

Effect of Time Management Skills on Academic Performance of Medical Students

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Time
Management
Skills on
Academic
Performance

ABSTRACT

Objective: To assess time management skills with respect to effect on academic performance of medical students.

Study Design: Descriptive / cross-sectional study

Place and Duration of Study: This study was at the Department of Medical Education, Dow University of Health Sciences, Karachi from 1st January 2015 to 31st December 2015.

Materials and Methods: The sample of the study consists of 652 medical college students. Academic performance has been checked by student affairs and examination department of college.

Results: The relationship between medical students' time management scores and academic performance ratings is measured. A positive and significant relationship was discovered between time management score and performance rating ($r = 0.584$, $p = <0.001$). Correlation is significant at the 0.01 level (2-tailed). Male students have better time management scores.

Conclusion: This research work underlines the crucial need of understanding the part of "time management in academic performance."

Key Words: Time management skills, Academic performance, Medical students

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INTRODUCTION

A time management skill is not just skill to know or to learn, it is a pathway.¹ Time management "is a set of principles, practices, skills, tools, and systems that work together to help you get more value out of your time with the aim of improving the quality of your life." Awareness of time management skills is crucial for every student in their college/university life to organize, plan, concentrate and study effectively for quality output. This will give an efficient control on the work and health status and task related stress can also be managed in a better way.³ Ezeala and Awanga⁴ reported a huge proportion of undergraduate students of health sciences have unawareness and no understanding of study skills and time management habits. Medical students in the study period are entailed to understand and make concepts of a huge range of medical and scientific subjects. It is clear that unprofessional and improper way of studying integrated subjects will lead them to have failure in getting good grades that results in demotivation, loss of passion to learn.⁵

Personality, IQ, family background, gender and age, as well as required factors such as learning styles and methods of study would have the effect on learning and academic performance.⁶ It is more obvious for medical students to understand the value of time management when dealing with excessive academic curriculum.⁷ Students from developing countries have lots of problems and difficulties during their academic time period, researchers are engaged to find out and discover factors affecting student's performance. One of the factors identified is that students do not give that much importance to the time management while they know it is affecting their academic performance.⁸

Time management is an asset that is having its own value, it is one of the fact that the need is increasing day by day but due to lack of awareness, Pakistani researchers are bit lacking behind regarding time management and its effect on performance of students in all aspects evaluated in medical students.⁹ However, efficient group of researchers suggest time management is affecting academic performance and are working on it.¹⁰ Time management skills help them prioritize, stay realistic, they can manage good timetabling that will make them aware how to work along a path and solve problems, and students can plan long term goals and can be focused person for getting "best results".¹¹

MATERIALS AND METHODS

This is a cross-sectional study in which descriptive survey was carried out at Dow University of Health Sciences, Karachi from 1st January 2015 to 31st December 2015. The sample of the study consists of 652 medical college students. Student's cumulative grade point average (GPA) is a grading criteria of

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measuring performance related to academics, was secured by an open ended question asking to write the most recent cGPA Scale ranging from 1-4 that they have obtained in their last university exam. The self-reported cGPA was later validated by the student affairs department and examination branch (Departments that have information regarding results and evaluation of each student). The questionnaire used in this study was acquired and modified questionnaire developed by Britton and Tesser¹⁹⁹¹ and John W. Olmstead MBA, Ph.D.^{2005^{12,13}}, regarding time management skills. These two Questionnaires had taken in consideration and modified according to our study design and has been checked by Cronbach's alpha for the reliability. A self-administered also called drop-off and pick procedure was employed to distribute the questionnaire and gathered information from the respondents who are students from medical colleges of Karachi.

The study consists of 652 medical students. The data is then gathered and transferred into SPSS 21 (Statistical Packet for Social Sciences) program. The descriptive statistics such as frequency (f), percentage (%), arithmetical mean (\bar{x}), range, standard deviation (S), Pearson correlation coefficient (r) and one sample T-test analysis (t) were used in the data analysis.

