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Review Article

Academic Procrastination among Medical Students Prevalence, Causes and Impact

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Abstract

Background: Academic Procrastination, defined as the voluntary delay of intended academic tasks despite expecting negative consequences, refers to putting off necessary work, often until pressure or deadlines force action often accompanied by anxiety and stress. It is particularly prevalent among medical students due to the intensive and demanding nature of medical education. **Aims:** To assess the prevalence, causes and impact of Academic procrastination among medical students from first year to fourth year medical students in Telangana, India. A leading study in this area of research. **Materials and Methods:** This cross sectional study was conducted among 115 medical students a structured questionnaire containing 25 items, based on Procrastination Assessment Scale for Students (PASS) by Solomon and Rothblum(1984), was distributed after obtaining informed consent. Data were analysed using descriptive statistics, including frequency, percentage, mean, and standard deviation(SD). Statistical analysis was performed using SPSS version 23. **Results:** Out of 115 participants, 43.5% per first year students, 27.8 % were second year students, 22.6 % third year students and 6.1% were four years students overall 77.6% of the students reported moderate to high levels of procrastination with 29.4% nearly always procrastinating and 48.2% sometimes procrastinating. The primary causes included laziness (38.3%), feeling overwhelmed by workload (11.3%), prioritizing distractions like games, phone, or sleep (11.3%), and waiting for deadlines (9.6%). **Conclusion:** This study highlights a high prevalence of Academic procrastination among medical students, with laziness, academic workload, and distractions being the most common contributing factors. These factors contribute to increased stress, reduced academic performance, and potential long-term effects on mental health and professional competence. Interventions focused on time management, motivation-building, and stress reduction strategies may help mitigate Academic procrastination and improve academic performance. Targeted interventions, including time management training, motivation enhancement, stress reduction techniques, and institutional support, are recommended to mitigate procrastination and enhance student outcomes.

Keywords: Academic Procrastination, Medical students, PASS Scale, Mental Health, Time management.

Introduction:

Procrastination is the irrational delay of tasks despite awareness of potential negative outcomes, often leading to heightened anxiety and stress. In academic settings, it manifests as postponing study, assignments, or exam preparation, frequently resulting in last-minute cramming. Academic procrastination is particularly common among university students, with prevalence rates ranging from 70-95% in general populations and 80-90% reporting habitual delays in some studies. Procrastination refers to putting off necessary work, often until pressure or deadlines force action often accompanied by anxiety and stress. It is a prevalent issue among medical students due to the demanding nature of their education. Understanding its reasons and effects is critical for addressing this behavior and improving academic and professional outcomes. Below is a structured overview tailored for an article publication, grounded in psychological, educational, and medical perspectives. Everyone procrastinates at different times in their lives. Procrastination is the failure to begin or complete a task or activity in a given amount of time.¹ Academic procrastination has been viewed as a extensive and permanent desire noticed in students to postpone academic activities, which is usually accompanied by anxiety.² Reasons for Procrastination in Medical Students include: High Academic Pressure and Workload³, Perfectionism⁴, Burnout and Mental Health Challenges⁵, Poor Time Management Skills⁶, Lack of Intrinsic

Motivation⁷, Distractions and Technology⁸. Effects of Procrastination in Medical Students embrace: Academic Underperformance, Chronic procrastination can jeopardize academic progression, with some students failing to meet the rigorous standards of medical programs⁹, Increased Stress and Anxiety¹⁰, Compromised Mental and Physical Health⁹ Impaired Clinical Competence Negative Impact on Professionalism Long-Term Career Consequences.¹² As shown in previous studies on medical students 29.25%¹³ of the students had academic procrastination (nearly always or always). Moreover, 47.9% of the students stated that academic procrastination at a moderate level had caused a lot of problems for them. There was a significant negative relationship between academic procrastination and academic achievement in medical students.^{14,15} This study aims to contribute to the growing body of evidence on academic procrastination in medical education, particularly in the Indian context, where such research is limited.

Objectives:

1. To assess the prevalence of academic procrastination among the medical students.
2. To analyse the cause responsible for procrastination
3. To evaluate the Impact of procrastination on academic performance and mental health.

