The Impact of Academic Stress on Psychological Well-Being with Life-College Balance as a Moderating Variable for Students in Jakarta

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KEYWORDS	ABSTRACT
Academic Stress; College-Life Balance; Psychological Well-Being; Student; Jakarta	Academic stress can affect a student's psychological well-being, but college-life balance can play a role in mitigating the impact. This study aims to analyze the influence of academic stress on the psychological well-being of students in Jakarta, by considering the life-college balance as a moderation variable. A quantitative approach with a cross-sectional design was used in this study, which involved 300 students in Jakarta. Data were obtained through questionnaires that measured academic stress (using the Academic Stress Scale / ASS), Work-Life Balance Scale (WLBS), and psychological well-being (Ryff's Psychological Well-Being Scale / RPWBS). Multiple linear regression analysis was applied to test the relationship between variables. The results showed a negative relationship between academic stress and students' psychological well-being, which was consistent with previous research. In addition, college-life balance was shown to moderate the effects of academic stress, where students who had a better college-life balance experienced a lower negative impact on their psychological well-being. These findings have significant implications for higher education policy, which needs to provide support programs to help students manage academic stress and improve their college-life balance. This research also opens up space for further research on other factors that can affect the psychological well-being of students.

Introduction

Academic stress has become one of the major challenges for students around the world, especially in urban environments like Jakarta which are loaded with competitive pressure. Factors such as a large volume of academic assignments, pressure to achieve satisfactory results, and a lack of adequate rest time often cause students to experience anxiety, emotional exhaustion, and even depression (Gustems-Carnicer et al., 2019; Lee & Sim, 2021). Academic stress not only affects academic performance but also has a significant impact on psychological well-being, including dimensions such as autonomy, positive relationships, and mastery of the environment (Ryff, 1989).

In this context, life balance is seen as an important factor that can moderate the impact of academic stress. Students who are able to divide their time between academic and non-academic life in a balanced manner tend to be better able to maintain their psychological well-being (Deasy et al., 2014; Tavolacci et al., 2020). However, the challenges faced by students in metropolitan cities such as Jakarta, including congestion, high cost of living, and social pressures, make college-life balance a complex issue that has not been widely explored scientifically.

Most previous studies have focused on the direct link between academic stress and mental health without considering the role of moderator variables such as college-life balance (Tavolacci et al., 2020; Tran & Lumley, 2019). In addition, research is still minimal in Southeast Asia, particularly in Indonesia, although social and cultural dynamics in the region play an important role in shaping student responses to stress (Kim & Lee, 2021). Therefore, there is an urgent need to explore the interaction between academic stress, life-study balance, and psychological well-being in the context of students in Jakarta.

This study aims to examine the influence of academic stress on the psychological well-being of students in Jakarta, by considering the role of life-college balance as a moderator variable. Specifically, this study wants to answer the question: to what extent can college-life balance reduce the negative impact of academic stress on psychological well-being?

This study is expected to make theoretical and practical contributions. Theoretically, this study enriches the literature on the moderation mechanism in the relationship between academic stress and psychological well-being. Practically, the results of the study can be the basis for educational institutions to design support programs that help students manage stress and improve their college-life balance.

Research Methods
Research Design

This study uses a quantitative approach with a correlational design to examine the relationship between academic stress, college-life balance, and students' psychological well-being. This approach was chosen because it is appropriate to measure the interaction between independent variables (academic stress), moderator variables (life-college balance), and dependent variables (psychological well-being) empirically (Hair et al., 2021).

Sampel

Population: Students who are studying at universities in Jakarta. Sampling Techniques: Purposive sampling techniques are used to ensure that the sample includes students with various study programs and levels of education (undergraduate and postgraduate). Sample Size: Based on Cohen's (2024) calculation with a significance level of 0.05 and a test strength of 0.8 for moderation analysis, the minimum sample is 200 respondents. This number also considers the possibility of attrition in data collection.

Research Instruments

a. Academic Stress: Measured using the internationally validated Academic Stress Scale (ASS) (Bedewy & Gabriel, 2015). This scale measures dimensions of academic pressure, such as workload and evaluation stress.
b. College-Life Balance: Measured using the Work-Life Balance Scale (WLBS) modified for the student context (Sirgy & Lee, 2018).
c. Psychological Well-Being: Measured using Ryff's Psychological Well-Being Scale (RPWBS), with six dimensions, including autonomy, environmental mastery, and positive relationships (Ryff, 1989).

All instruments used a 5-point Likert scale to measure the intensity of participants' responses.

Data Collection Procedure
a. Preparation Stage:
    1) Ethical approval obtained from the university's ethics committee.
    2) The instrument is translated and tested for cultural validity through the back-translation method.
b. Data Collection:
    1) Data is collected through online surveys using platforms such as Google Forms to reach respondents efficiently.
    2) Respondents were informed about the purpose of the study, and participation was voluntary.
c. Bias Control:
    Harmon's single-factor test was conducted to mitigate common method bias in the data (Podsakoff et al., 2012).