RESULTS

Out of 652 medical students (471) 72.2% were females and (181) 27.8% were males students (Table 1). Mean age of the students was 19.43 ± 1.352 with the range of 18-23 years. Figure 1 represents the ages of the sample students that were 18 year old students 235 (35.9%), 19 year old students were 115 (17.6%), 20 year old students that are 156 (23.9%), 21 year old students were 89 (13.7%), 22 year old students were 52 (8%) and 23 year old student is were only 6 (0.9%). This explains that the majority of the students were of 18 years and 20 years.

Table 2 shows the time management scores and cGPA along with mean age of medical students. Mean of time management scores of medical students was (2.41 ± 0.545) which describes that medical students have good time management skills as time management scores are coded as 1-4 that is ranging from low (1-1.9), moderate (2-2.9) and (high 3-4). Furthermore the relationship of the time management scores is more evident by the cumulative grade point average cGPA (1-4) that is plotted on a conventional scale ranging from average (1-1.9), good (2-2.9), excellent (3-4). The mean of cGPA of medical students was (2.55 ± 0.446) which proves that better time management skills can lead to good cGPA.

There is (471) 72.2% female students and (181) 27.8% male students enrolled. In this study, Male students seem to have slightly better time management skills than the female students as mean of time management score is 2.56 ± 0.519 as compared with the mean of time management scores of female students that is 2.35 ± 0.54 with statistically highly significant P value of <0.001 . This is more evident by the cGPA calculated, as male

students have mean of 2.65 ± 0.371 which was higher than the mean of female students 2.51 ± 0.466 with statistically highly significant P value of <0.001 . (Table 3)

Table No.1: Frequency and percentage of genders

Gender	No.	%
Male	471	72.2
Female	181	27.8

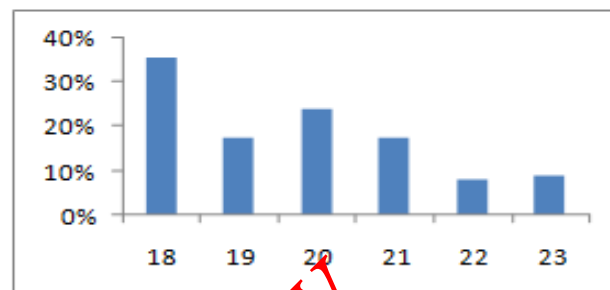


Figure No. 1: The graph representing the ages of the sample students

Table No.2: Baseline characteristics of study participants with their Academic Performance (n= 652)

Variable	Medical Students Mean \pm SD
Age (yrs)	19.43 ± 1.352
Time management Scores	2.41 ± 0.545
cumulative grade point average	2.55 ± 0.446

Table No.3: Comparison of time management scores and its effect on GPA between male and female students

Variable	Males (n=181, 27.8%)	Females (n=471, 72.2%)	P value
Time Mx Scores	2.56 ± 0.519	2.35 ± 0.541	<0.001
cGPA	2.65 ± 0.371	2.51 ± 0.466	<0.001

Table No.4: Correlation between TMx Scores and Academic Performance of student

Variable	Total TMX scores	cGPA	P Value
Total TMx scores	1	.584**	<0.001
cGPA	.584**	1	<0.001

TMx Scores: time management scores, cGPA: cumulative grade point average

** Correlation is significant at the 0.01 level (2-tailed)

When the relationship between medical students time management scores and academic performance is measured by Pearson correlation coefficient, a positive strong correlation and significant relationship was observed between time management score and academic performance ($r=0.584$, $p=<0.001$) correlation is significant at the level of 0.01 (2-tailed) that denotes that more the time management skills, better the academic performance of the students. (Table 4)

