SSR Institute of International Journal of Life Sciences
ISSN (O): 2581-8740 | ISSN (P): 2581-8732
Raheja *et al*., 2025
crossref doi: 10.21276/SSR-IIJLS.2025.11.4.20

Original Article

open access

Time Management Behaviours and Challenges among Medical Students: A Quantitative Analysis

Rashmi Raheja[1]*, Bindu Garg[2], Jyothula Tripura Lakshmi[3], Amar Nath Maurya[4], Kranthi Kumar Garikapati[5]

[1]Assistant Professor, Department of Physiology, Shri Ram Murti Smarak Institute of Medical Sciences, Bareilly, India
[2]Professor & Head, Department of Physiology, Shri Ram Murti Smarak Institute of Medical Sciences, Bareilly, India
[3]Assistant Professor, Department of Physiology, Rohilkhand Medical College and Hospital, Bareilly, India
[4]Associate Professor, Department of Medical Laboratory Science, Shri Ram Murti Smarak Institute of Medical Sciences, Bareilly, India
[5]Professor, Department of Physiology, Shri Ram Murti Smarak Institute of Medical Sciences, Bareilly, India

***Address for Correspondence:** Dr. Rashmi Raheja, Assistant Professor, Department of Physiology, Shri Ram Murti Smarak Institute of Medical Sciences (SRMS IMS), Bareilly–243202, Uttar Pradesh, India
E-mail: raheja.rashmi23@gmail.com

Received: 17 Mar 2025/ Revised: 27 Apr 2025/ Accepted: 11 Jun 2025

ABSTRACT

Background: Time management is a critical skill for academic success and stress reduction among medical students. However, many students struggle with effective time use due to poor planning, procrastination, and emotional or environmental distractions. Understanding these challenges is essential to design targeted interventions. This study aimed to comprehensively assess time management behaviors and challenges among medical students, with a focus on identifying strengths, weaknesses, and the influence of environmental and psychological factors.

Methods: A cross-sectional survey was conducted among 138 university students aged 18–25 years. Participants completed a 30-item time management questionnaire covering planning, scheduling, organization, procrastination, and self-regulation. Items were rated on a 4-point frequency scale, with seven items reverse scored. Total scores were categorized as excellent (108–120), good (90–107), average (72–89), needs improvement (54–71), or poor (≤53). Descriptive statistics summarized the distribution of scores and item-wise behaviors.

Results: Most students demonstrated "average" (58.3%) or "needs improvement" (36.7%) time management skills, with only 5% rated as "good." No students scored in the "excellent" or "poor" range. While 42% believed they managed time well, only 20% used calendars regularly. Procrastination was frequent, with 37% delaying disliked tasks. Environmental supports like organized workspaces were inconsistently practiced, and mood and peer influence significantly affected behaviors.

Conclusion: The findings highlight that most medical students lack structured time management habits, with key barriers including procrastination, insufficient planning, and emotional factors. Structured interventions addressing cognitive, emotional, and environmental aspects are recommended to improve time management and academic outcomes.

Key-words: Time management, Medical students, Procrastination, Planning behavior, Academic performance, Self-regulation, Environmental factors

INTRODUCTION

Time management is widely recognized as a fundamental skill for academic achievement and personal well-being among medical students.

How to cite this article
Raheja R, Garg B, Lakshmi JT, Maurya AN, Garikapati KK. Time Management Behaviours and Challenges among Medical Students: A Quantitative Analysis. SSR Inst Int J Life Sci., 2025; 11(4): 7936-7941.

Access this article online
https://iijls.com/

Numerous studies have demonstrated that effective time management is associated with higher academic performance, reduced stress, and greater satisfaction with the educational experience [1,2]. Despite its importance, research consistently finds that many students struggle to develop and maintain structured time management habits, such as using planners, prioritizing tasks, and adhering to daily schedules [2].

Common barriers like procrastination, poor planning, and difficulty estimating time requirements negatively impact students' ability to meet academic goals [3].

doi: 10.21276/SSR-IIJLS.2025.11.4.20

Additionally, students often overestimate their time management abilities, with self-perceptions not always aligning with actual behaviors [1,2]. Environmental factors such as workspace organization and psychological influences, including mood and peer behavior, also play significant roles in shaping time management practices.

Given these multifaceted challenges, assessing the time management skills of university students is essential for identifying those at risk and designing targeted interventions. This study aims to provide a comprehensive analysis of time management behaviors among medical students, highlighting both strengths and deficiencies, while situating the findings within the broader context of existing literature.

