



Student academic stress reviewed from critical thinking skills

Nurwahyuni

Department of Guidance and Counseling, Faculty of Education, Tadulako University

ARTICLE INFO

Article history:

Received 19 March 2023

Accepted 15 June 2023

Published 30 June 2023

Keyword:

Academic stress

Critical thinking skills

Gender

Students

*) corresponding author

Nurwahyuni

Department of Guidance and Counseling,
Faculty of Education, Tadulako University

Email: nurwahyuni.untad@gmail.com

DOI: 10.30604/jika.v8i2.2100

Copyright 2023 @author(s)

ABSTRACT

Academic stress is a dangerous thing if it is not managed properly, uncontrolled academic stress can trigger physiological, mental, emotional and physical consequences. One of the factors that influence academic stress is critical thinking skills. The aims of this study were (1) to identify the level of academic stress among students, (2) to identify the relationship between academic stress and critical thinking skills, and (3) to identify differences in academic stress for male and female students in terms of critical thinking skills. The subjects of this research were students of the Guidance and Counseling Education Study Program, Faculty of Education, Tadulako University, Palu. This research is a survey research. Student academic stress was measured using a scale adapted from the Perception of Academic Stress Scale (PAS). Critical thinking skills were measured using a critical thinking skills test adapted from the Critical Thinking Questionnaire (CThQ). The research data were analyzed using the Run Spearman test and one way ANOVA test with the help of SPSS statistics version 26. The results of the data analysis showed (1) the student stress level was 47.45 in the very high category. (2) There is no significant relationship between critical thinking skills and student academic stress as indicated by a significance value of 0.196 or $> 0,05$. (3) There is no difference in academic stress between male and female students in terms of gender. The results of Fhitung are smaller than Ftable ($0,070 > 3,92$).

This open access article is under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



INTRODUCTION

Academic stress is a prevalent issue faced by students in higher education institutions. It burdens their academic journey and personal life [Dianika, 2019] ¹. Academic stress refers to individuals' perception of academic conditions or responses experienced by students, including negative physical, behavioral, cognitive, and emotional reactions arising from academic demands [Octasya, 2021] ². Academic stress is associated with various stressors that can hinder academic development, including interpersonal, intrapersonal, social, health-related, and environmental factors within the educational institution [Adom et al., 2020] ³. Academic stress is described as a response arising from excessive demands and tasks faced by students [Olejnik & Holschuh in Basith, 2021] ⁴.

Bedewy and Gabriel [2015] ⁵ explain three aspects of academic stress, namely: 1. Academic expectations: This

aspect relates to high academic expectations from students, which can originate from oneself or the surrounding environment, such as family or professors. 2. Faculty work and examinations: This aspect pertains to students' perception of all forms of academic demands and examinations. It includes overwhelming course requirements, exam difficulties, and the ability to cope with them. 3. Student academic self-perception: This aspect refers to negative self-perception of academic abilities. It arises when students feel incapable of meeting academic demands.

In light of this, efforts to reduce academic stress among students are crucial. Critical thinking skills can help reduce perceived academic stress. Critical thinking skills encompass interpretation, analysis, evaluation, inference, explanation, and self-regulation [Facione, 2013] ⁶. Critical thinking skills involve complex problem-solving and various attitudinal skills [Cottrell, 2011] ⁷. Critical thinking is a skill that enables

students to think effectively and rationally about their actions and beliefs, guiding their decision-making process.

Previous research has examined academic stress among university students in relation to their psychological well-being, revealing a significant correlation between academic stress and psychological well-being [Barbayannis, 2022]⁹. However, these studies have primarily focused on the affective factors associated with academic stress. This study aims to investigate the cognitive factors, specifically critical thinking skills, using a constructivist approach.

METHOD

This study employed a survey design. Academic stress among students was measured using a scale adapted from the Perception of Academic Stress Scale (PAS) developed by Bedewy and Gabriel (2015). Critical thinking skills were assessed using... The collected data were analyzed using the Spearman's rank correlation coefficient (Spearman's rho) and one-way ANOVA with the assistance of SPSS statistical software version 26.

The participants in this study were undergraduate students from the Guidance and Counseling Program, Department of Educational Sciences, Faculty of Education, Tadulako University. A total of 119 participants, consisting of 19 males and 104 females, voluntarily took part in the research.

The research instruments employed in this study were an adapted questionnaire based on the Perception of Academic Stress Scale (PAS) developed by Bedewy and Gabriel [2015] to measure academic stress, and a questionnaire on critical thinking skills adapted from the Critical Thinking Questionnaire (CTHQ) developed by Kobylarek et al. [2022]. The collected data were analyzed using the Spearman's rank correlation coefficient (Spearman's rho) and one-way ANOVA with the assistance of SPSS statistical software version 26.

