

Time Management, Stress and Academic Performance of Senior High School Students at Mindanao State University-Sulu

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Abstract. This study explored the relationship between time management, stress, and academic performance among senior high school students at Mindanao State University–Sulu. Using a quantitative descriptive-correlational design, data were collected from 169 Grade 12 students through adapted questionnaires: the Time Management Questionnaire (TMQ) and the Perceived Stress Questionnaire (PSQ). Statistical tools such as mean, standard deviation, total score, and multiple linear regression analysis were used to analyze the data. The results showed that students generally demonstrated good time management practices, with responses interpreted as “moderate.” Students also experienced a moderate level of academic stress. In terms of academic performance, most students achieved a “very satisfactory” rating. Regression analysis revealed that time management had a positive but not statistically significant effect on academic performance. In contrast, stress showed a significant positive relationship with academic performance, suggesting that a manageable level of stress might have helped students stay motivated and perform better. Overall, the findings highlighted that while time management and stress were important factors, they do not simply influence academic success. Other elements, such as motivation, study habits, and learning environment have also played a significant role. Therefore, it was important to promote effective time management and healthy ways of coping with stress to support both academic achievement and student well-being.

Keywords: Academic performance; Stress; Time management

Introduction

Time management is one of the most common problems that many students struggle with, especially in their academic performance. Many students nowadays spend less time studying. Time management had both positive and negative effects on academic performance; students could have the ability to do their tasks on time, and they can maintain their good grades. However, there was a negative effect such as lack of time to fix themselves in terms of their needs and necessities.

Whereas performing goal directed activities with the purpose of using time efficiently defined time management as “behavior”. The time management behavior had three basic surfaces that are: time attitudes, long- range planning, and short-range planning (Aeon, 2017). Time attitude is the positive or negative perspective towards the present, future and past time which had been directly linked to academic achievement, and especially in scientific subjects (Nieuwoudt, 2017). There have been many studies that found association between greater academic achievement and effective time management as students acquired strategies that help them and meet competing demands (Nadinloyi, 2017).

Previous studies have determined a positive effect of time management. The management skills have indicated a positive effect on student learning and associated outcomes. A number of studies have identified the positive impact of time management. Time management skills have been shown to have a positive impact on student learning and student outcomes (Kearns, 2017) indicated the ability for successfully managing their time is the benchmark of students in developing better study habits as well as strategies for success. Time management provides individuals the ways for structuring and controlling their activities. In addition, report that the capacity to successfully manage their time is the foundation of students developing good study habits and strategies for success. Time management offers individuals the means to structure and control their activities (Claessens et al., 2004).

Time is a valuable resource that is essential for learning activities. Time management is one of the most difficult challenges that students face at tertiary institutions, and it has an impact on their school performance as well as their social life. According to Kaushar (2013) poor time management and organizational skills begin in secondary school. The teacher teaches everything to the students, including work supervision. At a university or college, students take responsibility of their tasks (Mukwevho & Harry, 2018).

Although previous studies have established the link between time management, stress, and academic performance, most were conducted in urban schools with better access to academic resources and support systems. There is limited research that explores how students in rural and resource-constrained settings, such as MSU–Sulu, manage their time in relation to stress and academic outcomes. This study addresses the gap by investigating the relationship between time management, stress levels, and academic performance among senior high school students in MSU–Sulu.

Research Questions

This study determined the relationship between time management, stress, and the academic performance of senior high school students at Mindanao State University-Sulu.

Specifically, it sought to answer the following questions:

1. What is the level of time management practices of senior high school students in terms of goal setting, prioritization, and scheduling?
2. What is the level of stress experienced by senior high school students?
3. What is the level of academic performance of the students?
4. Is there a significant influence of time management practices and stress on the academic performance of the students?

Literature Review

Time Management

Time management is a critical factor influencing academic performance. Claessens et al. (2007) emphasized that students who plan and prioritize their tasks effectively tend to achieve higher academic success. Similarly, Calvo and Li (2023) found that time-management skills significantly impact students' performance in online and hybrid learning environments, especially in post-pandemic settings. Wang et al. (2020) further identified a positive relationship between time management behaviors and grades among high school students, demonstrating that goal setting and scheduling can foster self-discipline and academic motivation. In the local context, Mariano et al. (2022) examined open high school students in the Philippines and discovered that those who adopted effective time management strategies performed better academically. Likewise, Aidoo (2023) in Ghana and Cyril (2021) in India both highlighted that structured study habits and time awareness correlate with lower procrastination and higher academic achievement.