MATERIALS AND METHODS

Study Design and Participants- This is a cross-sectional study conducted to assess time management skills among medical students. A total of 138 Phase-1 MBBS students of age between 18–25 years, and both genders were participated in the study. The sample size was calculated from the literature on time management in higher education populations [1,2].

Data Collection Tool- Data were collected using a pre-validated structured questionnaire adapted from established time management assessment instruments [4]. The questionnaire comprised 30 items designed to evaluate various domains of time management, including planning, scheduling, organization, procrastination, and self-regulation. Each item was rated on a 4-point Likert scale (Never=1, Seldom=2, Sometimes=3, Usually/ Always=4), with 7 items reverse-scored to ensure higher scores consistently reflect better time management skills.

Procedure- The survey was administered through Google Forms. Students participated voluntarily and anonymously after providing informed consent. Each participant completed the questionnaire independently, and confidentiality was maintained throughout the process.

Scoring and Interpretation- For each respondent, the scores for all 30 items were summed to yield a total time management score, in line with scoring procedures used in prior studies [1,2,6]. The following cutoffs were applied for interpretation:

- **108–120:** Excellent time management skills
- **90–107:** Good time management skills
- **72–89:** Average time management skills
- **54–71:** Needs improvement
- **53 or below:** Poor time management skills

Statistical Analysis- Descriptive statistics were used to summarise demographic characteristics and time management scores. The distribution of scores was analyzed to categorize students according to the defined cutoffs. Frequencies and percentages were calculated for categorical variables, and mean and standard deviation were reported for continuous variables. Data analysis was performed using Microsoft Excel.

Ethical Considerations- Participation was voluntary and anonymous, and the study was conducted by institutional ethical guidelines for research involving human subjects.

RESULTS

A total of 138 students participated in the Time Management Assessment. Each participant responded to 30 items, with 7 reverse-scored to ensure that higher scores consistently reflected better time management skills. Total scores ranged from 30 (minimum) to 120 (maximum), with higher scores indicating stronger time management abilities.

As shown in Table 1, most students fell into the "Average" (72–89) and "Needs Improvement" (54–71) categories. Specifically, 80 students (58%) demonstrated average time management skills, while 51 students (37%) were classified as needing improvement. Only 7 students (5%) demonstrated good time management skills (90–107). Notably, no students scored in the “Excellent” (108–120) or “Poor” (≤53) ranges. This indicates that most students exhibit mid-level time management proficiency, with limited examples of either high or low extremes.

This pie chart (Fig. 1) provides a visual representation of the distribution of time management skills among the student population. The highest proportion of students fall in the "Average" category, followed by "Needs Improvement." The complete absence of “Excellent” or “Poor” scorers suggests a central tendency and possible institutional influence promoting moderate levels of time management without fostering extreme outcomes.

doi: 10.21276/SSR-IIJLS.2025.11.4.20

Table 1: Distribution of Time Management Assessment Scores (n=138)

Score Range	Interpretation	Number of Students	Percentage (%)
108–120	Excellent	0	0
90–107	Good	7	5
72–89	Average	80	58
54–71	Needs improvement	51	37
53 or below	Poor	0	0
Total		138	100

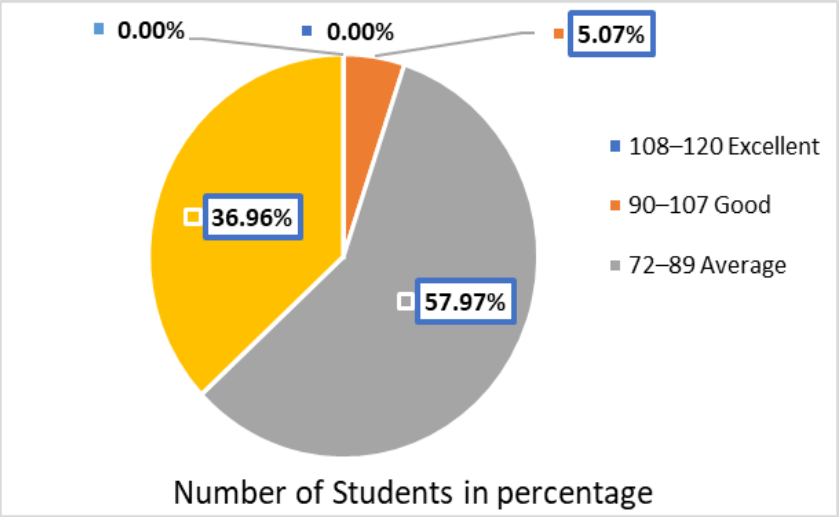

Fig. 1: Pie chart showing distribution of time management skill categories among 138 students