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MATERIALS AND METHODS

Study design: This cross-sectional study was conducted by Central research unit of SVS Medical College and Hospital among medical students of Telangana, India, forefront of research on this topic. A structured questionnaire containing 25 questions was distributed to medical students after gaining their consent . The collected information was summarized using descriptive statistics such as mean , standard deviation, percentage .

Study population: A total of 115 medical students from first to fourth year participated voluntarily after providing informed consent.

Data Collection:

Data Collection: A structured and validated questionnaire based on the Procrastination Assessment Scale for Students (PASS) developed by

Solomon and Rothblum¹⁶ was used. The PASS assesses procrastination frequency across six academic areas (writing term papers, studying for exams, keeping up with reading, administrative tasks, attendance, and general school activities) and reasons for procrastination. The adapted questionnaire contained 25 items.

sStatistical Analysis procedure: A survey with 115 student responses has been conducted and analyzed by applying margin error of 10%, confidence interval of 95% for the estimated total study population. The collected information were summarized using Descriptive statistics such as frequency, percentage, mean, and standard deviation (SD).Appropriate statistics test procedures were applied, wherever required. The data analysis was carried out by using SPSS 23 statistical software.

RESULTS

Demographic Distribution:

Table 1: Year-wise Distribution of the student

Year of Study	Percentage (%)	Number of Students
First Year	43.5	50
Second Year	27.8	32
Third Year	22.6	26
Fourth Year	6.1	7
Total	100.0	115

Figure 1: Year of study of participants pie diagram

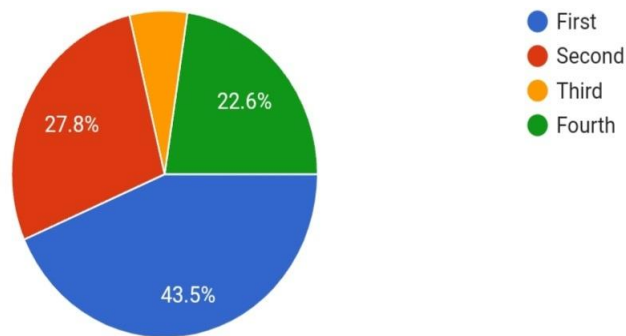


Figure 2 : Piechart showing Percentage of Reasons for procrastination among medical students . Major Causes (PASS responses) :

The results of this Study revealed Prevalence of procrastination
 77.6% of students were in moderate to high level of procrastination.
 29.4% procrastinated nearly always or always.
 48.2% procrastinated sometimes .



Table 2: Major Reasons for Procrastination Among Medical Student

Reason	Percentage (%)
Laziness to start the work	38.3
Overwhelmed by workload	11.3
Priority to games, phone, sleep	11.3
Waiting until the deadlines	9.6

Did not have enough energy	8.7
Overconfident about work	5.2
Fear of perfection	5.2
Fear of failure	4.3
Friends pressuring other things	3.5
Waited until classmates	2.6

Figure 3: Shows the percentage of students who procrastinate always and nearly always

