

The effect of time management on student stress levels

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Abstract

Management is an important skill that students must have in order to organize, plan, and control the use of time effectively to achieve academic and personal goals. This skill plays an important role in reducing psychological pressure that arises from the burden of assignments, exams, and lecture demands. This study aims to determine the extent to which time management affects students' stress levels. The method used is a quantitative method with a correlational approach. The research population consists of undergraduate students at a university, with a sample size of 100 respondents selected using purposive sampling. The research instruments consisted of a time management scale adapted from Macan (1994) and a student stress scale compiled based on Lazarus and Folkman's (1984) stress theory. The data were analyzed using simple linear regression tests with the help of the SPSS version 25 program. The results showed a negative and significant effect of time management on student stress levels ($p < 0.05$), which means that the better the time management skills students have, the lower their stress levels will be. The results of this study indicate that time management skills are important for maintaining a healthy balance between academic responsibilities and personal needs. It is hoped that these findings will encourage educational institutions to develop time management training programs to reduce student stress levels and improve their well-being and academic performance.

Keywords: Time Management; Academic Workload; Student Stress

Introduction

In college, students are required to balance various academic and non-academic responsibilities. Campus life not only demands critical thinking skills and mastery of learning materials, but also requires the ability to manage time effectively and handle heavy academic loads. The inability to organize time and cope with academic demands can cause psychological pressure, which manifests as stress. Student stress is a common problem in academic environments and can have a significant impact on academic achievement, mental health, and overall well-being.

Time management is one of the important factors that determine the success of students in achieving their academic goals. According to Macan (1994), time management is the process of planning, organizing, and controlling the effective allocation of time to complete specific tasks. Students who are able to manage their time efficiently tend to be more productive, complete tasks on time, and maintain

better control over academic pressure. Conversely, students who lack time management skills often experience procrastination, fatigue, and increased stress levels due to the accumulation of unfinished tasks.

In addition to time management, academic workload is another factor that plays an important role in influencing students' stress levels. Academic workload refers to the number of courses, assignments, exams, and other academic activities that students must complete within a certain period. Lazarus and Folkman (1984) state that stress occurs when a person feels that environmental demands exceed their resources or coping abilities. In this context, students who face excessive academic workload are more likely to experience emotional exhaustion, decreased concentration, and reduced motivation to study. Previous studies have found a positive correlation between academic workload and stress, showing that students who are burdened with excessive assignments and deadlines tend to experience higher levels of psychological pressure.

These circumstances show that students' ability to manage time and balance academic workloads plays an important role in managing stress. However, not all students possess these abilities at the same level. Some students may have good time management but still feel stressed due to overwhelming academic pressure. On the other hand, there are students who face a heavy academic workload but can manage it effectively through proper scheduling and prioritization. This suggests that the relationship between time management, academic workload, and stress is complex and requires further empirical examination.

Therefore, this study aims to analyze the effect of time management (X_1) and academic workload (X_2) on students' stress levels (Y). By understanding how these two factors influence stress, universities can design appropriate academic support programs such as time management workshops, counseling services, and curriculum load adjustments. These initiatives can help students build resilience, reduce psychological distress, and maintain a healthy balance between academic demands and personal well-being. Ultimately, this research is expected to contribute to the development of strategies that enhance students' mental health and academic success in the higher education environment.

Theoretical Framework

Time management is one of the important skills that students must have in order to organize, plan, and control the use of time so that academic and non-academic activities can be carried out effectively. According to Macan (1994), time management is the process of planning and controlling the amount of time used for certain activities, with the aim of increasing effectiveness, efficiency, and productivity. Students who have good time management skills tend to be able to complete tasks on time, maintain a balance between studying and resting, and avoid excessive psychological pressure.

Student stress levels often arise due to high academic demands, pressure to achieve, and difficulties in managing study time and social activities. Lazarus and Folkman (1984) explain that stress is an individual's response to demands that exceed their abilities or resources. In the context of students, stress can arise when they feel overwhelmed in managing various responsibilities, such as college assignments, part-time jobs, and organizational activities. According to research by Misra and McKean (2000), poor time management skills are one of the main factors causing academic stress in students. The relationship between time management and stress is negative, meaning that the better a person's ability to manage time, the lower their stress levels will be.

