

EFFECT OF STUDY HABITS ON ACADEMIC PERFORMANCE OF STUDENTS AT WAH MEDICAL COLLEGE

Robina Mushtaq¹, Khola Waheed², Shezadi Sabah Imran³, Ambreen Ansar⁴, Sadia Nadeem⁵, Musarat Ramzan⁶

¹Associate Professor Community Medicine, ^{2,5} Assistant Professor Community Medicine, ³ Professor Community Medicine,

⁴ Assistant Professor Medical Education, ⁶ Dean, Professor & HOD Community Medicine, Wah Medical College, NUMS

ABSTRACT

Background: Educational achievements depend on study habits. Medical profession requires lifelong learning, and students have to acquire a lot of knowledge and skills; they need to use good learning strategies for their academic success.

Objective: To identify the study habits of medical students in Wah Medical College and the effect of study habits on their academic performance.

Design: Descriptive, Cross-sectional.

Place and Duration of Study: Wah Medical College, 6 months (March to August 2021).

Material and Methods:

Data Collection tools: Hard copy of Palsane and Sharma Study Habits Inventory (PSSHI) was used for data collection. Study habits inventory contained 45 items belonging to eight areas, which were scored on a rating scale.

Analytical methods: Results were summed and statistically analyzed using SPSS version 23. Frequency/proportions of qualitative variables were determined. Mean and standard deviation for each item in PSSHI was calculated and added up to obtain the final score. Chi-square test (at alpha value of 0.05) was used to find out the association of variables.

Results: On the whole, study habits of students were 'Relatively favorable' as mean score of PSSHI was 53.35 ± 9.41 . Study habits of 118 (26%), 327 (72.5%) & 6 (1.3%) students were favorable, relatively favorable and unfavorable respectively. Statistically significant positive association was noted between academic performance and study habits (p-value 0.000).

Conclusion: Study habits of majority of students were Relativity Favorable and with increase in PSSHI score the academic performance got better.

Key words: Study habits, Academic Performance, Medical Students, Palsane and Sharma Study Habits Inventory.

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INTRODUCTION

Study skills are the tactics used by the students to acquire knowledge^{1,2}. They include regular reading, collecting and retaining new information, managing time, selecting right objectives, opting for suitable environment and organization². Medical profession requires dedication, hard work and lifelong learning. Medical students need to acquire a lot of knowledge and skills, as well as professionalism to make them ready for the multiplicity of their profession^{3,4}. Study habits are exclusive for each person but it is necessary to identify the right approach⁵.

The students who are short of good study habits perform pathetically in assessments which further exacerbate their test fretfulness^{6,7}. The resulting apprehension is the foremost cause of examination misconducts, rising failure rates and absenteeism from institutions. All devices like TV, cell phones and laptops disrupt the learning process, so it is necessary to avoid all these while studying².

Globally every educational institution and all stakeholders are worried about the educational achievements of students^{2,6}. In reality, quality of schooling is related to academic achievements which in turn assure the growth of a nation, keep the learners connected to social networks, make them ambitious and help them complete their dreams^{1,7}. Academic performance of students depends upon several factors like enthusiasm, mindset, self-confidence and learning environment but to a large part on their study habits^{2,3}.

The scholars' habits of studying have a pivotal effect on the educational standards and overall achievements^{2,6}. The scores of the whole class are not alike although they are taught

Correspondence to: Dr. Robina Mushtaq, Associate Professor, Department of Community Medicine, Wah Medical College, Wah Cantt, NUMS

Email: robina.mushtaq@yahoo.com

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together. The students having well-planned study habit thrive and achieve more marks in exams¹. The students with planned study habits do better than those having jumbled habits³. In fact learners with unorganized study habits do not have clear concepts leading to pathetic performance¹. Standard of health care in a country is determined by the excellence of its medical graduates whereas worth of graduates is subjected to the morals of their training, consequently all revolve around the study habits of the learners. In a study conducted among medical students of Iran, the study habits were found to be relatively favorable and were positively associated with their academic performance ($p < 0.0001$ and $r = 0.229$)¹. In another study the students from Philippines had relatively favorable study habits but had no significant effect on their academic performance⁶.

As there is dearth of evidence regarding consequences of study habits on the educational achievements of medical graduates in Pakistan, we aim to find out the study habits of medical students in Wah Medical College and the effect of these habits on their academic performance. Quality study expertise will lead to the development of self-reliance, competency, and morale; will also lessen the apprehension concerning assessments. As a result of adopting valuable study habits, learners can reduce the time spent for academic work, and can have spare time for new activities in their lives. The results of this research will facilitate the graduates to build up favorable study habits leading to improvement in their academics.