RESULTS

Based on the descriptive test results, it was found that out of the 119 students who participated in this study, the minimum value of academic stress was 27, the maximum value was 66, the mean was 47.45, and the standard deviation was 7.055. Since the average (mean) academic stress is greater than $M + 1SD$ ($47.45 > 16.055$), it can be concluded that the academic stress of students in the Guidance and Counseling Program at Tadulako University is classified as very high.

There was no significant relationship between critical thinking skills and academic stress among students in the Guidance and Counseling Program at Tadulako University. This can be observed from the output of the Spearman's rank correlation test, with a two-tailed p-value of $0.196 > 0.05$, as shown below.

Spearman Run Correlations Test Output

		Critical Thinking Skills	Academic stress
Spearman's rho	Critical Thinking Skills	Correlation Coefficient	1.000
		Sig. (2-tailed)	.196
		N	119
	Academic stress	Correlation Coefficient	-.119
		Sig. (2-tailed)	.196
		N	119

There was no significant difference in academic stress between male and female students when considering gender. The computed F-value (0.070) was smaller than the critical F-

value (3.92), or the significance level of the test (Sig. 0.793) was greater than the predetermined alpha level (0.05). This can be observed from the ANOVA output below.

ANOVA Outputs

Academic Stress	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3.488	1	3.488	.070	.793
Within Groups	5869.907	117	50.170		
Total	5873.395	118			

DISCUSSION

Based on the conducted research, it can be concluded that a majority of the 119 students who participated in this study experience very high levels of academic stress. This suggests that critical thinking skills do not significantly influence academic stress among the students. The critical thinking skills of the students in the Guidance and Counseling Program at Tadulako University are already quite good, but their academic stress requires serious attention in order to reduce it and improve their personal quality, particularly in relation to the quality of their education. Students with high academic

stress find it difficult to concentrate or focus on their academic activities, especially in completing their coursework. Therefore, as educators, researchers, and academics, further research is needed to investigate academic stress with more appropriate approaches, considering factors other than critical thinking skills. Hence, efforts to address academic stress among students should explore other factors. According to Munir, et al (2020) that one of the factors that influence student academic stress is family, personal, and peer pressure.

ETHICAL CONSIDERATIONS

Funding Statement.

The author does not receive financial support from any party.

Conflict of Interest Statement

The authors state that they have no disputes with other parties related to this study.

REFERENCES

- Adom, D., Chukwuere, J., & Mavis Osei, M. (2020). Academic Stress among Faculty and Students in Higher Institutions. *Pertanika J. Soc. Sci. & Hum.* 28(2): 1055 – 1064.
- Barbayannis, G.; Bandari, M.; Zheng, X.; Baquerizo, H.; Pecor, W. K.; & Ming, X. (2022). Academic stree and Mental Well-Being in College Student: Correlations Effected groups, and covid-19. *Front. Psychol Sec. Educational Psychology* Volume 13 | <https://doi.org/10.3389/fpsyg.2022.886344>
- Basith, A.; Syahputra, A.; Fitriyadi, S.; Rosmayadi1; Fitri; Triani, N.E. (2021). Academic Stress And Coping Strategy In Relation To Academic Ach,levement. *Cakrawala Pendidikan*, 40 (2). doi:10.21831/cp.v40i2.37155
- Bedewy, D., & Gabriel, A. (2015). Examining perceptions of academic stress and its sources among university students: The Perception of Academic Stress Scale. *Health Psychology Open*, 2(2). <https://doi.org/10.1177/2055102915596714>
- Cottrell, S. (2011). *Critical Thinking Skills Developing Effective Analysis and Argument* University of East London, London, United Kingdom.
- Facione, P.A. (2013). *Critical Thinking: What It Is and Why It Counts*. Paper, 1-28.
- Kobylarek, A., Błaszczynski, K., Ślósarz, L., & Madej, M. (2022). Critical Thinking Questionnaire (CThQ) – construction and application of critical thinking test tool. *Article ResearchGate*. DOI: 10.15503/andr2022.1
- Munir, S., Anita, R., Sefnimal, O.D.T. (2020). Academic Stress Factors Among Indonesia Students: A Case of IAIN Batu Sangkar. *Jurnal Pendidikan Progresif* 10(3). DOI: <http://dx.doi.org/10.23960/jpp.v10.i3.202004>
- Nolasco, P. N., Sarmiento, M.J., Tamangan, A.E. (2019). Liceo Journal of Higher Education Research 15 (1). doi: <http://dx.doi.org/10.7828/ljher.v15i1.1288>.
- Octasya, T. (2021). Level of academic stress for students of guidance and counseling at Semarang State University during the pandemic. *Journal of Professionals in Guidance and Counseling*, 2 (1): 27-33. <https://journal.uny.ac.id/index.php/progcouns>.
- Zubaidah, S., Corebima, A., & Mistianah. (2015). Asesmen Berpikir Kritis Terintegrasi Tes Essay. *Prosiding Symposium on Biology Education. Edubiodiversity: Inspiring Education with Biodiversity di Universitas Ahmad Dahlan Yogyakarta*, 200-213

