies this anxiety, underscoring the need for educational environments that focus on learning and growth rather than rigid performance metrics.

Beyond exams, students also express anxiety about assignments and doubt their ability to

meet university expectations, with over one-third feeling uncertain about whether their efforts are sufficient. This uncertainty can lower motivation and self-esteem, potentially creating barriers to engagement and intellectual development if not addressed.

Social factors play a significant role in academic anxiety. Many students experience discomfort in peer interactions and classroom participation, reflecting social anxiety that impacts their academic life. Concerns about peer and teacher validation affect students' willingness to engage in discussions, seek help, or participate in collaborative learning, teamwork, and networking—critical components of holistic education. The study suggests that fostering inclusive classrooms, encouraging peer support, and providing counseling can help mitigate these social fears. Personal and familial stressors further compound academic anxiety. A notable portion of students report emotional distress linked to family concerns, which disrupts focus and academic performance. This highlights the importance of a holistic approach that addresses mental health and socio-emotional well-being alongside academic challenges. Universities are encouraged to offer mental health services, financial aid, and mentorship programs to support students in managing both personal and academic difficulties.

The study's factor analysis categorizes academic anxiety into six dimensions: General Academic Anxiety, Social and Performance Anxiety, Task Completion Anxiety, Examination and Results Anxiety, Decision-Making and Personal Concerns, and Emotional and Familial Anxiety. This nuanced framework shows that no single factor dominates, but rather multiple interrelated dimensions contribute to students' overall stress. The Academic Anxiety Scale used demonstrated strong reliability (Cronbach's Alpha = 0.88), validating its effectiveness for identifying students at risk and guiding interventions.

To address academic anxiety, the study recommends comprehensive strategies including stress management workshops, study skills training, accessible counseling, and a shift toward learning-focused assessments. Promoting peer collaboration, inclusive teaching, and robust career counseling can further create supportive environments, helping students cope with academic pressures and plan confidently for their futures.

Conclusion

The study underscores the prevalence and complexity of academic anxiety among students, demonstrating its significant impact on mental well-being, academic performance, and long-term aspirations. By identifying the key dimensions of academic anxiety and validating a reliable measurement scale, the study provides valuable insights for designing effective interventions. Addressing academic anxiety requires a multidimensional approach that integrates academic, social, and emotional support to foster a more positive and stress-free learning environment. Future research could explore longitudinal trends in anxiety levels and assess the effectiveness of various intervention strategies in mitigating academic stress over time.

References

Alkis Y, Kadirhan Z and Sat M (2017). Development and validation of social anxiety scale for social media users. *Journal of Social Media Psychology, 6*(1), 24–36.

American Psychological Association. (2023). *Anxiety*. American Psychological Association.

Beck A T, Epstein N, Brown G and Steer R (1988). Beck Anxiety Inventory. *APA PsycTests Database Record*.

Beiter R, Nash R, McCrady M, Rhoades D, Linscomb M, Clarahan M and Sammut S

(2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal of Affective Disorders, 173*, 90–96.

Bostic S L (1992). The development and validation of the Library Anxiety Scale. *Journal of Library and Information Science Research, 16*(4), 195–208.

Brown T A (2015). *Confirmatory factor analysis for applied research* (2nd ed.). The Guilford Press.

Carroll J M and Iles J E (2006). An assessment of anxiety levels in dyslexic students in higher education. *Journal of Learning Disabilities Research, 34*(1), 13–22.

Castillo J (2021). Examining anxiety in students: A comprehensive review of factors and interventions. *Journal of Educational Psychology, 113*(4), 678–692.

Çelebi, İ., Şeremet, N., Alkaş, G., & Keleş, A. (2023). Validity and reliability study of the Occupational Anxiety Scale for Health Services Students. *Journal of Health Services Education, 18*(2), 45–58.

Durak İ and Karagöz Y (2021). Adaptation of the Statistics Anxiety Scale to Turkish: Validity and reliability study. *Turkish Journal of Educational Measurement, 9*(2), 87–96.

Eysenck M W (1992). *Anxiety: The cognitive perspective*. Lawrence Erlbaum Associates.

Feldborg M, Lee N A, Hung K, Peng K and Sui J (2021). Perceiving the self and emotions with an anxious mind: Evidence from an implicit perceptual task. *International Journal of Environmental Research and Public Health, 18*(22), 96–120.