MATERIAL AND METHODS

A descriptive cross-sectional study was carried out at Wah Medical College from March to August 2021, involving all 500 students. The objective and procedure of data collection was clarified before distributing hard copies of questionnaires. The first section of the questionnaire included Sociodemographic information, including name, gender, study year, residence either in dormitory or day scholar, and marks (percentage) in the last passing examination.

The Palsane and Sharma Study Habits Inventory (PSSHI)³ was used to determine the study habits of students. The inventory contained 45 items belonging to eight areas: budgeting time, physical condition, reading ability, note-taking, learning motivation, memory, taking examinations, and health. Scoring of the study habits inventory was done on a three-point rating scale; "0 = rarely or never", "1 = sometimes" and "2 = Always or Mostly". For the statement No's 6, 9, 13, 15, 24, 26, 34, 36, 37, 41 and 42, scoring was reversed marking 0, 1

and 2 for 'Always', 'sometimes' and 'never' because these were negative items. Total score for study habits ranged from 0 – 90. The scores were interpreted as given below:

Score > 60-----Favorable
Score 31 to 60-----Relatively favorable
Score ≤30 -----Unfavorable

Academic performance was assessed based on marks obtained in the last professional exam.

Marks percentage	Level of academic performance
81% to 100%	-----Excellent
66% to 80%	-----Good
50% to 65%	-----Average
< 50%	-----Poor

CAPSULE SUMMARY

Lifelong learning is required in the medical profession. Students must acquire a wide range of knowledge and skills so there is a need to employ innovative learning strategies all along.

Study habits of medical students from one medical college and their effect on student's academic performance were explored. Majority of students were found to have 'Relativity Favorable' study habits with a better academic performance with an increase in their Palsane and Sharma Study Habits Inventory (PSSHI) scores.

Students should be encouraged to organize their study activities in order to excel academically and personally, both of which are required for professional success.

Results were summed and statistically analyzed using SPSS version 23. Frequency/proportions of qualitative variables were determined. Mean and standard deviation for each item in PSSHI was calculated and added up to obtain final score. Chi-square test (at alpha value of 0.05) was used to find out the association of variables.

RESULTS

The study planned for all 500 students of Wah Medical College, out of which 451 students responded within the given time (response rate 90.2%). Out of 451 students 295 (65.4%) were females and 156 (34.6%) were males; 177 (39.2%) were day scholars and 274 (60.8%) were hostelites; the number of students in each year of MBBS was Y1=97, Y2=103, Y3=88, Y4=108, Y5=55. The categories of academic performance and study habits are shown in Fig A.1 and A.2 respectively.

The study habits of students were 'Relatively favorable' as mean score of PSSHI was 53.35 ± 9.41 . Study habits of 118 (26%), 327 (72.5%) & 6 (1.3%) students were favorable, relatively favorable and unfavorable respectively. Results regarding mean and standard deviation of individual items are shown in Tables A.1, A.2 and A.3.

Study habits of females were more favorable as compared to males (p -value 0.03) and that of day scholars than hostelites (p -value 0.015). Statistically significant association was noted between academic performance and study habits (p -value 0.000), details are presented in Table A.4.

