IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 6, Issue 4, April 2026
Impact Factor: 8.2

Effect of Time Management on Academic Performance among High School Students

R. Santhiya[1] and Dr. E. Dhivyadeepa[2]
[1]M.Ed. Scholar, Department of Education, Bharathiar University, Coimbatore
[2]Assistant Professor, Department of Education, Bharathiar University, Coimbatore

Abstract: *Time management is a fundamental determinant of academic success among students in contemporary education systems. This study examines the effect of time management on academic performance among high school students. A quantitative descriptive-correlational research design was adopted, and data were collected from 85 students using a structured Time Management Skills Questionnaire (TMSQ). The study analysed six dimensions of time management: planning, prioritization, time attitude, distraction control, consistency, and stress management. Statistical tools such as mean, standard deviation, independent t-test, ANOVA, and Pearson's correlation were employed. The results revealed a moderate level of time management among students, with significant deficiencies in long-term planning and procrastination control. A strong positive correlation ($r = 0.68$, $p < 0.01$) was found between time management and academic performance. The findings highlight the importance of structured time management training in schools.*

Keywords: Time Management, Academic Achievement, High School Students, Quantitative Research

I. INTRODUCTION

Time is a limited and non-renewable resource that significantly influences academic success. Effective time management allows students to plan, prioritize, and execute tasks efficiently, leading to improved academic performance and reduced stress. In modern education, students face increasing academic pressure, digital distractions, and extracurricular commitments. These challenges demand strong time management skills. However, many students struggle with procrastination, poor planning, and inability to balance academic and personal responsibilities. Thus, this study investigates the relationship between time management and academic performance among high school students.

II. REVIEW OF RELATED LITERATURE

A study by Britton and Tesser (1991) found a significant positive relationship between time management practices and academic performance. Students who planned their tasks and used schedules performed better academically. The study emphasized that short-term planning was more effective than long-term planning in improving grades.

Research by Ahmad et al. (2019) revealed that procrastination is one of the major barriers to academic success. Students who frequently delayed tasks showed lower academic achievement and higher stress levels. The study concluded that time management training significantly reduces procrastination.

A study by Adams et al. (2019) highlighted the impact of digital distractions on student productivity. Students spending more than two hours daily on social media exhibited poor time management and lower GPA. The study recommended structured time planning and digital discipline strategies.

Statement of the Problem

Despite the well-established importance of time management in enhancing academic success, a considerable number of students continue to struggle with managing their time effectively, which often results in poor academic performance, heightened stress, and anxiety. Many students tend to delay tasks, leading to last-minute cramming, while also exhibiting inadequate scheduling and prioritization skills. The pervasive influence of digital distractions further

DOI: 10.48175/IJARSCT-32610

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 6, Issue 4, April 2026
Impact Factor: 8.2

exacerbates this issue, and the lack of formal training in time management within educational systems leaves students ill-equipped to handle academic demands efficiently. Although existing research has explored time management, most studies primarily focus on university students, thereby neglecting the high school population, where foundational habits are formed. Furthermore, previous studies often overlook critical neurobiological and psychological factors that influence students' time-use behaviours and fail to provide a comprehensive analysis across different school boards and demographic backgrounds. In addition, there is a lack of multidimensional investigation encompassing key aspects such as planning, procrastination, and stress management. Addressing these limitations, the present study focuses specifically on high school students, adopts a multidimensional framework of time management, analyses relevant demographic and academic variables, and provides empirical evidence within a localized educational context, thereby contributing to filling the existing research gap.

Objectives of the Study

- To assess the overall level of time management skills among high school students by examining key dimensions such as planning, prioritization, consistency, and ability to control distractions.
- To analyse the differences in time management practices among students based on demographic variables such as gender and type of school, in order to identify variations and patterns across different groups.
- To determine the relationship between time management skills and academic performance, and to evaluate how effective time utilization contributes to improved academic outcomes.
- To identify the major factors influencing students' time management, including procrastination, digital distractions, academic workload, and stress, with a view to suggesting strategies for improving students' efficiency and well-being.

Hypotheses

$H_0$1: There exists no statistically significant variation in overall time management competencies between male and female high school students.

$H_0$2: Type of educational board (CBSE, ICSE, and Matriculation) does not exert a statistically significant influence on students' time management practices.

$H_0$3: Time management proficiency does not demonstrate a statistically significant association with students' academic achievement.

$H_0$4: There is no statistically significant difference in time management abilities across different grade levels of high school students.

Delimitations of the study

The study is confined to high school students and does not include other educational levels.

It focuses only on time management and academic performance, excluding other influencing factors.

The research is limited to a specific academic year, providing a snapshot rather than a longitudinal view.

Method of study

The study adopted a quantitative approach to collect and analyse numerical data related to time management and academic performance. A descriptive-correlational research design was employed to describe students' time management levels and examine the relationship between variables. This design enabled the identification of patterns and associations without manipulating any variables. It also facilitated comparison across demographic factors such as gender, grade, and school type. Overall, the approach provided a systematic and objective basis for analysing the research problem.