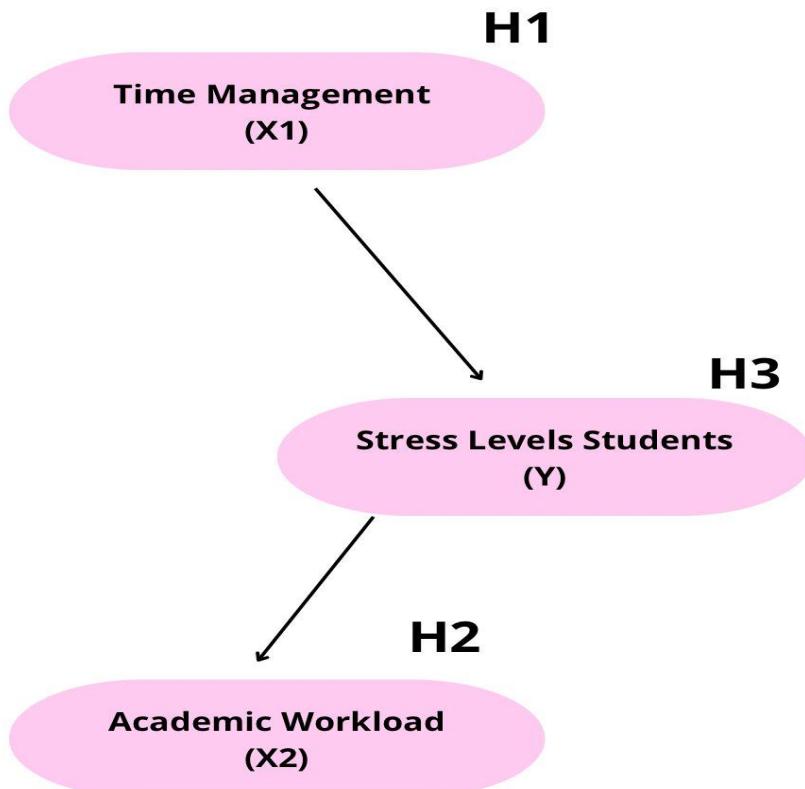
The results of research by Britton and Tesser (1991) show that students who implement good time planning have higher academic performance and lower stress levels compared to those who do not have clear time planning. In addition, research by Nonis, Hudson, Logan, and Ford (1998) also confirms that time management skills play an important role in reducing students' emotional pressure during their studies.

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Time management encompasses several important dimensions, including goal setting, activity planning, priority setting, and monitoring of time used (Claessens, van Eerde, Rutte & Roe, 2007). If students are able to apply these dimensions well, they can avoid work overload, reduce anxiety levels, and improve psychological well-being. Conversely, students who are less able to manage their time effectively tend to experience stress, fatigue, and even a decline in motivation to study. Based on previous theories and research, it can be concluded that time management has a significant influence on students' stress levels. The ability to manage time effectively helps students cope better with academic pressure and maintain their mental health.

Therefore, the application of good time management strategies needs to be developed in the educational environment so that students can achieve without experiencing excessive stress.



Gambar 1 : Model Penelitian

Source: Literature Review

H1: Time management (X_1) has a negative and significant effect on student stress levels.

H2: Academic workload (X_2) has a positive and significant effect on student stress levels.

H3: Time management (X_1) and academic workload (X_2) simultaneously have a significant effect on student stress levels (Y).

Method

This study uses a quantitative approach with an associative descriptive method, which aims to determine the effect of time management variables (X_1) and academic workload (X_2) on student stress levels (Y). The population in this study consists of all active undergraduate students at a university in Indonesia. The sampling technique

used purposive sampling, with the criteria being students who were in at least their second semester and actively participating in academic activities. The sample size was determined using the Slovin formula to ensure that the data obtained were representative of the population.

Data were collected through an online questionnaire using a five-point Likert scale ranging from "strongly disagree" to "strongly agree," to measure respondents' perceptions of time management, academic workload, and stress levels. The collected data were analyzed using multiple linear regression with the help of SPSS version 25 to determine the effect between the independent and dependent variables. Validity and reliability tests were carried out to ensure that all research instruments were accurate and consistent. The results of this study are expected to provide empirical evidence on how time management and academic workload influence student stress levels and serve as a reference for universities to design effective programs that enhance students' well-being and academic performance.

