1st International Conference on Management, Business and Economy (ICoMBEc 2025)
Vo. 1 No. 1 2025
e-ISSN : XXXX-XXX

Balancing Work and Study: The Influence of Stress and Time Management on Student Achievement

Lastri Susilawati[1], Nurlaili[2]

Pamulang University, Indonesia[1,2]
*lastrisusilawati2005@gmail.com

Abstract

This study aims to analyze the effect of work stress management and time management on the academic achievement of students who study while working. This research employs a quantitative approach using a survey method through questionnaires distributed to 102 respondents. The population of this study consists of evening class students at Pamulang University. Data analysis was conducted using SPSS version 22 with a series of tests, including validity, reliability, normality, multicollinearity, heteroscedasticity, multiple linear regression, F-test, t-test, and the coefficient of determination (R^2).

The results show that all research instruments were declared valid and reliable. Work stress management and time management significantly affect the academic achievement of working students. This means that both factors play an important role in determining the level of academic success among working students. Partially, time management has the most dominant influence on academic achievement, indicating that the better students manage their time between work and study, the higher their academic performance will be.

The implications of this study highlight the importance of implementing effective time management and stress control strategies for working students to achieve optimal academic performance.

Keywords:
Work Stress Management, Time Management, Academic Achievement, Working Students

Introduction

The phenomenon of students pursuing higher education while working has become increasingly common in modern society. The demand for financial independence while attaining higher education requires students to be able to divide their time, energy, and attention between work and study. This situation offers opportunities to develop professional skills but also presents significant challenges such as stress and high demands on time management. Therefore, it is important to understand how work stress management and time management influence the academic performance of working students.

Work stress management involves an individual's ability to control the pressures arising from both work and academic demands. Stress among working students can result from long working hours, heavy workloads, and role conflicts. Lazarus and Folkman (1984) explain that stress occurs when environmental demands exceed an individual's ability to cope with them. If not managed properly, stress can negatively impact physical and mental health as well as academic performance. Misra and McKean (2000) found that high levels of stress are associated with difficulties in time management, increased anxiety, and decreased life satisfaction, which ultimately lead to poorer academic performance among students.

Apart from stress, time management is also an important factor determining the success of working students. Students with good time management skills are able to plan their study and work activities in a balanced manner. Macan et al. (1990) found that perceived control over time is positively correlated with academic achievement and lower stress levels. This finding is supported by Britton and Tesser (1991), who demonstrated that effective time management practices such as setting priorities and study planning have a significant positive effect on students' Grade Point Average (GPA).

However, working while studying does not always have negative effects. Part-time work with moderate hours can provide benefits such as discipline, managerial skills, and work experience. On the other hand, excessive workload can reduce study time and increase stress levels. Byun et al. (2014) found a negative relationship between long working hours and academic achievement, emphasizing the importance of maintaining role balance to prevent conflicts from disrupting learning performance.

Role conflict is a major issue faced by working students. They are confronted with two major demands: productivity at work and academic success. When stress is not properly managed, students are at risk of experiencing burnout physical and mental exhaustion that lowers learning motivation and academic achievement. Conversely, good time management skills can serve as an effective coping strategy. Students who are able to organize their schedules, set priorities, and create realistic goals find it easier to maintain a balance between work and study. Häfner et al. (2014) found that time management training not only improves academic performance but also significantly reduces stress levels.

In the context of higher education in Indonesia, this issue has become increasingly relevant since many students work to finance their education. Therefore, research on the influence of work stress management and time management on academic performance is essential. The results can help universities design policies that better support working students, such as flexible class schedules, counseling services, and training programs in stress and time management.

Practically, this research is also beneficial for students in developing adaptive strategies to cope with dual pressures. In addition, awareness from both universities and employers is expected to enhance support for working students. Thus, the ability to manage stress and time becomes the key to maintaining a balance between work and academic responsibilities and achieving optimal performance.

Theoretical Framework

The theoretical framework of this study focuses on the relationship between work stress management, time management, and the academic performance of students who study while working. Students who take on dual roles as both workers and learners face complex challenges, particularly in terms of time allocation and psychological pressure. Based on the work stress theory proposed by Robbins and Judge (2019), stress arises when individuals perceive that environmental demands exceed their ability to cope with them. In the context of working students, work stress may result from high workloads, limited rest time, and accumulating academic demands. If stress is not properly managed, it can reduce concentration, learning motivation, and critical thinking ability, ultimately having a negative impact on academic performance.