Table 2 provides item-wise descriptive statistics on selected time management behaviors among the 138 medical students. While 42.4% of students reported that they manage their time well (mean±SD=2.09±0.81), only 20.1% regularly used a calendar or appointment book (mean=1.33±1.00), and just 18% checked it during the day, indicating a notable gap between perceived time management ability and actual structured planning. A significant number of students (25.2%) admitted to rushing through tasks (mean=1.48), and 37.4% reported procrastinating on disliked tasks (mean=1.77), reflecting common patterns of delay and inefficiency.

Although 44.6% of students completed tasks on schedule to their satisfaction (mean=2.16), a considerable proportion struggled with punctuality and time allocation, with 29% often running late and 27% frequently running out of time before completing important work. Regarding organizational behavior, 60.4% regularly carried writing tools (mean=2.93), and 55.4% used a watch or phone to keep track of time (mean=2.82), whereas only 34% cleared their workspace before tasks and 41% returned items to their proper place, indicating inconsistent environmental organization.

Emotional and social influences were also notable, as 35.3% of students felt that their mood affected their time use (mean=1.95), and 38% were more likely to follow schedules when their peers did the same. These findings reinforce the multidimensional nature of time management, shaped by not only cognitive habits but also behavioral, emotional, and environmental factors.

doi: 10.21276/SSR-IIJLS.2025.11.4.20

Table 2: Selected Item-wise Descriptive Statistics

Measure	Percentage (%)	Mean	SD
Students who feel they manage time well	42.4	2.09	0.81
Regular use of calendar/appointment book	20.1	1.33	1.00
Often rush while completing work	25.2	1.48	1.02
Complete tasks on schedule satisfactorily	44.6	2.16	0.92
Carry pen/pencil daily	60.4	2.93	1.04
Wear watch/use phone for time	55.4	2.82	1.13
Mood affects time management	35.3	1.95	1.07
Put off disliked tasks until last minute	37.4	1.77	1.07

DISCUSSION

This study assessed time management skills among 138 university students using a comprehensive 30-item questionnaire. The findings reveal that most students fell into the "average" (58.3%) or "needs improvement" (36.7%) categories, with only a small minority (5%) demonstrating "good" skills and none reaching the "excellent" or "poor" extremes. This distribution is consistent with prior research, which has shown that while most students are aware of time management strategies, few consistently apply them at a high level [1–3]. The absence of both excellent and poor scorers suggests a clustering of students around moderate skill levels, possibly reflecting the influence of academic culture and peer norms that encourage some degree of time management but may not foster mastery [2,5].

The item-wise analysis provides further insight into specific behaviors and attitudes. While 42.4% of students felt they managed their time well, only 20.1% regularly used a calendar or appointment book, and just 18% checked it during the day. This gap between perceived competence and structured planning mirrors findings from prior studies, which noted that self-perception does not always translate into effective behaviors [5,6]. Similarly, although 44.6% reported completing tasks on schedule, a substantial proportion admitted to rushing (25.2%) or procrastinating (37.4%), highlighting the persistence of last-minute work and avoidance of disliked tasks—patterns well-documented as barriers to academic success [3,7,10,11].

Environmental factors such as workspace organization also played a notable role. For example, only 34% of students reported clearing their workspace before beginning a task, and 41% put their things back where they belong. These behaviors are important, as research shows that an organized physical environment can reduce distractions and cognitive load, thereby supporting better time management and productivity [6–8]. Students who maintain organized workspaces are more likely to engage in planning and follow-through, which are critical components of effective time management [7,8]. Environmental structuring, such as keeping materials in order and minimizing clutter, has been linked to increased academic efficiency and reduced stress [8,9].

Psychological factors were equally influential. Over a third of students (35.3%) reported that their mood affects their time management, and 38% put in more effort when peers do the same. This supports the view that time management is not only a matter of skills but also of psychological and social context [2,9]. Emotional regulation, motivation, and peer influence can either facilitate or hinder the consistent use of time management strategies [9,10]. For instance, students who experience negative moods or lack supportive peer environments may struggle to initiate or sustain effective time management behaviors, as also noted in studies on academic stress and performance [9,10]. The relatively high standard deviations for many items further indicate significant variability in habits and attitudes across the

doi: 10.21276/SSR-IIJLS.2025.11.4.20

sample, suggesting that interventions need to be tailored to different student profiles [6,8].