Results

Table 1. T-test

Model	Coefficients ^a											Collinearity Statistics			
	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B		Correlations							
	B	Std. Error				Lower Bound	Upper Bound	Zero-order	Partial	Part					
1	(Constant)	3.692	2.448	1.508	.135	-1.168	8.551								
	Time Management	.005	.081	.004	.059	.953	-.155	.165	.474	.006	.003	.694	1.441		
	Academic Workload	.936	.070	.850	13.346	<.001	.797	1.076	.853	.805	.708	.694	1.441		

a. Dependent Variable: Student Stress Levels

Based on the t-test results in Table 1, it was found that the Time Management variable (X1) had a t-value of 0.059 with a significance value of 0.953 > 0.05.

This indicates that time management does not have a significant effect on students' stress levels. This means that students' ability to manage time does not directly affect the level of stress they experience.

Meanwhile, the Academic Load variable (X2) has a t-value of 13.346 with a significance value of 0.000 < 0.05.

These results indicate that academic load has a positive and significant effect on students' stress levels. The higher the academic load felt by students, the higher the level of stress they experience.

Thus, it can be concluded that, partially, academic workload (X2) has a significant effect on students' stress levels, while time management (X1) does not have a significant effect.

Table 2. Multiple linear regression test

Model	Coefficients ^a										
	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	95.0% Confidence Interval for B		Correlations		
	B	Std. Error	Beta				Lower Bound	Upper Bound	Zero-order	Partial	Part
1	(Constant)	3.692	2.448		1.508	.135	-1.168	8.551			
	Time Management	.005	.081	.004	.059	.953	-.155	.165	.474	.006	.003
	Academic Workload	.936	.070	.850	13.346	<.001	.797	1.076	.853	.805	.708

a. Dependent Variable: Student Stress Levels

The constant value of 3.692 indicates that if time management (X1) and academic load (X2) have a value of zero, then the stress level of students (Y) remains at a base value of 3.692 units.

The regression coefficient for time management (X1) of 0.005 indicates that each one-unit increase in time management will increase students' stress levels by 0.005 units, assuming other variables remain constant.

The regression coefficient for academic workload (X2) of 0.936 indicates that each one-unit increase in academic workload will increase student stress levels by 0.936 units.

Table 3. Coefficient of determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.853 ^a	.727	.721	7.20521	.727	129.009	2	97	<.001	2.009

a. Predictors: (Constant), Academic Workload, Time Management

b. Dependent Variable: Student Stress Levels

The adjusted R-squared value of 0.721 indicates that 72.1% of the variation in student stress levels can be explained by two independent variables, namely time management (X1) and academic load (X2).

The remaining 27.9% is influenced by other factors not included in this research model, such as family problems, financial pressure, or personal coping strategies.

These results indicate that the regression model used in this study has a strong explanatory power regarding the relationship between time management, academic workload, and student stress levels.

Table 4. F test

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13394.988	2	6697.494	129.009	<.001 ^b
	Residual	5035.762	97	51.915		
	Total	18430.750	99			

a. Dependent Variable: Student Stress Levels

b. Predictors: (Constant), Academic Workload, Time Management

Based on the ANOVA test results, an F value of 129.009 was obtained with a significance value of 0.000 < 0.05.

This indicates that the variables of time management (X1) and academic workload (X2) simultaneously have a significant effect on students' stress levels.

Thus, the regression model used in this study is valid, and the two independent variables together are able to explain the variation in the dependent variable, namely the stress level of students.

Table 5. Simple Linear Regression Analysis between Time Management (X₁) and Student Stress Levels (Y)

Model	Coefficients ^a											
	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
	B	Std. Error				Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3.692	2.448	1.508	.135	-1.168	8.551					
	Time Management	.005	.081	.004	.059	.953	-.155	.165	.474	.006	.003	.694 1.441
	Academic Workload	.936	.070	.850	13.346	<.001	.797	1.076	.853	.805	.708	.694 1.441

a. Dependent Variable: Student Stress Levels

The regression coefficient for time management (X₁) is 0.005, indicating that each one-unit increase in time management will increase students' stress levels by 0.005 units, assuming other variables remain constant.

A t-value of 0.059 with a significance value of 0.953 > 0.05 indicates that time management does not have a significant effect on students' stress levels.