DISCUSSION

Many factors such as student's motivation, stress, and socioeconomic status influence the student's academic performance. One of the most important determinants of student's academic profile is time management skill which has a positive effect on their academic achievement.^{14,15} Studies on this issue reports that students utilizing their time effectively have been shown to have high academic achievement.^{9,12,14} Androniceanu et al¹⁶ reported a positive relationship between students' time management skills and academic achievement and the same is also reported in several other studies.¹⁷ Findings of our study are also consistent with these studies. We also concluded that the students having good time management scores (2.41 ± 0.545) have an excellent cumulative GPA rating (2.55 ± 0.446). According to Karakose et al female students were found to be more successful than male students. In one more study conducted by Trueman and Hartley¹⁸, on university students female students were found considerably better than male students in time management skills.¹⁹ On contrast to this we found exactly opposite results of these studies that is in our research male students have good time management scores (2.56 ± 0.519) than female students (2.35 ± 0.541) and these good time management skills are reflected in their academic performance in terms of c GPA rating which is (2.65 ± 0.371) for males and (2.51 ± 0.466) for females and these findings are highly significant at the p value of <0.001 . To the best of our knowledge these finding are being reported for the first time and we consider these results unique in comparison to previous studies. As a result of the present research, a significant positive correlation of time management scores with the GPA was established between time management score and academic performance rating ($r = 0.514$, $p = 0.000$) correlation is significant at the level of 0.01.

CONCLUSION

Medical students who were good in time management and time planning scored good on likert scale of time management questionnaire and their high scores are reflected in their academic performance as they obtained excellent rating of their GPA.

Author's Contribution:

Concept & Design of Study: Shaur Sarfaraz
 Drafting: Muhammad Kashif Nisar
 Data Analysis: Muhammad Kashif Nisar
 Revisiting Critically: Erum Afaq
 Final Approval of version: Shaur Sarfaraz

Conflict of Interest: The study has no conflict of interest to declare by any author.

REFERENCES

1. The study guide and strategies 2011. Available from: <http://www.studygs.net/timman.htm>.
2. Effexis. Time Thoughts. Time Management. 2004-2011.
3. JA. How to improve Time Management Skills for Professional Role 2016.
4. Ezeala CC, Siyanga N. Analysis of the study skills of undergraduate pharmacy students of the University of Zambia School of Medicine. *J Educa Evalu Health Profess* 2015;12.
5. Zarshenas L, Danaei SM, Mazarei E, Najafi HZ, Shakour M. Study skills and habits in Shiraz dental students; strengths and weaknesses. *J Edu Health Prom* 2014;3.
6. Mashayekhi F, Rafati S, Mashayekhi M, Rafati F, Mohamadisardoo MR, Yahaghi E. The relationship between the study habits and the academic achievement of students in Islamic Azad Univ of Jiroft Branch. *Int J Curr Res Acad Rev* 2014;2(6):182-7.
7. Karakose T. The relationship between medical students' time management skills and academic achievement. *Studies on Ethno-Medicine* 2015;9(1):19-24.
8. Karim S, Kandy M. Time management skills impact on self-efficacy and academic performance. *J Am Sci* 2011;7(12):127-31.
9. Macan TH, Shamir L, Dipboye RL, Phillips AP. College students' time management: Correlations with academic performance and stress. *J Educ Psychol* 1990;82(4):760.
10. Burns J, Jackson T, Holtzman S, Roberts RD, Mandigo T. Examining the efficacy of a time management intervention for high school students. *ETS Research Report Series* 2013;2013(2).
11. Shuilleabhain AN. Lesson Study in Community of Practice: A Model of In-School Professional Development 2013.
12. Britton BK, Tesser A. Effects of time-management practices on college grades. *J Educ Psychol* 1991;83(3):405.
13. Olmstead JW. Effective Time Management Skills & Practices Self-Assessment Questionnaire. St. Louis: Missouri; 2005.
14. 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.
15. Macan TH. Time management: Test of a process model. *J Applied Psychol* 1994;79(3):381.
16. Androniceanu A. Research on management capacity of medical units for addicts to deliver quality services in time of crisis. *Revista de cercetare si interventie sociala* 2014;47:78.
17. Başak T, Uzun Ş, Arslan F. Hemşirelik yüksek okulu öğrencilerinin zaman yönetimi becerileri. *TAF Preventive Med Bulletin* 2008;7(5):429-34.
18. Afyon. University Students Time Management Skills with the Relationship between Academic Successes [Master Thesis]. Unpublished: Kocatepe University; 2015.
19. Mark T. A comparison between the time management skills and academic performance of mature and traditional-entry university students. *Journals of Higher Educ, University of Keel* 2000.