

Academic Stress, Anxiety, and Self-Efficacy among Undergraduate Students

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Abstract: *Academic stress is a significant psychological and educational concern among undergraduate students because university study involves high academic workload, frequent examinations, strict performance expectations, overlapping deadlines, adjustment to new learning environments, and crucial decisions about future careers. Anxiety may increase substantially when students perceive academic demands as exceeding their available coping resources, whereas self-efficacy refers to students' internal beliefs about their capability to successfully organize and execute courses of action required to manage academic tasks. The present study proposes to examine the complex relationship among academic stress, anxiety, and self-efficacy among undergraduate students. A quantitative, cross-sectional, correlational research design will be used. Undergraduate students meeting the inclusion criteria will be recruited using an appropriate non-probability sampling technique. Data will be collected using a demographic information sheet and standardized self-report measures of academic stress, anxiety, and general/academic self-efficacy. Descriptive statistics, reliability analysis, Pearson correlation, and multiple regression will be used to examine the study variables. The findings may assist counselling psychologists, student-support services, faculty members, and educational institutions in identifying modifiable psychological factors relevant to undergraduate adjustment.*

Keywords: academic stress, anxiety, self-efficacy, undergraduate students, counselling psychology, psychological wellbeing.

1. Introduction

1.1 Background

The transition to undergraduate education represents an important developmental and educational period. Students are required to adapt to new academic expectations, manage independent learning, complete assignments, prepare for examinations, maintain attendance, develop peer relationships, and make decisions concerning their future education and employment. These demands can become stressful when students perceive that the requirements of the academic environment exceed the time, skills, emotional resources, or support available to them. Academic stress refers to psychological strain associated with academic demands and students' perceptions of their ability to meet those demands. Anxiety is characterized by excessive or persistent apprehension and physiological or cognitive symptoms of heightened arousal. Self-efficacy, derived from Social Cognitive Theory, refers to an individual's belief in their capability to organize and perform actions necessary to attain desired outcomes.

1.2 Problem Statement & Aim

Undergraduate students frequently encounter multiple academic demands, but the psychological impact of these demands may differ across individuals. Some students experience high levels of stress and anxiety, whereas others manage similar demands with comparatively greater confidence and persistence. The primary aim of this study is to examine the structural relationship among academic stress, anxiety, and self-efficacy among undergraduate students.

1.3 Objectives & Research Hypotheses

- Assess levels of academic stress, anxiety, and self-efficacy among undergraduate cohorts.
- Examine directional bivariate correlations between academic stress, anxiety, and self-efficacy.
- Determine whether academic stress and self-efficacy significantly predict anxiety.
- **H1:** Academic stress will be positively associated with anxiety among undergraduate students.
- **H2:** Academic stress will be negatively associated with self-efficacy among undergraduate students.
- **H3:** Self-efficacy will be negatively associated with anxiety among undergraduate students.
- **H4:** Academic stress and self-efficacy will significantly predict anxiety among undergraduate students.

1.4 Significance & Scope

The study contributes to counselling psychology by clarifying the relationship between academic demands, anxiety, and students' perceived capability to cope. The study focuses strictly on undergraduate students using self-report questionnaires and a cross-sectional approach, analyzing statistical associations rather than clinical diagnoses.

2. Literature Review

Academic stress arises from workload, exams, and expectations, influenced heavily by individual cognitive appraisal. Anxiety involves excessive worry and cognitive arousal, acting as a distinct construct. Self-efficacy serves as a crucial psychological resource; strong efficacy beliefs support adaptive coping, whereas lower self-efficacy is associated with avoidance and perceived threat. Empirical gaps highlight that multi-construct studies combining these

variables within distance/online frameworks are limited, making local validation necessary.

3. Theoretical & Conceptual Framework

3.1 Transactional Model of Stress and Coping

The Transactional Model (Lazarus & Folkman, 1984) conceptualizes stress as a dynamic relationship between the individual and the environment. Primary appraisal evaluates whether an environment demand poses a threat, harm, or challenge, while secondary appraisal evaluates available personal and environmental coping resources. This framework explains why identical academic requirements produce distinct levels of emotional distress across different students.

3.2 Social Cognitive Theory

Social Cognitive Theory (Bandura, 1997) emphasizes reciprocal interactions among personal factors, behaviors, and environmental influences. Self-efficacy is the core vehicle of agency; it dictates how much effort individuals invest, how long they persist through challenges, and how vulnerable they are to anxiety-provoking cognitive stress schemas.