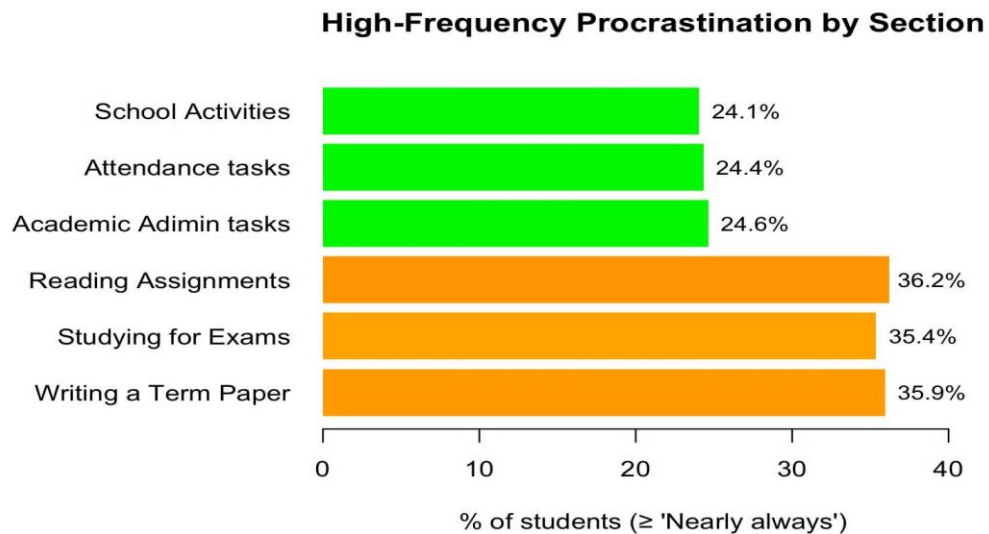


Table 3: Percentage of Students Who Procrastinate Nearly Always/Always by PASS Domains

Academic Domain	% Nearly Always/Always
Keeping up with reading assignments	36.2
Writing a term paper	35.9
Studying for exams	35.4
Academic administrative tasks	24.6
Attendance tasks	24.4
School activities in general	24.1

Figure 4. Response distribution across Procrastination Assessment Scale-Students (PASS) items Stacked bar chart showing the proportion of responses for procrastination frequency (_Proc), problem severity (_Prob), and desire to decrease procrastination (_Decr) in six academic domains: Writing a term paper (Write), Studying for exams (Exams), Keeping up with reading assignments (Read), Academic administrative tasks (Admin), Attendance tasks (Attend), and General school activities (School)

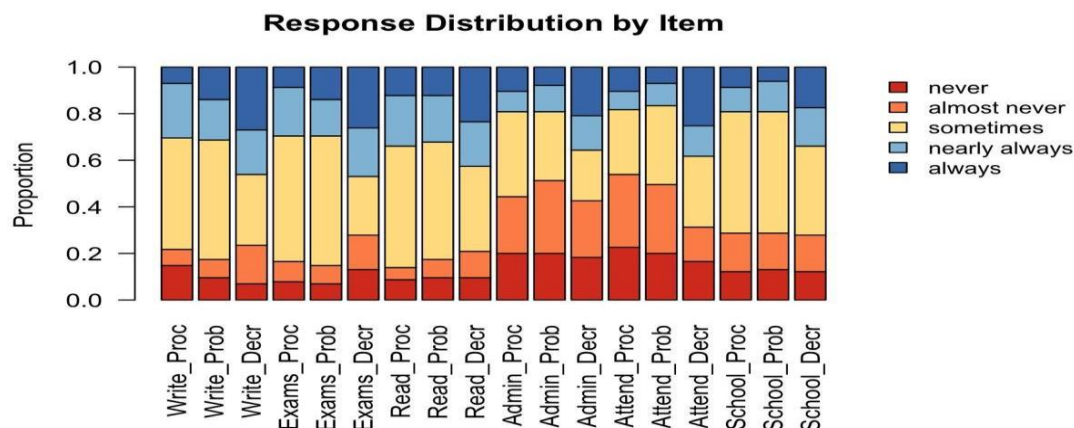


Table 4. Percentage distribution of responses to Procrastination Assessment Scale-Students (PASS) items across academic domains (n=115) Responses are on a 5-point Likert scale: 1 = Never, 2 = Almost Never, 3 = Sometimes, 4 = Nearly Always, 5 = Always

SI.No	Domain and Question	Never (%)	Almost Never (%)	Sometimes (%)	Nearly Always (%)	Always (%)
1.	Writing a term paper/formative assessment, weekly test To what degree do you procrastinate on this task?	4.8	7.0	47.8	23.5	7.0