Work stress management is defined as an individual's ability to identify sources of stress and apply appropriate strategies to control them. The Coping Stress Theory proposed by Lazarus and Folkman (1984) explains that individuals who are able to use adaptive coping strategies such as problem-focused coping and emotion-focused coping are better able to adjust to environmental pressures. In the context of working students, the ability to manage work-related stress becomes a crucial factor in maintaining a balance between professional and academic responsibilities. The better a student's ability to manage work stress, the higher their likelihood of maintaining strong academic performance.

Furthermore, the Time Management Theory proposed by Macan (1994) emphasizes the importance of planning, prioritization, and control over time usage to achieve efficiency and effectiveness in activities. Students who study while working face time constraints, making the ability to organize study schedules, work hours, and rest periods essential. Good time management enables students to minimize stress, avoid procrastination, and maximize academic productivity. Thus, time management functions not only as a tool for self-regulation but also as a mediating variable that strengthens the effect of work stress management on academic performance.

The conceptual framework of this research illustrates a causal relationship in which work stress management and time management serve as independent variables, while the academic performance of students who study while working serves as the dependent variable. Theoretically, effective work stress management reduces psychological pressure and fatigue, allowing students to study with greater focus and productivity. Similarly, effective time management helps students balance work and study responsibilities, ultimately improving academic outcomes. These two variables interact with each other, as good time management can reduce stress, while effective stress control can enhance time-use efficiency.

Based on the theoretical discussion and conceptual framework above, the research hypotheses can be formulated as follows:

(1) Work stress management has a positive and significant effect on the academic performance of students who study while working.

(2) Time management has a positive and significant effect on the academic performance of students who study while working.

(3) Work stress management and time management simultaneously have a positive and significant effect on the academic performance of students who study while working.

Method

This study employs a quantitative research method. According to Sugiyono (2013:13), the quantitative research method can be defined as a research method based on the philosophy of positivism, used to study specific populations or samples. Sampling techniques are generally conducted randomly, data collection utilizes research instruments, and data analysis is quantitative or statistical in nature with the aim of testing predetermined hypotheses.

This research uses a quantitative correlational design to examine the relationship between work stress management and time management on students' academic performance, with a survey technique employed for data analysis. The survey involves the use of a Google Form questionnaire as a medium for collecting data from respondents, followed by processing their responses.

The research was conducted at Pamulang University, with a data collection period of two weeks. The survey began on October 2, 2025, and the target population of this study consisted of active students from all faculties and study programs at Pamulang University, with a total of 102 respondents.

A quantitative approach was used to obtain objective data that can be generalized to a wider population.

Results

Based on the results of the questionnaire distributed to 102 respondents, it was found that the majority of respondents were female students (72.5%), while male students accounted for 27.5%. In terms of age, most respondents were between 20–25 years old (74.5%), indicating that they are in a productive age range, which is typical for students who study while working.

Based on the semester level, the majority of respondents were in semesters 5–6 (63.7%), indicating that they have been studying for a considerable period and have gained experience in managing their time between academic and work responsibilities.

Most of the respondents were indeed studying while working (83.3%), while the remaining 16.7% were not working while studying. The duration of studying while working also showed a relatively balanced variation between respondents who had just started (less than 6 months, 31.4%) and those who had been doing so for more than 2 years (31.4%).

Overall, the characteristics of the respondents indicate that female students of productive age, who are in the middle stage of their studies and actively working while studying, dominate the research population. Therefore, the results of this study

are considered relevant for analyzing the influence of work stress management and time management on the academic performance of students who study while working.

This research has undergone various stages of instrument testing and classical assumption testing to ensure that the data used possess a high level of reliability and feasibility before conducting regression analysis.

Based on the results of the validity test for the three variables Work Stress Management (X1), Time Management (X2), and Academic Achievement (Y) it was found that all 20 statement items (P1–P20) showed significance values below 0.05 and correlation values greater than 0.3. Therefore, it can be concluded that all statement items are valid and appropriate for use in the research instrument. This indicates that each question item consistently measures the intended construct variables, namely work stress management, time management, and academic achievement of students who study while working.