Fernandes B, Newton J and Essau C A (2022). The mediating effects of self-esteem on anxiety and emotion regulation. *Psychological Reports, 125*(2), 787–803.

Freud S (1900). *The interpretation of dreams*. Macmillan.

Hancock K M, Swain J, Hainsworth C J, Dixon A L, Koo S and Munro K (2018). Acceptance and commitment therapy versus cognitive behavior therapy for children with anxiety: Outcomes of a randomized controlled trial. *Journal of Clinical Child & Adolescent Psychology, 47*(2), 296–311.

Hofmann S G, Sawyer A T, Witt A A and Oh D (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 78*(2), 169–183.

Hogg T ., Stanley S K, O'Brien L V, Wilson M S and Watsford C R (2021). The Hogg Eco-Anxiety Scale: Development and validation of a multidimensional scale. *Global Environmental Change, 71*, 102–131.

Horwitz E K (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. *TESOL Quarterly, 20*(3), 559–562.

Jaiswal S (2004). Academic stress and its impact on students' cognitive and non-cognitive skills. *Journal of Education Studies, 12*(3), 45–56.

Keskin S, Şahin M and Uluç S (2023). Social Anxiety Scale for E-Learning Environments (SASE): Development and validation. *Interactive Learning Environments, 31*(5), 620–636.

Khoshaim H B, Al-Sukayt A, Chinna K, Nurunnabi M, Sundarasen S, Kamaludin K, Baloch G M and Hossain S F A (2020). Anxiety level of university students during COVID-19 in Saudi Arabia. *Frontiers in Psychiatry, 11*, 579–750.

Lin, E and Others. (2011). Stressors among graduate students: Implications for well-being and performance. *Journal of*

Higher Education Research, 22(2), 78–90.

Lin Y (2024). Review of the effects of foreign language classroom anxiety on learners' development of a second language acquisition. *Journal of Education, Humanities and Social Sciences, 26*, 979–985.

Mahmood S and Khatoon T (2011). Development and validation of the Mathematics Anxiety Scale for secondary and senior secondary school students. *International Journal of Mathematics Education, 24*(4), 145–158.

Mofatteh M (2021). Risk factors associated with stress, anxiety, and depression among university undergraduates. *Journal of Public Health Research, 10*(3), 1608.

Nabeel H and Others. (2012). Educating graduate students about stress management skills. *Psychology in Practice, 15*(4), 134–150.

Naveed M A, Jan S U and Anwar M (2020). Reliability and validity of scales assessing anxiety associated with information-related tasks: A systematic review. *Journal of Academic Information Science, 12*(3), 233–247.

Pascoe M C, Hetrick S E and Parker A G (2020). The impact of stress on students in higher education: A systematic review of psychological and physiological studies. *Frontiers in Psychiatry, 11*, 590.

Primi C, Busdraghi C, Tomasetto, C & Morsanyi, K. (2014). Measuring math anxiety in Italian college and high school students: Validity, reliability, and gender invariance of the AMAS. *Italian Journal of Educational Psychology, 10*(2), 245–259.

Sahu P, Patra S, Panda S, & Kumar R (2022). Academic anxiety among students: A psychometric validation of the Academic Anxiety Scale. *PLOS Digital Health, 1*(4), e0000601.

Saleh D, Camart N and Romo L (2017). Predictors of stress in college students: The role of coping, social support, and emotional intelligence. *Frontiers in Psychology, 8*, 1214. Spielberger C D (1989). *State-Trait Anxiety Inventory: Bibliography* (2nd ed.). Consulting Psychologists Press.

Spielberger C D, Gorsuch R L, Lushene R, Vagg P R and Jacobs G A (1983). *Manual for the State-Trait Anxiety Inventory*. Consulting Psychologists Press.

Sullivan H S (1953). *The interpersonal theory of psychiatry*. Norton & Company.

Trifon A and Shahini M (2011). How does exam anxiety affect the performance of university students? *Mediterranean Journal of Social Sciences, 2*, 93–100.

Vyaat T and Others (2013). Anxiety of students in higher education. *International Journal of Higher Education Research, 12*(3), 45–60.