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 6, Issue 4, April 2026
Impact Factor: 8.2

Variables

- **Independent Variable:** Time Management – the primary factor influencing students' outcomes.
- **Dependent Variable:** Academic Performance – the outcome affected by time management practices.
- **Control Variables:** Gender, Grade Level, and School Type – factors controlled to ensure accurate analysis of the relationship between the main variables.

Population and Sample

- **Population:** The population of the study includes high school students from different school boards such as CBSE, ICSE, and Matriculation, who are actively involved in academic activities.
- **Sample Size:** A total of 85 students were selected for the study, which is sufficient to carry out statistical analysis and draw meaningful conclusions.
- **Sampling Technique:** Stratified random sampling was used. The students were divided into groups based on factors like grade level, school type, and gender, and then samples were randomly selected from each group. This ensures that all categories of students are fairly represented.

III. RESEARCH TOOL

A structured Time Management Skills Questionnaire (TMSQ) was used as the primary instrument for data collection. The questionnaire consists of 30 items, equally divided into six dimensions of time management: Planning, Prioritization, Time Attitude, Distraction Control, Consistency, and Stress Management, with each dimension containing five items to ensure balanced coverage of all aspects.

The instrument is based on a five-point Likert scale, where respondents indicate their level of agreement with each statement, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). This scaling technique enables the systematic and quantitative assessment of students' time management behaviours, attitudes, and practices, thereby supporting detailed statistical analysis and meaningful interpretation of results.

IV. RELIABILITY AND VALIDITY

Reliability

The reliability of the TMSQ was established using **Cronbach's Alpha**, which yielded a value of **0.84**, indicating high internal consistency among the items. Since values above **0.70** are considered acceptable in educational research, the instrument is deemed reliable for measuring time management skills.

Validity

The instrument was validated through multiple approaches.

- **Content validity** was ensured through expert review from education and psychology specialists, confirming adequate coverage of all dimensions.
- **Construct validity** was established by aligning the questionnaire with theoretical frameworks such as the Pickle Jar Theory and Covey's Matrix.
- **Face validity** was confirmed by reviewing items for clarity, relevance, and suitability for high school students.

Statistical Techniques Used

- **Mean and Standard Deviation:** Mean was used to find the average level of time management, while standard deviation measured the variation in students' responses.
- **Independent Samples t-test:** This test was used to compare the mean scores between two groups (e.g., male vs. female) to check if the difference is statistically significant.
- **One-Way ANOVA:** ANOVA was used to compare mean scores among more than two groups (e.g., different school types) to identify significant differences.

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 6, Issue 4, April 2026
Impact Factor: 8.2

- **Pearson's Correlation:** This was used to measure the strength and direction of the relationship between time management and academic performance.

V. ANALYSIS AND INTERPRETATION

Table 1: Mean Scores of Time Management Dimensions

Dimension	Description	Mean Score (Max = 25)	Level
A	Short-range Planning	18.4	Moderate
B	Long-range Planning	16.2	Low
C	Time Attitude	19.1	High
D	Prioritization	17.5	Moderate
E	Consistency / Task Completion	15.8	Low
F	Stress & Academic Pressure	14.2	Low
Total	Overall Time Management Score	101.2 / 150	Moderate

The mean scores indicate a moderate level of time management among high school students (Mean = 101.2/150), showing that students understand time management but struggle to apply it consistently. Time Attitude (C) scored highest (19.1), reflecting positive awareness, while lower scores in Long-range Planning (B) (16.2) and Consistency (E) (15.8) reveal a gap between intention and practice. Moderate scores in Planning (A) and Prioritization (D) suggest better handling of short-term tasks. The lowest score in Stress Management (F) (14.2) indicates difficulty in coping with academic pressure. Overall, a clear planning-execution gap exists, affecting students' performance and well-being.

$H_0$1: Gender and Time Management

$H_0$1: There exists no statistically significant variation in overall time management competencies between male and female high school students.

Table 2: Independent Samples t-test for Gender Differences

Gender	N	Mean	SD	t-value	p-value	Result
Male	41	98.4	12.1	1.84	0.068	Not Significant
Female	44	103.8	10.5			

The independent samples t-test reveals that female students (M = 103.8) scored slightly higher in time management compared to male students (M = 98.4). However, the obtained p-value (0.068) is greater than the significance level of 0.05, indicating that the observed difference is not statistically significant. Therefore, the null hypothesis is accepted. This suggests that gender does not play a decisive role in determining time management abilities among high school students, even though minor variations in specific dimensions such as prioritization and attitude may exist.

$H_0$2: School Type and Time Management

$H_0$2: Type of educational board does not exert a statistically significant influence on students' time management practices.

Table 3: One-Way ANOVA for School Type

Source of Variation	Sum of Squares	df	Mean Square	F-value	p-value	Result
Between Groups	245.6	2	122.8	3.92	0.024*	Significant
Within Groups	2568.4	82	31.3			
Total	2814.0	84				

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429 Volume 6, Issue 4, April 2026 Impact Factor: 8.2

The One-Way ANOVA results indicate that there is a statistically significant difference in time management scores among students from different school boards ($F = 3.92$, $p = 0.024 < 0.05$). Hence, the null hypothesis is rejected. This finding suggests that the type of educational system influences students' time management behaviour. Specifically, ICSE students tend to exhibit stronger prioritization and adaptive scheduling skills, likely due to the demanding and project-oriented curriculum, while CBSE students demonstrate relatively balanced planning with lower stress levels.