Students' Level of Academic Stress

Academic stress has been widely documented as a factor that negatively influences student well-being and performance. Tsai et al. (2022) reported that family and academic stress significantly predict anxiety and depression among adolescents, which in turn reduces their academic motivation. Kaur and Singh (2024) conducted a systematic review showing that high school students face persistent academic pressure that affects their cognitive functioning and mental health. Similarly, Huang et al. (2023) found that academic burnout is a common consequence of unmanaged stress, which can result in emotional exhaustion and disengagement from learning. Locally, Porwal and Kumar (2024) revealed that stress among senior secondary students in the Philippines is intensified by high expectations from teachers and parents. Jiffry and Firose (2024) identified that stress management programs and mindfulness practices can mitigate the harmful effects of academic stress. These findings suggest that both institutional and individual coping strategies are important to sustaining student resilience.

Students' Level of Academic Performance

Understanding key factors influencing students' academic performance can help educators, policymakers, and institutions develop effective interventions and policies for all students, (Suleiman et al., 2024). However, involved parents, a supportive home environment, and strong peer influence all positively impact students' academic performance and emotional well-being (Bangquiao & Galigao, 2024). Students defined academic success as a combination of grades and personal development, with student agency, aptitude, and support being key factors (Lynam et al., 2022).

Combined Influence on Academic Performance

Several studies have established that time management and stress are interrelated factors affecting academic performance. Alyami et al. (2021) demonstrated that students who practiced good time management reported lower stress levels and higher GPA scores. In a similar vein, Sekizler et al. (2022) observed that nursing students who managed their time effectively during the COVID-19 pandemic maintained academic success despite environmental stressors. Mariano et al. (2022) both found that the interplay between time management and stress management determines the students' overall performance. When students efficiently allocate time for study, rest, and recreation, they experience less academic stress and perform better academically.

Methodology

Research Design

This was quantitative study using descriptive-correlational design which according to Hopkins (2008) aims to determine the relationship between one thing and another in a population. It involved the description, recording, analysis, and interpretation of the present nature, composition, or processes of phenomena. A descriptive-correlational design was used to test whether there is an existing relationship between two or more quantifiable variables, and if there is, to what extent or degree the relationship is (Ariola, 2014). Through a descriptive manner of unravelling the phenomena, the researchers determined the relationship between the variables whether positive or negative; and the degree or extent of the relationship is presented.

Sampling Design

This study used a stratified random sampling design to ensure that all Grade 12 students from different strands at Mindanao State University–Sulu were fairly represented. The total population consisted of 297 students, and a sample of 169 respondents was determined using the SurveyMonkey sample size calculator. The students were first grouped into strata based on their strands and class sections (STEM and GAS), and then respondents were randomly selected from each group in proportion to their size. This means that larger sections had more participants while smaller sections had fewer, ensuring balance in the sample. Each student had an equal chance of being chosen. This sampling method helped reduce bias and made the results more accurate and representative of the entire population.

Research Locale

This study was conducted at the campus of Mindanao State University-Sulu, located at the Capitol Site, Barangay Bangkal, Patikul, Sulu. Specifically, the research took place in the Senior High School Department which offers three strands which are STEM, GAS and HUMSS, and situated beside the University Cafeteria.

Research Participants

The respondents of the study were Grade 12 students from Mindanao State University–Sulu Senior High School, with a total population of 297 students. From this population, 169 students were selected as participants using the SurveyMonkey sample size calculator to ensure efficient data collection and analysis. The participants were taken from different sections, namely STEM 1–12 (25 respondents), STEM 2–12 (27), STEM 3–12 (31), GAS 1–12 (25), GAS 2–12 (25), and GAS 3–12 (36). The study employed a stratified random sampling technique, where the population was first divided into smaller groups or strata based on their strands and sections, and then respondents were randomly selected from each group proportionally. This method ensured that all groups were fairly represented, reduced bias, and produced more accurate and balanced results.