Based on the reliability test results, the Cronbach's Alpha value for variable X1 (work stress management) was 0.877 > 0.70, for variable X2 (time management) the value was 0.897 > 0.70, indicating that the instrument is highly reliable, and for variable Y (academic achievement) the Cronbach's Alpha value was 0.915, indicating very high reliability. Thus, all variables have Cronbach's Alpha values greater than 0.70, meaning that all instruments in this study are reliable and consistent in measuring each variable.

The Kolmogorov-Smirnov test on 102 sample data produced a significance value of 0.075 ($p > 0.05$). Therefore, the residual data in the regression model can be considered normally distributed. This shows that the regression model meets one of the classical assumptions, namely the normality assumption, allowing the regression analysis to proceed to the next stages (heteroscedasticity test, multicollinearity test, and regression analysis).

Based on the results of the multicollinearity test, the variables work stress management and time management had Tolerance values of 0.332 and Variance Inflation Factor (VIF) values of 3.009. Since the Tolerance values are greater than 0.10 and the VIF values are less than 10, it can be concluded that the regression model does not exhibit multicollinearity. Therefore, both independent variables can be used together in the regression model as they do not strongly influence each other.

Based on the results of the heteroscedasticity test using the Glejser method, the significance values obtained were 0.076 for work stress management and 0.164 for time management. Since all significance values are greater than 0.05, it can be concluded that the regression model is free from heteroscedasticity. Thus, the classical assumption of equal residual variance is fulfilled, and the regression model is suitable for further analysis.

Multiple Linear Regression

Multiple linear regression is a statistical analysis technique used to determine the effect of two or more independent variables (X1, X2, ..., Xn) on one dependent variable (Y).
The goal is to predict the value of the dependent variable based on changes in the independent variables and to determine the direction and magnitude of each variable's influence.
In this study, the dependent variable is:
Y - Academic Achievement
Independent variables:
X_1 = Work Stress Management
X_2 = Time Management

The general equation for multiple linear regression is:
Y = a + b1, X1 + b2, X2 + e

Information:
Y = Dependent variable (variable being influenced)
Constant (value of Y when X1 and X2 = 0)
b1, b2 = Regression coefficients of each independent variable

X1, X2 Independent variables
e = Error (interference factor)

Table 1. Multiple Linear Regression Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.313	2.226		2.836	.006
	Work stress management	.041	.163	.033	.253	.801
	Time management	.676	.141	.630	4.799	.000

a. Dependent Variable: Academic Achiviement

Source: SPSS Data Processing Result

Interpretation:
Based on the Unstandardized Coefficients (B) values, the multiple linear regression equation is as follows:
Y= 6.313+ 0.041 X1 x 0.676 X2
Explanation:
Y = Academic Achievement
X_1 = Work Stress Management

X_2 = Time Management

Coefficient Interpretation
Constant (6.313):
If the variables of work stress management (X_1) and time management (X_2) are both 0, then the academic achievement of students is 6.313 (the baseline value).

Work Stress Management Coefficient (B = 0.041):
Every 1-unit increase in the work stress management score will increase academic achievement by 0.041, assuming the other variable remains constant.
However, since Sig. = 0.801 > 0.05, the effect of work stress management on academic achievement is not significant.

Time Management Coefficient (B = 0.676):
Every 1-unit increase in the time management score will increase academic achievement by 0.676, assuming the other variable remains constant.
The Sig. value = 0.000 < 0.05, indicating that time management has a significant effect on academic achievement.

Interpretation of t-Value and Significance
Since Sig. X_1 > 0.05, H_0 is accepted → work stress management has no significant effect on academic achievement.
Since Sig. X_2 < 0.05, H_0 is rejected → time management has a significant effect on academic achievement.
Interpretation of Standardized Coefficients (Beta)
The Beta value indicates the relative influence of each independent variable on the dependent variable.
Work Stress Management (β = 0.033) → has a very small effect.
Time Management (β = 0.630) → has the greatest influence on academic achievement.
The time management variable has a positive and significant effect on the academic achievement of students who work while studying.
The work stress management variable has a positive but not significant effect on academic achievement.

Partial F-test
The F-test is used to determine whether all independent variables (X_1 , X_2 , X_3 , etc.) simultaneously have a significant effect on the dependent variable (Y).