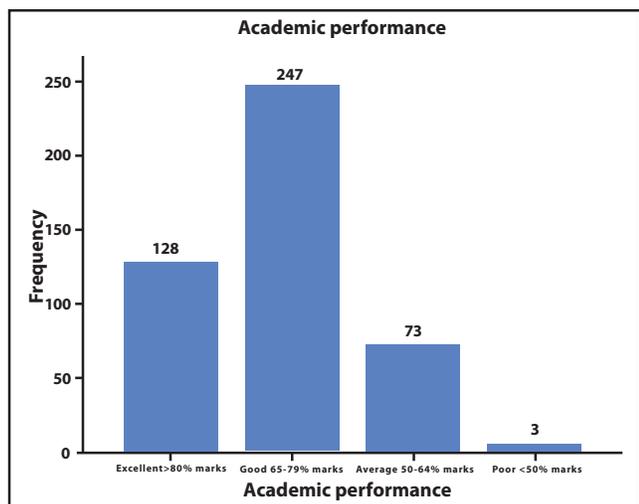


Figure A.1: Academic Performance of students

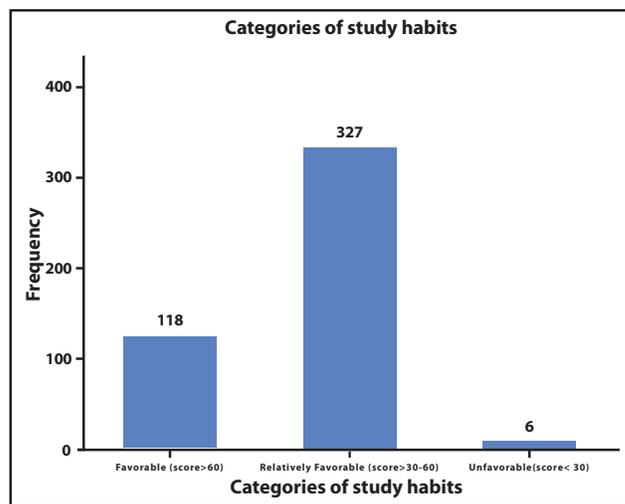


Figure A.2: Categories of study habits

Table A.1: Mean (SD) of Palsane and Sharma Study Habits Inventory

Indicators/Items	Mean ± SD
Total PSSHI Score	53.35 ± 9.41
Budgeting time	6.39 ± 2.26
1. "I study every day".	1.11± 0.71
2. "I study at a particular time of the day".	1.21± 0.73
3. "I do my homework daily".	1.15± 0.76
4. "If I have to study for a longer time, I take a rest in between".	1.60± 0.63
32. "I divide the time according to the matter to be answered in respect of the number of questions".	1.33± 0.71
Physical condition	7.75 ± 1.7
5. "I have all the required books and other relevant materials of study with me".	1.70± 0.53
6. "For the time of the study, I get disturbed by the surroundings at the time of the study".	0.77± 0.64
7. "I develop an automatic interest in the subject as soon as I start studying it".	1.39± 0.62
8. "I realize the importance of the subjects for my future career".	1.60± 0.58
9. "Other stray thoughts gradually flow in as soon as I settle down for the study".	0.71± 0.62
43. "I think that I can improve my study habits fairly".	1.59± 0.55
Reading ability	8.96 ± 2.33
10. "I read the main points before I read the chapter".	1.08± 0.78
13. "I continue my reading despite the difficulties in understanding the meaning of some words".	0.95± 0.76
14. "I read very carefully in order to understand every point".	1.70± 0.50
15. "I never read silently".	1.12± 0.76
16. "According to the importance and difficulty of the subject matter, I change and adjust the speed of my reading".	1.50± 0.62
17. "I study figures and graphs very carefully while reading".	1.38± 0.64
22. "I read books whenever I get free time, whether at home or in school/College".	0.78± 0.72
28. "I study in the library regularly".	0.46± 0.60

Table A.2: Mean (SD) of Palsane and Sharma Study Habits Inventory

Indicators/Items	Mean \pm SD
Note taking	2.67 \pm 1.8
11. "I take down notes while reading".	1.11 \pm 0.73
18. "During the classroom teaching, I take down notes very sincerely".	0.86 \pm 0.71
19. "At home, I compare my class notes with the notes from the text books".	0.71 \pm 0.75
Learning motivation	8.44 \pm 1.8
20. "I take the help of anybody if I do not follow anything".	1.38 \pm 0.62
21. "I study the subject matter at home thoroughly before it is taught in the classroom".	0.45 \pm 0.63
23. "I attend my classes regularly on time".	1.76 \pm 0.50
24. "I frequently remain absent from class".	1.72 \pm 0.56
25. "If a matter is to be learned by heart, I read and memorize it part by part".	1.54 \pm 0.62
40. "I try to make up my deficiency in the weak subjects to my best".	1.60 \pm 0.55
Memory	4.45\pm 1.23
12. "I try to recall the matter after reading it".	1.52 \pm 0.62
26. "I cram certain things without understanding".	1.27 \pm 0.63
27. "I revise the subject matter from time to time".	1.02 \pm 0.62
37. "After the examination, I realize that I have made some mistakes in the answers I have written, or I have forgotten some important points".	0.64 \pm 0.60