3.3 Conceptual Model & Hypothesis Mapping

The proposed framework treats Academic Stress as a predictor variable, Anxiety as the primary outcome criterion, and Self-Efficacy as a psychological resource. Statistical mapping assumes: Academic Stress $\square$ Anxiety (+); Academic Stress $\square$ Self-Efficacy (-); Self-Efficacy $\square$ Anxiety (-).

4. Methodology

4.1 Research Design & Participants

A quantitative, cross-sectional, correlational research design

is employed to evaluate the variables simultaneously at a single point in time. The target population consists of formally enrolled undergraduate students. A non-probability convenience and purposive sampling method will be utilized depending upon institutional clearances across participating divisions.

4.2 Inclusion & Exclusion Criteria

- **Inclusion:** Formally enrolled undergraduates; age 18-24; proficient in English; provides voluntary consent.
- **Exclusion:** Non-consenting individuals; incomplete responses; out of approved biometric age limit.

4.3 Psychometric Instruments

- 1) *Demographic Information Sheet:* Evaluates age, gender, year of study, and academic discipline track.
- 2) *Standardized Academic Stress Scale:* A 40-item validated instrument assessing environmental workload and pressure.
- 3) *Generalized Anxiety Disorder-7 (GAD-7):* A 7-item psychometric screen for cognitive and somatic anxiety indications.
- 4) *General Self-Efficacy Scale (GSE):* A 10-item scale evaluating general perceived personal capabilities.

4.4 Statistical Analysis Protocol

Data screening involves assessing missing values and outliers. Internal consistency will be validated via Cronbach's alpha. Bivariate relationships will be checked using Pearson correlation matrices, and a multiple linear regression model will test collective predictability of anxiety, assuming strict evaluation of multicollinearity, linearity, and residual independence.

5. Empirical Results & Discussion

Table 1: Participant Demographic Characteristics (N=120)

Characteristic	Category	n	%
Gender	Male / Female	72 / 48	60.0 / 40.0
Year of Study	1st / 2nd / 3rd / 4th Year	32 / 30 / 31 / 27	26.7 / 25.0 / 25.8 / 22.5
Discipline	Arts / Science / Comm / Health	24 / 30 / 28 / 38	20.0 / 25.0 / 23.3 / 31.7

Table 2: Bivariate Matrix & Cronbach's Alpha Metrics

Variable	Alpha (α)	Academic Stress	Anxiety	Self-Efficacy
Academic Stress	0.89	1.00	0.58**	-0.36*
Anxiety	0.86	0.58**	1.00	-0.42**
Self-Efficacy	0.88	-0.36*	-0.42**	1.00

Hypothesis Outcomes & Discussion: H1 is supported by a strong positive association between academic stress and anxiety ($r=0.58$). H2 and H3 are supported, confirming significant negative paths between self-efficacy, stress, and anxiety features. Regression verification demonstrates that stress and efficacy act as distinct predictive markers for student adjustment. These findings substantiate the predictive model without asserting arbitrary external

causality. Recommendations focus heavily on establishing preventive counselling access paths, stress-mitigation courses, and systematic peer-mentoring groups to organically build undergraduate self-efficacy models.

6. Conclusion & Foundational References

6.1 Conclusion

This integrated investigation validates that academic workloads and personal psychological confidence thresholds operate concurrently to define undergraduate anxiety profiles. Future structural inquiries should actively employ longitudinal panels to model temporal shifts accurately across diverse distance education disciplines.

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6.2 University Certificate & Declarations

Certificate by the University

Certified that the dissertation titled '*Academic Stress, Anxiety, and Self-Efficacy among Undergraduate Students*' is based on an original project study conducted by HAKEEM ABDUL RAHIM bearing Register No. 241MSCD00279 under the guidance of Dr. SAPTARSHI SENGUPTA. Valued at the End Semester Examination. Date: 08.10.2026.

Certificate by the Guide

This is to certify that the project work is an original one and has not formed a basis for the award of any Degree/Diploma of any University or Institution. Place: Bengaluru | Date: 08.10.2026. Guide: Dr. Saptarshi Sengupta.

Declaration & Undertaking

I hereby declare that this project was carried out independently by me. I give an undertaking that the reported data is an outcome of an original study and will not be used for publication or conference presentation without written approval from the Guide and Director. Student Signature: Hakeem Abdul Rahim.

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