2.	Writing a term paper/formative assessment, weekly test To what degree is procrastination on this task a problem for you?	9.6	7.8	51.3	17.4	13.9
3.	Writing a term paper/formative assessment, weekly test To what extent do you want to decrease your tendency to procrastinate on this task?	7.0	16.5	30.4	19.1	27.0
4.	Studying for exams To what degree do you procrastinate on this task?	7.8	8.7	53.9	20.9	8.7
5.	Studying for exams To what degree is procrastination on this task a problem for you?	7.0	7.8	55.7	15.7	13.9
6.	Studying for exams To what extent do you want to decrease your tendency to procrastinate on this task?	13.0	14.8	25.2	20.9	26.1
7.	Keeping up with reading assignments To what degree do you procrastinate on this task?	8.7	5.2	52.2	21.7	12.2
8.	Keeping up with reading assignments To what degree is procrastination on this task a problem for you?	9.6	7.8	50.4	20.0	12.2
9.	Keeping up with reading assignments To what extent do you want to decrease your tendency to procrastinate on this task?	9.6%	11.3%	36.5%	19.1%	23.5%
10.	Academic Administrative Tasks: Filling out Forms, Registering for Classes, Getting ID Card, etc. To what degree is procrastination on this task a problem for you?	20%	24.3%	36.5%	8.7%	10.4%
11.	Academic Administrative Tasks: Filling out Forms, Registering for Classes, Getting ID Card, etc. To what degree do you procrastinate on this task?	20%	31.3%	29.6%	11.3%	7.8%
12.	Academic Administrative Tasks: Filling out Forms, Registering for Classes, Getting ID Card, etc. To what extent do you want to decrease your tendency to procrastinate on this task?	20%	31.3%	29.6%	11.3%	7.8%
13.	Academic Administrative Tasks: Filling out Forms, Registering for Classes, Getting ID Card, etc. To what extent do you want to decrease your tendency to procrastinate on this task?	18.3%	24.3%	21.7%	14.8%	20.9%
14.	Attendance Tasks: Meeting with Your Advisor, Making an Appointment with a Professor.	22.6%	31.3%	27.8%	7.8%	10.4%
15.	Attendance Tasks: Meeting with Your Advisor, Making an Appointment with a Professor, etc. To what degree do you procrastinate on this task?	20%	29.6%	33.9%	9.6%	7%
16.	Attendance Tasks: Meeting with Your Advisor, Making an Appointment with a Professor, etc. To what degree is procrastination on this task a problem for you?	16.5%	14.8%	30.4%	13%	25.2%
17.	School Activities in General To what extent do you want to decrease your tendency to procrastinate on this task?	12.2%	16.5%	52.2%	10.4%	8.7%
18.	School Activities in General To what degree do you procrastinate on this task?	13%	15.7%	52.2%	13%	6.1%
19.	School Activities in General To what degree is procrastination on this task a problem for you?	12.2%	15.7%	38.3%	16.5%	17.43%

DISCUSSION

The findings of this cross-sectional study reveal a substantial prevalence of academic procrastination among medical students at SVS Medical College in Telangana, India. As shown in Table 1: Year-wise Distribution of the students, first-year students constituted the largest group (43.5%, n=50), followed by second-year (27.8%, n=32), third-year (22.6%, n=26) and fourth-year students (6.1%, n=7). This distribution is visually represented in Figure 1: Year of study of participants pie diagram.

Overall, 77.6% of students exhibited moderate to high levels of procrastination, with 29.4% reporting that they procrastinate nearly always or always and 48.2% sometimes procrastinating. This high prevalence is clearly illustrated in Figure 3: Shows the percentage of students who procrastinate always and nearly always.

When examining specific causes, Figure 2: Pie chart showing Percentage

of Reasons for procrastination among medical students shows that laziness to start the work was the leading reason (38.3%), followed by feeling overwhelmed by workload (11.3%), prioritizing games/phone/sleep (11.3%) and waiting until deadlines (9.6%). The complete list of reasons with exact percentages appears in Table 2: Major Reasons for Procrastination Among Medical Students.

Domain-specific procrastination frequencies (Table 3: Percentage of Students Who Procrastinate Nearly Always/Always by PASS Domains) demonstrate that keeping up with reading assignments was most affected (36.2%), followed closely by writing a term paper (35.9%) and studying for exams (35.4%). Administrative, attendance and general school activities showed comparatively lower rates (24.6%, 24.4% and 24.1% respectively). These patterns are graphically summarized in Figure 4: Response distribution across Procrastination Assessment Scale-Students (PASS) items (stacked bar chart) and in the detailed percentage

breakdown provided in Table 4: Percentage distribution of responses to Procrastination Assessment Scale-Students (PASS) items across academic domains.