Table A.3: Mean (SD) of Palsane and Sharma Study Habits Inventory

Indicators/Items	Mean \pm SD
Taking examinations	11.24 \pm 2.4
29. "During examination days also, I sleep as usual in the night".	0.94 \pm 0.80
30. "Before writing the answers to the questions in the examination, I read very carefully the entire question paper".	1.61 \pm 0.62
31. "In the examination, I answer the question in their serial order".	1.20 \pm 0.70
33. "Before examination, I read my own notes carefully".	1.23 \pm 0.72
34. "I prepare for the examinations from the guides/notes available in the market".	1.12 \pm 0.75
35. "I draw an outline of answers of each question, before writing answers to the questions in the examination".	1.12 \pm 0.75
36. "I feel tense at the beginning of the examination".	0.54 \pm 0.63
38. "I carefully record my examination results".	1.29 \pm 0.73
39. "I single out my weak subjects on the strength of my examination results".	1.37 \pm 0.63
42. "I have a tendency to compare my marks with others after the results are declared".	0.83 \pm 0.74
Health of study	3.41 \pm 1.19
41. "I get disappointed, if the examination result is not favorable".	0.72 \pm 0.67
44. "I get guidance about proper study habit from my teachers".	1.09 \pm 0.72
45. "I will take advantage if a guidance program in study habits is arranged".	1.60 \pm 0.61

Table A.4: Association between study habits and academic performance

Study Habits	Academic Performance			
	Excellent > 80% Marks	Good 65-79% Marks	Average 50-64% Marks	Poor < 50% Marks
Favorable (Score > 60)	55	50	13	0
Relatively Favorable (Score 30-60)	73	193	58	3
Unfavorable (Score < 30)	0	4	2	0
p-value	0.000			

DISCUSSION

Study skill is the acquisition of planned and committed time for the purpose of gaining knowledge, as it is necessary to become confident and excel in life. Such skills determine the level of knowledge gained by the learners and the targets they want to achieve in future; all possible by appraising the study habits at frequent intervals⁸. In medical schools, un-planned study habits grossly affect the educational progress of scholars as dedicated hard work is required for lifelong learning. The study was conducted with the objective to identify the study habits of medical students in Wah Medical College and its effect on their academic performance. We endeavored to include all 500 students but a response rate of 90.2 % was achieved. PSSHI containing 45 statements, belonging to eight areas, was used.

In our research, study habits of majority of students were relatively favourable, just like the results of a study conducted in Jundishapur University of Medical Sciences⁹ and a research by Looyeh¹. In our study positive relationship among study habits and academic performance was found, with increasing study habits scores the academic performance turned out to be better. Similar association was observed in the studies among the medical students by Sreelekha¹⁰ and Jafari³ and among nursing students by Alimohamadi¹¹. Unlike this no association of study habits was found with the academic performance of students in a study by Chandana¹² and Tus⁶.

In our research, study habits of females were more favourable as compared to males; these results are almost similar to research conducted in district Pulwama, J&K¹³. Other research also showed that the study habits of females were better than males^{3,14}. As far as residence is concerned, study habits of day scholars were better than hostelites, just like the results obtained in a research done at Kermanshah University of Medical sciences². But residence had no significant effect on study habits in a research conducted in Iran⁴.

The indicators for which we got the maximum and minimum

scores were learning motivation and note-taking respectively. Similarly, in other studies the most undesirable results were obtained for note-taking³, and the highest score for learning motivation¹. Regarding budgeting time, most of the students did not have the habit of studying daily or at any specific time. The students were of the opinion of taking rest in between if they had to study for longer periods. They also distributed their time on the basis of importance of the subject in their view. The result almost matched with the study conducted by Tus⁶.

About physical conditions, mostly the students agreed that all the related books and other reading material were provided to them as well as they understood the importance of their field. Some were unable to concentrate because of their surroundings and roving thoughts. Similar results were obtained in other studies by Alavijeh² and Gilavand⁵. Regarding reading ability, the students did not have the habit of studying books in the library. But they read sensibly to comprehend each topic giving due importance to graphs and figures in the text. Similar results regarding reading ability were found in a study conducted by Looyeh¹ and Sharma¹⁵.

For Note-taking habits the majority of the students were not interested in taking notes regularly. Similar low results in note-taking were obtained in another study by Alavijeh². Regarding learning motivation, most of the students had determination for seeking knowledge. They also tried making up their deficiencies in all subjects by regularly attending the lectures. Students in Iran⁷ and Philippines⁶ were similarly motivated to become skilled at their profession.