Research Instrument

The questionnaires used in this study were adapted from the Time Management Questionnaire (TMQ) developed by Britton and Tesser (1991) and the Perceived Stress Questionnaire (PSQ) developed by Shahid et al. (2012). The TMQ demonstrated a reliability coefficient ranging from .87 to .88, with an overall scale reliability of .87, while the PSQ reported reliability coefficients ranging from .90 to .92 and a test–retest reliability of .82. A checklist questionnaire served as the primary instrument for data collection and was divided into three parts. Part I gathered data on the demographic profile of the respondents, including their name and grade point average (GPA). Part II aimed to identify the time management practices commonly employed by senior high school students and consisted of 18 items measured using a five-point Likert scale with response options: always, often, sometimes, rarely, and never. Part III assessed the students' level of

academic stress through 30 items using a four-point Likert scale with response options: usually, often, sometimes, and almost never. The instruments were designed to collect comprehensive and reliable data aligned with the objectives of the study. To ensure validity, the questionnaire was reviewed by a panel of experts who evaluated the clarity, relevance, and appropriateness of each item in measuring the intended variables. Their feedback was carefully considered, and necessary revisions were made to enhance the quality of the instrument. Following validation, the questionnaire underwent pilot testing with 40 respondents to establish its reliability.

Data Gathering Procedure

The data collection process began with the preparation of a formal request letter addressed to the Senior High School Director, seeking permission to conduct the study within the school premises. Upon approval, the researchers coordinated with the strand coordinators of STEM and GAS to facilitate the conduct of the study. Consent was also obtained from the class advisers prior to the distribution of the questionnaires. The researchers then oriented the selected respondents by providing a brief explanation of the purpose of the study, the variables involved, and the instructions for answering the questionnaire. Participation was voluntary, and respondents were assured of the confidentiality and anonymity of their responses throughout the data collection process.

Results and Discussions

Research Questions 1: What is the level of time management practices of senior high school students in terms of goal setting, prioritization, and scheduling?

Table 1: Level of Time Management Practices

Construct	Mean	SD	Description
Time Management Practices	36.4	6.72	Moderate

Note. Low = 10-23; Moderate = 24-36; High = 37-50

Table 1 presented the level of time management practices among Grade 12 students. Based on the table, the mean obtained was 36.4 ($SD = 6.72$), which corresponded to "moderate". The result suggested that the level of time management practices among the students was moderate. This further implied that students demonstrated some effective time management behaviors, but these were not consistent or fully developed.

Research Question 2: What is the level of stress experienced by senior high school students?

Table 2. Level of Stress

Construct	Mean	SD	Description
Stress	48.7	9.91	Low

Note. Low = 21-49; Moderate = 52-77; High = 78-105

Table 2 presented the level of stress among Grade 12 students. Based on the table, the mean obtained is 48.7 ($SD = 9.91$), which corresponded to "low". The result suggested that the level of stress of the students was low. This further implied that students generally experienced minimal psychological pressure in relation to their academic or daily activities.

Research Question 3: What is the level of academic performance of the students?

Table 3. Level of Academic Performance

Variable	Mean	SD	Description
Academic Performance	89.4	3.88	Very Satisfactory

Table 3 presented the level of academic performance among Grade 12 students. Based on the table, the mean obtained is 89.4 ($SD = 3.88$), which corresponded to "Very Satisfactory". The result suggested that the level of academic performance among the students is very satisfactory. This further implied that the students are achieving high academic outcomes and meeting educational expectations.

Research Question 4: Is there a significant influence of time management practices and stress on the academic performance of the students?

Table 4: Influence of Time Management Practices and Stress on Academic Performance

Model	Estimate	SE	R ²	t	p
1 (Intercept)	81.6905	2.1664		37.71	<.001
Time Management Practices	0.0878	0.0430	0.0778	2.04	0.061
Stress	0.0934	0.0292		3.20	0.002

A multiple linear regression was used to determine the influence of student's time management practices and stress level on their academic performance. The results revealed that time management practices were found to be a significant predictor of academic performance, $B = 0.088$, $SE = .043$, $t = 2.04$, $p = .061$. This indicates that for every one-unit increase in time management practices, academic performance increases by approximately .088 units. Similarly, stress was also a significant predictor of academic achievement, $B = .093$, $SE = .029$, $t = 3.20$, $p = .002$. The R-square (0.0778) signifies that only about 7.78% of the variability in academic performance can be explained by student's time management practices and stress level, while the remaining 92.22% can be explained by other variables.