Taken together, these findings indicate that while some foundational time management behaviors are present, there is a lack of consistent, structured planning and a high prevalence of procrastination and emotional influences. This pattern is in line with the literature, which emphasizes the importance of both cognitive strategies and emotional regulation in effective time management [1,6,11,12]. Recent studies also highlight the role of self-regulated learning and metacognitive strategies in enhancing time use, suggesting that students who actively monitor and control their learning are more likely to exhibit better time management [13]. Furthermore, broader reviews of time management literature support the multidimensional nature of this construct, involving not only planning and scheduling, but also goal setting, prioritization, and adaptation to contextual demands [14].

CONCLUSIONS

In conclusion, most university students in this study demonstrated only moderate time management skills, with a significant proportion needing improvement and very few achieving good proficiency. While some students perceived themselves as effective time managers, structured planning, proactive scheduling, and the use of organizational tools were limited. Procrastination, emotional factors, and a lack of advanced organizational habits were common barriers. These findings highlight the need for targeted interventions that address not only cognitive strategies but also emotional, environmental, and social influences on time management. Universities should consider implementing comprehensive support programs to help students develop consistent, effective time management practices, ultimately enhancing academic performance and well-being.

CONTRIBUTION OF AUTHORS

Research concept– Rashmi Raheja, Bindu Garg
Research design– Rashmi Raheja, Jyothula Tripura Lakshmi
Supervision– Bindu Garg, Kranthi Kumar Garikapati
Materials– Amar Nath Maurya, Jyothula Tripura Lakshmi
Data collection– Rashmi Raheja, Jyothula Tripura Lakshmi
Data analysis and interpretation– Rashmi Raheja, Amar Nath Maurya
Literature search– Rashmi Raheja, Jyothula Tripura Lakshmi
Writing article– Rashmi Raheja
Critical review– Bindu Garg, Kranthi Kumar Garikapati
Article editing– Rashmi Raheja, Amar Nath Maurya
Final approval– Bindu Garg, Kranthi Kumar Garikapati

REFERENCES

[1] Britton BK, Tesser A. Effects of time-management practices on college grades. J Educ Psychol., 1991; 83(3): 405–10. doi: 10.1037/0022-0663.83.3.405.
[2] Trueman M, Hartley J. A comparison between the time-management skills and academic performance of mature and traditional-entry university students. High Educ., 1996; 32(2): 199–215.
[3] Kaya E, Kaya A, Palancı M, Doğan T. The predictive role of time management on academic procrastination. Educ Res Rev., 2012; 7(20): 430–35.
[4] White SM, Riley A, Flom P. Assessment of Time Management Skills (ATMS): A practice-based outcome questionnaire. Occup Ther Ment Health, 2013; 29(3): 215–31.
[5] Macan TH, Shahani C, Dipboye RL, Phillips AP. College students' time management: Correlations with academic performance and stress. J Educ Psychol., 1990; 82(4): 760–68.
[6] DeVellis RF. Scale Development: Theory and Applications. 4th ed. Thousand Oaks: Sage Publications; 2016.
[7] Eilam B, Aharon I. Students' planning in the process of self-regulated learning. Contemp Educ Psychol., 2003; 28(3): 304–34.
[8] Nonis SA, Hudson GI. Performance of college students: Impact of study time and study habits. J Educ Bus., 2010; 85(4): 229–38.
[9] Häfner A, Stock A, Oberst V. Decreasing students' stress through time management training: An intervention study. Eur J Psychol Educ., 2014; 29(4): 621–34.
[10] Misra R, McKean M. College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. Am J Health Stud., 2000; 16(1): 41–51.

doi: 10.21276/SSR-IIJLS.2025.11.4.20

[11]Schraw G, Wadkins T, Olafson L. Doing the things we do: A grounded theory of academic procrastination. J Educ Psychol., 2007; 99(1): 12–25.

[12]Steel P. The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. Psychol Bull., 2007; 133(1): 65–94.

[13]Caci H, Buyukozturk S. The role of self-regulated learning strategies in predicting university students' time management skills. Educ Sci Theory Pract., 2012; 12(1): 301–07.

[14]Claessens BJ, van Eerde W, Rutte CG, Roe RA. A review of the time management literature. Pers Rev., 2007; 36(2): 255–76.