As far as memory is concerned the students knew the importance of memorization in MBBS and had a habit of revising the content before examination. Similar results were obtained in other studies by Gilavand⁵ and Sharma¹⁵. For taking examinations, the students had the habit of reading questions carefully and outlined answers before attempting. Some were anxious while others had usual sleep before examination, also had the habit of critically analysing their results. The

habits of taking examinations resembled a study conducted in Philippines⁶. Regarding the health of study, the students had the habit of taking assistance from their teachers for study and were willing to join any mentoring platform for improving their academic performance. Iranian students also got assistance from their peers and teachers⁷.

CONCLUSION

Study habits of majority of students of Wah Medical College were Relatively Favorable and those having favorable study habits perform better academically. Study habits of female students and day scholars were more favourable as compared to male students and hostelites. Students should be encouraged to organize their study activities in order to shine academically and personally as both are essential features for attaining success in their profession.

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AUTHORS' CONTRIBUTION

Robina Mushtaq	Conception and design, Drafting the Article
Khola Waheed	Analysis and interpretation of data, Drafting the Article
Shezadi Sabah Imran,	Acquisition of data, Critical revision
Ambreen Ansar	Acquisition of data
Sadia Nadeem	Analysis and interpretation of data,
Musarat Ramzan	Conception and design, Critical revision

REFERENCES

1. Rezaie Looyeh H, Seyed Fazelpour SF, Reza Masoule S, Chehrzad MM, Kazem Nejad Leili E. The relationship between the study habits and

the academic performance of medical sciences students. *J Holist Nurs Midwifery*. 2017 Jun 10;27(2):65-73.

2. Mirzaei-Alavijeh M, Matin BK, Hosseini SN, Jalilian F. Study habits and associated demographic determinants among students of Kermanshah University of Medical Sciences. *Educ Res Med Sci*. 2017 Jul 9;6(1).

3. Jafari H, Aghaei A, Khatony A. Relationship between study habits and academic achievement in students of medical sciences in Kermanshah-Iran. *Adv. Med. Educ. Pract.* 2019 Aug 15;637-43.

4. Nourian A, Mousavinasab SN, Fehri A, Mohammadzadeh A, Mohammadi J. Evaluation of study skills and habits in medical students. *seajme*. 2008 Jun 30;2(1):61-4.

5. Gilavand A. Study habits of dental students of Ahvaz Jundishapur University of Medical Sciences (2018). *Educ Res Med Sci*. 2019 Jun 30;8(1).

6. Tus J, Lubo R, Rayo F, Cruz MA. The learners' study habits and its relation on their academic performance. *IJARW* |. 2020 Dec 2;2(6):1-9.

7. Tahamtani T, Kohpayezadeh J, Hosseini M, Arabshahi KS. Correlation of study habits with academic achievement among students attending the national medical science Olympiad. *JAMED*. 2017; 1(1): 19-23.

8. Nadeem NA, Puja JA, Bhat SA. Study habits and academic achievement of kashmiri & ladakhi adolescent girls: A comparative study. *TOJDE*. 2014 Apr 1;15(2):91-7.

9. Gilavand A. Evaluation of study habits among general medical students and its relation with test anxiety in Ahvaz Jundishapur University of Medical Sciences, Southwest of Iran. *J Res Med Dent Sci*. 2018 Oct;6(5):240-5.

10. Sreelekha V, Indla Y, Reddy R, Rameswarudu M, Swathi A, Yamini D, Uddin A. Study habits and academic performance of first year MBBS students. *Int J Med Sci Public Health*. 2016 Sep 1;5(9):1831-4.

11. Alimohamadi N, Dehghani M, Almasi S, Ashtarani E, Jonbakhsh F, Paymard A, Khalili A. Relation study between study habit and academic performance of nursing students in Hamadan. *Pajouhan Sci J*. 2018 Apr 10;16(3):29-38.

12. Dey C. Effect of Study Habit on Academic Achievement. *IJHSS* 2014 Jun;2(5):101-5.

13. Illahi BY, Khandai H. Academic Achievements and Study Habits of College Students of District Pulwama. *JEP*. 2015;6(31):1-6.

14. Lateef R. Study habits and scholastic achievement of male and female Kashmir University students – A comparative study. *SRJIS*. 2013; II/IX: 936-942.

15. Sharma S, Suhag S. A Comparative Study of Scientific Interest and Study Habit of Rural and Urban Adolescent Girls. *BIJER*. 2012; 1(III).