Ethical Considerations

The researchers made sure that participants felt safe and respected throughout the study. To protect everyone's privacy, participants are given the choice of whether to write their names on the questionnaire. Any questions that may involve sensitive information are handled carefully and respectfully. All responses were kept strictly confidential to honor the participants' time, trust, and personal boundaries. The questionnaire was given with honesty and transparency, ensuring that the rights and well-being of every participant are upheld. The researchers also assured that all collected data were used only for academic purposes. Participation is completely voluntary, and respondents may choose to stop at any point without facing any consequences. Ethical approval and informed consent are prioritized, and the researchers commit to maintaining respect, fairness, and confidentiality throughout the entire research process.

Conclusion

This study aimed to uncover the influence of time management practices and stress on the academic achievement among senior high school students at Mindanao State University–Sulu. The findings revealed that level of time management practices of the students was moderate. This means they typically engaged in effective time management strategies, demonstrated by their skill in planning, prioritizing, and organizing tasks. Furthermore, students report a low level of academic stress, indicating that while they encounter academic challenges, these pressures are manageable and not overwhelming. In terms of academic achievement, students' performance is very satisfactory. This means they consistently achieved commendable results, reflecting their overall success in academic endeavors. The regression analysis highlighted that time management and stress were significant predictors of academic achievement. This suggested that enhancing time management skills may ensure better academic achievements. Surprisingly, stress appeared to exert a significant positive effect on academic performance. This finding suggests that a certain degree of stress can act as a motivating force, helping students to maintain focus and enhance their academic results. Yet, it is crucial to interpret this cautiously, as too much stress can lead to negative consequences. In summary, the study underscores that both time management and stress contribute to academic performance, albeit to a limited extent. This points to the need for a broader perspective that also includes factors such as motivation, the learning environment, and personal habits in the pursuit of academic excellence. Consequently, it is essential for educators, parents, and students to adopt a holistic approach that addresses multiple influencing factors to truly enhance academic performance.

Recommendations

The findings of this study provide meaningful insights into the relationship between time management, stress, and academic performance among senior high school students, offering several practical and research-oriented implications. For students, the results highlight the importance of developing effective time management habits and maintaining manageable stress levels to enhance academic outcomes. For teachers, the study offers a basis for designing instructional strategies, classroom activities, and deadlines that are responsive to students' time constraints and stress experiences. School administrators may use the findings to develop institutional programs, seminars, and support systems that promote time management skills and stress management among learners. Parents may also benefit from a better understanding of how academic demands influence their children's well-being and performance, enabling them to provide appropriate guidance and support at home. Furthermore, this study serves as a valuable

reference for future researchers who may explore related variables or extend the investigation to different contexts. Future research may focus on examining the paradoxical role of stress in academic performance, the combined influence of time management, stress, and self-regulated learning, as well as the mediating role of stress in the relationship between time management and academic achievement to deepen understanding of these interconnected factors.