$H_0$3: Time Management and Academic Achievement

$H_0$3: Time management proficiency does not demonstrate a statistically significant association with students' academic achievement.

Table 4: Pearson Correlation between Time Management and Academic Performance

Variables	Pearson's r	p-value	Interpretation
Time Management vs Academic Achievement	0.68	0.001*	Strong Positive Correlation

The Pearson correlation coefficient ($r = 0.68$) indicates a strong positive relationship between time management and academic achievement. The p-value (0.001) is less than 0.01, confirming that the relationship is statistically significant. Therefore, the null hypothesis is rejected. This implies that students who effectively manage their time tend to achieve higher academic performance. Improved planning, reduced procrastination, and better prioritization contribute significantly to academic success.

$H_0$4: Grade Level and Time Management

$H_0$4: There is no statistically significant difference in time management abilities across different grade levels.

Table 5: Independent Samples t-test for Grade Level

Grade Level	N	Mean	SD	t-value	p-value	Result
Grade 10	38	95.27	16.52	1.26	0.210	Not Significant
Grade 12	47	99.64	15.19			

The comparison between Grade 10 and Grade 12 students shows that Grade 12 students have slightly higher mean scores in time management. However, the p-value (0.210) exceeds the 0.05 significance level, indicating that the difference is not statistically significant. Therefore, the null hypothesis is accepted. This suggests that while senior students may develop better planning and prioritization skills due to academic pressure, these improvements are not substantial enough to create a statistically significant difference in overall time management ability.

VI. FINDINGS

The findings indicate a moderate level of time management among students, suggesting that while they understand its importance, they struggle to apply these skills consistently in their academic activities.

Students exhibit high levels of procrastination and stress, often delaying tasks and finding it difficult to manage deadlines, which increases academic pressure and affects performance.

A strong positive relationship was observed between time management and academic performance, indicating that students who effectively plan and utilize their time tend to achieve better academic results.

No significant difference was found between male and female students, showing that time management challenges are common across both genders.

Academic pressure, particularly in higher grades, significantly influences students' time management, often leading to stress and reduced efficiency in handling tasks.

Implications

Time management should be included in the curriculum to help students develop planning and organizational skills.

Teachers should balance workload and coordinate deadlines to reduce student stress.

Students should use structured tools like timetables and planners to manage tasks effectively.

IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429 Volume 6, Issue 4, April 2026 Impact Factor: 8.2

Students need to maintain disciplined routines and minimize distractions.
Parents should support structured study habits and provide a conducive learning environment at home.
Parents can also model good time management practices and provide guidance in balancing academic work with rest and recreational activities.

Limitations of the Study

The study is based on a relatively small sample size of 85 students, which may limit the generalizability of the findings.
The sample is restricted to specific school boards, which may not represent all educational systems.
The data collected is self-reported, which may introduce response bias or inaccuracies.
The study follows a cross-sectional design, limiting the ability to observe changes over time or establish causal relationships.

VII. CONCLUSION

The study concludes that time management plays a significant role in determining students' academic performance. Students who demonstrate effective planning, prioritization, and consistent execution of tasks tend to achieve higher academic success. The findings highlight that strong time management skills contribute to better organization, reduced stress, and improved learning outcomes. However, many students face challenges such as procrastination and inability to adhere to schedules. Digital distractions, particularly from mobile phones and social media, further reduce study efficiency. These factors create a gap between students' intentions and actual performance. Therefore, improving time management skills is essential for enhancing both academic achievement and overall well-being.

REFERENCES

[1]. Britton, B. K., &Tesser, A. (1991). Effects of time-management practices on college grades. *Journal of Educational Psychology, 83*(3), 405–410.
[2]. Macan, T. H. (1994). Time management: Test of a process model. *Journal of Applied Psychology, 79*(3), 381–391.
[3]. Claessens, B. J. C., van Eerde, W., Rutte, C. G., & Roe, R. A. (2007). A review of the time management literature. *Personnel Review, 36*(2), 255–276.
[4]. Nonis, S. A., & Hudson, G. I. (2010). Performance of college students: Impact of time management and study habits. *Journal of Education for Business, 85*(4), 229–238.
[5]. Trueman, M., & Hartley, J. (1996). A comparison between the time-management skills and academic performance of mature and traditional-entry university students. *Higher Education, 32*(2), 199–215.
[6]. Häfner, A., & Stock, A. (2010). Time management training and perceived control of time at work. *The Journal of Psychology, 144*(5), 429–447.
[7]. Misra, R., & McKean, M. (2000). College students' academic stress and its relation to time management. *American Journal of Health Studies, 16*(1), 41–51.
[8]. Aeon, B., Faber, A., &Panaccio, A. (2021). Does time management work? A meta-analysis. *PLOS ONE, 16*(1), e0245066.