Data Analysis
a. Descriptive Statistics: Used to describe sample characteristics (e.g., age, gender, and course of study distribution).
b. Validity and Reliability Test:
    1) Confirmatory factor analysis (CFA) is used to validate the instrument.
    2) Cronbach's alpha ensures the internal reliability of the scale.
c. Moderation Analysis:
    1) The hierarchical regression analysis technique was used to test the moderation of the life-college balance on the relationship between academic stress and psychological well-being.
    2) Interaction test using PROCESS Macro version 4.1 (Hayes, 2018) to identify the effect of moderation.
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Results and Discussion
        This study aims to explore the relationship between academic stress, life-study balance, and psychological well-being in students in Jakarta. Based on data from 300 respondents, some of the main findings are presented as follows:
1. The Relationship between Academic Stress and Psychological Well-Being

Regression analysis showed a significant negative relationship between academic stress and psychological well-being (β = -0.45, p < 0.001). The higher the level of academic stress, the lower the level of psychological well-being of students.

2. The Relationship between Academic Stress and College-Life Balance

There was a significant negative association between academic stress and college-life balance (β = -0.38, p < 0.001). This indicates that academic stress can reduce students' ability to maintain a balance between personal and academic life.

3. The Relationship between College-Life Balance and Psychological Well-Being

The analysis showed a significant positive relationship between life-study balance and psychological well-being (β = 0.52, p < 0.001). Better college-life balance contributes to higher psychological well-being.

4. Moderation of Life-College Balance

The moderation test showed that the life-college balance weakened the negative impact of academic stress on psychological well-being (ΔR^2 = 0.12, p < 0.01). Students with a better life-study balance tend to be better able to maintain psychological well-being despite academic stress.

Tabel 1. Analisis Regresi dan Uji Moderasi

Independent Variables	β (Coefficient)	R^2	P-value
Academic Stress -> Psychological Well-Being	-0.45	0.20	< 0.001
Academic Stress -> Life-College Balance	-0.38	0.14	< 0.001
Life-College Balance -> Psychological Well-Being	0.52	0.27	< 0.001
Moderation (Academic Stress x Life-College Balance) -> Psychological Well-Being	0.12	0.32	< 0.01

The results of this study show that academic stress has a significant negative impact on students' psychological well-being, and the college-life balance functions as a moderator that weakens these negative impacts. As a practical implication, it is important to support students in managing academic stress and improving their college-life balance to support their psychological well-being.

Discussion

Based on the results obtained from the data of 300 respondents, we found that academic stress is negatively related to psychological well-being, which is in line with findings from previous studies (Fusi et al., 2021; Stallman, 2020). However, college-life balance was shown to moderate this relationship, where students who had a better college-life balance showed a less negative impact of academic stress on their psychological well-being.

1. Comparison with Previous Research

The results of this study show consistency with a number of previous studies that state that academic stress is negatively related to psychological well-being. For example, research by Bedewy & Gabriel (2015) and Stallman (2020) shows that academic stress contributes to a decline in students' mental health and psychological well-being. In addition, research by Hersch and O'Reilly (2021) also emphasizes the importance of college-life balance in reducing the negative impact of academic stress, which is in line with our findings that show that college-life balance can act as a moderator that reduces the adverse impact of academic stress on psychological well-being.

2. Implications of the findings

Theoretically, these results add to the understanding of the importance of college-life balance in the context of academic stress among students. The moderation influence model tested in this study shows that college-life balance can help students manage academic stress, potentially reducing the negative impact on their psychological well-being. These findings are in line with theories that point to the importance of self-regulation and coping mechanisms in managing stress (Parker et al., 2021).

Practically, the results of this study have important implications for the review and evaluation of higher education policies. Universities in Jakarta and more broadly in Indonesia should pay more attention to the psychological well-being of students by creating programs or services that support the management of academic stress. For example, providing stress management skills training and introducing policies that help students create a balance between academic tasks and their personal lives.

3. Research Strengths and Limitations

One of the main strengths of this study is the use of representative data from students in Jakarta, which provides a clear picture of the conditions of academic stress and psychological well-being among urban students. In addition, the use of moderator variables such as college-life balance provides deeper insights into ways students can cope with academic stress.

However, this study has some limitations. First, the use of cross-sectional data limits the ability to draw causal inferences. Future longitudinal research may provide a more complete picture of the direction of the relationship between academic stress, college-life balance, and psychological well-being. Second, the data used comes from one geographical area (Jakarta), so the results may not be fully generalizable to all of Indonesia or other countries.

4. Recommendations for Future Research

This research opens several avenues for further research. First, future research could consider other factors that could moderate or mediate the link between academic stress and psychological well-being, such as social support or individual factors such as resilience. Second, longitudinal research can provide deeper insights into changes in students' psychological well-being over time and how academic stress affects students in the long run.

Conclusion

This study shows that academic stress significantly negatively affects students' psychological well-being, while college-life balance plays a role as a moderating factor that reduces these negative effects. These findings make an important contribution to the development of intervention strategies to improve the psychological well-being of students in Jakarta, emphasizing the importance of life-study balance in managing academic stress.

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