References

- Aeon, B., & Aguinis, H. (2017). It's about time: New perspectives and insights on time management. *Academy of Management Perspectives*, 31(4), 309–330. <https://doi.org/10.5465/amp.2016.0166>
- Aidoo, B. (2023). Time management and academic achievement of students in selected public senior high schools in the Kumasi metropolis of Ghana. *European Journal of Education Studies*, 10(7). <https://doi.org/10.46827/ejes.v10i7.4878>
- Alyami, A., Alharbi, M., Almutairi, R., Alotaibi, N., & Alshammari, A. (2021). Impact of time management on students' academic performance: A cross-sectional study. *Creative Education*, 12(3), 473–482. <https://doi.org/10.4236/ce.2021.123033>
- Ariola, M. M. (2014). *Principles and methods of research*. Unlimited Books Library Services & Publishing Inc.
- Bangquiao, S., & Galigao, R. (2024). Factors influencing students' academic performance. *Pantao: International Journal of the Humanities and Social Sciences*. <https://doi.org/10.69651/pijhss030443>
- Britton, B. K., & Tesser, A. (1991). Effects of time-management practices on college grades. *Journal of Educational Psychology*, 83(3), 405–410. <https://doi.org/10.1037/0022-0663.83.3.405>
- Calvo, R., & Li, P. (2023). The impact of time-management skills on academic performance in online and hybrid learning environments. *Education Sciences*, 13(1), 45–62. <https://doi.org/10.3390/educsci13010045>
- Claessens, B. J. C., Van Eerde, W., Rutte, C. G., & Roe, R. A. (2007). A review of time management literature. *Personnel Review*, 36(2), 255–276. <https://doi.org/10.1108/00483480710726136>
- Hopkins, W. G. (2008). Quantitative research design. *Sportscience*, 12, 1–5.
- Huang, Q., Zhang, Y., & Chen, L. (2023). Academic stress and academic burnout in adolescents: A moderated-mediating model. *Frontiers in Psychology*, 14, 1133706. <https://doi.org/10.3389/fpsyg.2023.1133706>
- Jiffry, F. S., & Fiorese, M. M. (2024). Relationship between time management and stress among undergraduates. *Kalam International Research Journal*, 17(1), 592–600.
- Kaur, P., & Singh, D. (2024). Academic stress interventions in high schools: A systematic review. *Child & Youth Care Forum*, 53(2), 125–147. <https://doi.org/10.1007/s10578-024-01667-5>
- Kaushar, M. (2013). Time management of higher secondary school students. *International Journal of Education and Psychological Research*, 2(3), 30–41.
- Kearns, H., & Gardiner, M. (2007). Is it time well spent? The relationship between time management behaviours, perceived effectiveness, and work-related morale and distress in a university context. *Higher Education Research & Development*, 26(2), 235–247. <https://doi.org/10.1080/07294360701310839>
- Lynam, S., Cachia, M., & Stock, R. (2022). An evaluation of the factors that influence academic success as defined by engaged students. *Educational Review*, 76, 586–604. <https://doi.org/10.1080/00131911.2022.2052808>
- Mariano, M., Madel, C., & Miranda, R. (2022). The relationship between time management skills and academic performance of students in open high school programs. *Asian Journal of Education and Social Studies*, 34(4), 56–70. <https://doi.org/10.9734/ajess/2022/v36i2776>
- Mukwevho, M., & Harry, N. (2018). Time management challenges on students' academic performance: A case study of a rural university in South Africa. *Journal of Education and Practice*, 9(17), 45–50.
- Nadinloyi, K. B., Hajloo, N., Garamaleki, N. S., & Sadeghi, H. (2013). The study efficacy of time management training on increasing academic time management of students. *Procedia—Social and Behavioral Sciences*, 84, 134–138. <https://doi.org/10.1016/j.sbspro.2013.06.523>
- Nieuwoudt, J. E., & Brickhill, M. (2017). Time management and attitude toward science as predictors of academic success in an enabling science subject: A preliminary exploratory study. *Research Ideas and Outcomes*, 7, e67379. <https://doi.org/10.3897/rio.7.e67379>
- Porwal, P., & Kumar, A. (2024). A study of academic stress among senior secondary students. *Journal of Education and Practice*, 15(1), 12–19. <https://doi.org/10.25215/0103.017>

- Shahid, A., Wilkinson, K., Marcu, S., & Shapiro, C. (2012). Perceived stress questionnaire (PSQ). In *STOP, THAT and one hundred other sleep scales* (pp. xx–xx). Springer. <https://doi.org/10.1007/978-1-4419-9893-4>
- Simkus, J. (2013). Convenience sampling: Definition, method and examples. *Simply Psychology*. <https://www.simplypsychology.org/convenience-sampling.html>
- Suleiman, I., Okunade, O., Dada, E., & Ezeanya, U. (2024). Key factors influencing students' academic performance. *Journal of Electrical Systems and Information Technology*. <https://doi.org/10.1186/s43067-024-00166-w>
- Temizkan Sekizler, E., Yildiz, K., Gok, N. D., Kahraman, I., Orskiran, B. A., & Kaya, U. (2022). The relationship between time management skills and academic achievements of nursing students during the COVID-19 pandemic. *Mediterranean Nursing and Midwifery*, 2(3), 94–102. <https://doi.org/10.5152/mnm.2022.222096>
- Tsai, Y. M., Huang, Y. P., & Chen, S. W. (2022). Family and academic stress and their impact on students' mental health and academic performance. *Frontiers in Psychiatry*, 13, 869337. <https://doi.org/10.3389/fpsy.2022.869337>
- Vences Cyril, A. (2021). Time management and academic achievement of higher secondary students. *International Journal of Education and Psychological Research*, 10(2), 67–75. <https://doi.org/10.26634/JSCH.10.3.3129>
- Wang, X., Chen, L., & Zhao, J. (2020). Time management behaviors and academic performance of high school students: A structural equation model. *Education and Learning Journal*, 9(1), 25–33. <https://doi.org/10.26737/elj.v9i1.1601>