Table 2. Partial F-test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2174.710	2	1087.355	37.737	.000[b]
	Residual	2852.584	99	28.814		
	Total	5027.294	101			

a. Dependent Variable: Academic Achiviement

b. Predictors: (Constant), Time management, Work stress management

Source: SPSS Data Processing Result

Interpretation:
F-value:
From the table, the F-value = 37.737
Significance value (Sig.):
The significance value (Sig.) = 0.000 (less than 0.05)

Decision criteria:
If Sig. < 0.05, then H_0 is rejected → the regression model is significant.
If Sig. > 0.05, then H_0 is accepted → the regression model is not significant.
Decision:
Since 0.000 < 0.05, H_0 is rejected.

This means that the regression model is simultaneously significant. In other words, the two independent variables jointly have a significant effect on the dependent variable.

Partial T-Test

The t-test is used to determine whether each independent variable (Work Stress Management and Time Management) has a partial significant effect on the dependent variable (Academic Achievement).

Table 3. Partial T-Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.313	2.226		2.836	.006
	Work stress management	.041	.163	.033	.253	.801
	Time management	.676	.141	.630	4.799	.000

a. Dependent Variable: Academic Achiviement

Source: SPSS Data Processing Result

Interpretation:
Work Stress Management
The t-value = 0.253, and Sig. = 0.801 (> 0.05).
This means that there is no significant effect of work stress management on academic achievement.
Thus, the ability to manage work stress does not have a significant impact on students' academic achievement in this model.
Time Management
The t-value = 4.799, and Sig. = 0.000 (< 0.05).
This means that there is a significant effect of time management on academic achievement.
Therefore, the better a person's time management skills, the higher their academic achievement tends to be.

The Coefficient of Determination (R^2)
The coefficient of determination (R^2) is a statistical measure that indicates how much the independent variables (X_1 , X_2 , X_3 , etc.) are able to explain the variation or changes in the dependent variable (Y).
In other words, R^2 explains how well the regression model is able to predict or describe the behavior of the dependent variable.

Table 4. Coefficient Determination Test

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.817[a]	.668	.661	3.31274

a. Predictors: (Constant), Academic Achiviement, Time management

Source: SPSS Data Processing Result

Interpretation:
R (Correlation Coefficient) = 0.817
Indicates the level of relationship (correlation) between the independent variables (Academic Achievement and Time Management) and the dependent variable.
A value of 0.817 means there is a very strong and positive relationship between these variables.
This means that the better the time management and academic achievement, the higher the value of the dependent variable measured in the model.

R Square (Coefficient of Determination) = 0.668
Indicates that 66.8% of the variation in the dependent variable can be explained by the independent variables in the model (Academic Achievement and Time Management).
The remaining 33.2% is explained by other factors outside this research model.

Adjusted R Square = 0.661
This value is an adjustment of R^2 that takes into account the number of variables and the sample size.
Since the value is not much different from R^2 (0.668 → 0.661), the regression model is considered good and stable.

Std. Error of the Estimate = 3.31274
Indicates the average prediction error of the regression model.
The smaller the value, the better the model's ability to predict the dependent variable.

Discussion

This study was conducted to examine the extent to which work stress management and time management affect the academic performance of students who work while studying.

Based on the validity test, all 20 statement items across the three research variables showed significance values below 0.05 and correlation coefficients greater than 0.3. Thus, all items were declared valid and suitable for use in the research instrument. This indicates that each statement consistently measures the intended construct work stress management, time management, and academic performance of working students.

The reliability test also showed that all three variables had Cronbach's Alpha values above 0.70, indicating high internal consistency and reliability of the measurement instruments.

The normality test revealed that the residual data in the regression model were normally distributed.

In the multicollinearity test, the variables of work stress management and time management had tolerance values of 0.332 and Variance Inflation Factor (VIF) values of 3.009. Since the tolerance value is above the threshold and the VIF value is below the limit, it can be concluded that the regression model does not contain multicollinearity. Therefore, both variables can be used simultaneously in the regression model as they do not strongly influence each other.

The heteroscedasticity test results indicated that the regression model was free from heteroscedasticity symptoms. Thus, the classical assumption regarding the equality of residual variance was met, and the regression model is appropriate for further analysis.

The results of the multiple linear regression analysis showed that the model was statistically significant overall ($p < 0.05$). Both independent variables had a significant effect on academic performance, with time management showing the most dominant influence as indicated by a higher Beta value of 0.630 Hence, improving students' or employees' ability to manage time and handle stress effectively will have a positive impact on their academic performance.

The coefficient of determination (R^2) showed a strong and positive relationship between the independent variables (work stress management and time management) and the dependent variable (academic performance). Approximately 66.8% of the variation in academic performance could be explained by these two variables, indicating that the model is relevant and robust. The Adjusted R^2, which is close to R^2, further confirms that the model is stable and unbiased with respect to sample size.