These results align closely with previous research on medical students, where high-level procrastination rates range from 27–52% [13,19,21]. The overall moderate-to-high prevalence of 77.6% in our study is comparable to the 80–95% reported in general student populations [1,2]. The 29.4% who procrastinate nearly always/always falls within the range observed by Clark and Hill [17] (30–45%) among American undergraduates and is slightly higher than rates reported among nursing students (43%) [18] and technology/design students (45%) [18], but higher than the 27% found among Indian dental students [19]. In an Indian context, our high-level rate is lower than the 44.1% nearly always/always reported in the Delhi NCR study [20], yet the pattern of task-specific procrastination remains consistent with studies conducted at Government Medical College, Indore [22] and Assam Agricultural University [23].

The dominance of laziness (38.3%) as the primary cause (Table 2 and Figure 2) likely reflects low motivation and task aversiveness [1,7], while workload overload and technology distractions (both 11.3%) mirror the challenges of the intensive MBBS curriculum in India. These causes are in strong agreement with earlier Indian medical student studies [22] and international meta-analyses [7,14].

The impact is evident in Table 4, where large proportions of students rated procrastination as a problem (e.g. 31.3% nearly always/always for writing tasks) and expressed a strong desire to reduce it (e.g. 46.1% nearly always/always for exam preparation). This self-awareness, combined with the known negative correlation between procrastination and academic achievement [14,15], underscores risks to mental health, burnout [5,10] and long-term clinical competence [12].

In summary, Tables 1 through 4 and Figures 1 through 4 collectively demonstrate that academic procrastination is highly prevalent, task-specific and driven by laziness, workload and distractions among our medical students. These visual and numerical results strongly support the urgent implementation of time management workshops, motivation programs, digital distraction controls and institutional mental health support to improve academic success and well-being.

Domain-specific analysis using the Procrastination Assessment Scale-Students (PASS) further demonstrates that procrastination is most pronounced in core academic activities requiring sustained self-regulation, such as keeping up with reading assignments, preparing written assessments, and studying for examinations. In contrast, more structured or externally monitored tasks exhibit lower rates, emphasizing that procrastination tends to flourish in the absence of immediate accountability. These patterns carry profound implications. Chronic academic procrastination undermines academic performance through rushed and superficial preparation, impairs knowledge retention, and heightens stress, anxiety, and susceptibility to burnout—consequences that threaten mental well-being and, in the long term, hinder the development of essential clinical skills, sound professional judgment, and lifelong learning habits vital for medical practice.

Limitations of the study include the modest sample size, single-institution setting and reliance on self-reported data (as presented across Tables 1–4 and Figures 1–4). Future longitudinal research with objective academic performance measures and multi-institutional samples is recommended.

Conclusion:

This cross-sectional study, reveals a high prevalence of academic procrastination among first- to fourth-year medical students, with most exhibiting moderate to high levels and frequent delays on tasks. First-year students, prominent in the cohort, appear especially vulnerable during the transition to medical demands. Key causes include perceived laziness in starting tasks, workload overwhelm, distractions like mobiles/gaming/sleep, and waiting for deadlines—reflecting motivational gaps, cognitive overload, and modern influences.

In Indian medical education, where such research is scarce, these findings urge targeted interventions:

Time-management and goal-setting workshops to counter overwhelm and deadline reliance.

Motivation programs with intrinsic goals and reinforcement to tackle aversion.

Digital wellness for distraction control.

Curriculum-based stress management, mindfulness, CBT, and resilience training.

Supports like staggered deadlines, reminders, peer mentoring, screening, and mental health services—prioritizing first-years to prevent entrenched habits. Students' self-awareness and desire to change highlight procrastination's burden and intervention potential. Addressing

it is a professional imperative: it boosts outcomes, protects mental health, and builds resilient physicians for healthcare demands. This study lays groundwork for multicentric Indian research to guide policies that balance academic rigor with student well-being.

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