These findings indicate that students' ability to manage their time does not significantly affect their stress levels. This may be due to other more dominant factors, such as academic workload or personal coping mechanisms. Therefore, time management alone is not sufficient to reduce student stress without considering the level of academic demands faced by students.

Table 6. Simple Linear Regression Analysis between Academic Workload (X_2) and Student Stress Levels (Y)

Model		Coefficients ^a						Correlations			Collinearity Statistics		
		B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3.692	2.448		1.508	.135	-1.168	8.551					
	Time Management	.005	.081	.004	.059	.953	-.155	.165	.474	.006	.003	.694	1.441
	Academic Workload	.936	.070	.850	13.346	<.001	.797	1.076	.853	.805	.708	.694	1.441

a. Dependent Variable: Student Stress Levels

The regression coefficient for academic workload (X_2) is 0.936, indicating that each one-unit increase in academic workload will increase students' stress levels by 0.936 units, assuming other variables remain constant.

The t-value of 13.346 with a significance value of $0.000 < 0.05$ shows that academic workload has a positive and significant effect on students' stress levels.

These results indicate that the higher the academic workload experienced by students – such as assignments, exams, and tight deadlines – the higher their level of stress will be. This finding supports the theory that excessive academic pressure can lead to psychological strain and decreased well-being among students. Therefore, balancing academic demands and providing adequate support systems are essential to help students manage stress effectively.

Interpretation of Results

The results show that time management (X_1) has no significant effect on students' stress levels ($t = 0.059$; $\text{Sig.} = 0.953 > 0.05$), while academic load (X_2) has a positive and significant effect ($t = 13.346$; $\text{Sig.} = 0.000 < 0.05$).

The Adjusted R^2 value of 0.721 indicates that 72.1% of the variation in stress levels is explained by the two variables, and the F value of 129.009 ($\text{Sig.} = 0.000 < 0.05$) confirms a significant simultaneous effect.

Overall, academic workload is the dominant factor that increases students' stress levels, while time management alone is not sufficient to reduce this stress.

Discussion

The results of this study indicate that time management and academic workload have different effects on students' stress levels. Based on the results of the partial regression test, time management does not have a significant effect on stress levels, whereas academic workload has a positive and significant effect. These findings are in line with the stress theory proposed by Lazarus and Folkman (1984), which states that stress arises when environmental demands exceed an individual's ability to cope with them. In this context, a high academic workload causes greater psychological pressure on students.

Theoretically, these results reinforce previous research by Misra and McKean (2000), which found that academic workload is one of the main sources of stress among students, while time management skills only serve as a supportive factor, not a primary determinant. This finding is also consistent with Macan's (1994) view that

time management indeed helps improve efficiency, but does not always directly impact stress reduction if the academic workload remains high.

From a practical implication perspective, the results of this study provide input for universities to balance students' academic workload and offer structured time management training. Therefore, students can develop adaptive strategies to cope with academic pressure while maintaining their mental well-being. In addition, these findings can also serve as a basis for educational institutions to improve academic policies, particularly regarding the distribution of assignments and the scheduling of learning evaluations.

The contribution of this research lies in providing empirical evidence on the importance of managing academic workload in the context of students' psychological well-being. However, this study has limitations as it only uses a quantitative approach with data from a single university, so the results cannot yet be generalized. Further research is recommended to involve respondents from various higher education institutions and to include other variables, such as social support and emotional intelligence, in order to provide a more comprehensive view of the factors that influence student stress.

Conclusion

This study concludes that time management and academic workload have different influences on students' stress levels. The results show that time management does not have a significant effect on stress, indicating that the ability to plan and organize time alone is insufficient to reduce academic pressure. In contrast, academic workload has a positive and significant effect, suggesting that the heavier the academic demands, the higher the level of stress experienced by students.

The findings contribute to the academic understanding of how internal and external factors affect student well-being, especially within the context of higher education. Practically, this research highlights the importance of designing effective time management programs and balancing academic loads to promote students' mental health and productivity.

However, this study is limited by its focus on quantitative data from a single institution, which may not fully capture other psychological or environmental factors affecting stress. Future research is recommended to include qualitative approaches and explore additional variables such as emotional intelligence, social support, and coping strategies to provide a more comprehensive understanding of student stress management.

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