Theoretically, students need to motivate themselves to use time more efficiently, such as by setting clear goals. This differs from students who do not work or work fewer hours, as only a few people can attend classes without experiencing stress (Tarigan et al., 2021), which can lead to procrastination.

Working students need to manage their time effectively to balance their academic and work responsibilities. Planning activities outside of work in a balanced manner is essential for maintaining academic productivity. However, physical and psychological conditions can affect productivity, and reduced concentration may lower academic quality and learning focus (Auliya, 2020).

Based on the results of this study, it is proven that time management has a positive and significant effect on students' productivity. Students who are good at managing their time tend to be more productive in completing academic tasks and other activities. The study also indicates that student productivity is highly influenced by their time management ability.

These findings are consistent with previous research, which also found that time management positively and significantly influences individual productivity.

Furthermore, the analysis confirmed that work stress has a negative and significant effect on student productivity. High levels of stress can decrease motivation and learning satisfaction, reduce enthusiasm for completing academic tasks, and negatively affect learning outcomes overall.

The implications of this study suggest that higher education institutions particularly universities and faculties should provide training in time management and stress management to enhance the productivity of students who work while studying.

However, this study has limitations as it only involved respondents from one institution, making it difficult to generalize the results broadly. Additionally, the use of a quantitative approach through questionnaires may not fully capture the emotional dynamics of the respondents in depth.

Conclusion

Based on the data analysis and discussion in the study titled Balancing Work and Study: The Influence of Stress and Time Management on Student Achievement, it can be concluded that,

The research instruments used are valid and reliable, as all items have a significance value of < 0.05, a correlation coefficient > 0.3, and a Cronbach's Alpha value > 0.70. This indicates that the measurement tools have good internal consistency and are suitable for use.

The regression model has met all classical assumption tests (normality, multicollinearity, and heteroscedasticity), indicating that the multiple linear regression model can be used for further analysis.

Simultaneously, work stress management and time management have a significant effect on the academic achievement of students who study while working. This shows that both factors play an important role in determining the level of academic success among working students.

Partially, time management has the most dominant influence on academic achievement. This means that the better students manage their time between work and study, the higher their academic performance will be.

Work stress management has a negative and significant effect on academic achievement. High levels of stress can reduce students' motivation, concentration, and learning productivity.

Theoretically and practically, the results of this study emphasize the importance of students' ability to manage time and stress effectively in order to achieve optimal academic performance. Therefore, universities are encouraged to provide training on time management and stress management to support students who study while working.

For future research, it is recommended to include other variables such as learning motivation, social support, or job satisfaction in order to gain a more comprehensive understanding of the factors that influence student productivity.

Acknowledgments

The author would like to express sincere gratitude to all parties who have provided support, assistance, and motivation throughout the preparation of this research entitled "Balancing Work and Study: The Influence of Stress and Time Management on Student Achievement"

Special thanks are extended to fellow students of Pamulang University, especially to the academic advisor, for the valuable guidance, supervision, and constructive suggestions during the course of this study.

The author also wishes to thank all respondents the students who study while working for their time and willingness to participate in completing the research questionnaire.

Appreciation is also conveyed to colleagues and family members for their moral support, encouragement, and prayers, which greatly contributed to the completion of this research.

It is hoped that this study will provide meaningful insights and make a positive contribution to the development of knowledge, particularly in the fields of management and education.

References

Britton, B. K., & Tesser, A. (1991). Effects of time-management practices on college grades. Journal of Educational Psychology, 83(3), 405–410.

Byun, S.-Y., Irvin, M. J., & Meece, J. L. (2014). Rethinking the "work"–school balance: The impact of student employment on academic achievement. Frontiers in Psychology

Häfner, A., Stock, A., Pinneker, L., & Ströhle, S. (2014). Stress prevention through a time management training intervention: An experimental study. Educational Psychology, 34(3), 403–416.

Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. Springer.

Macan, T. H., Shahani, C., Dipboye, R. L., & Phillips, A. P. (1990). College students' time management: Correlations with academic performance and stress. Journal of Educational Psychology, 82(4), 760–768.

Misra, R., & McKean, M. (2000). College students' academic stress in relation to their anxiety, time management, and leisure satisfaction. American Journal of Health Studies, 16(1), 41–51