Original Research Article

A study on university student's time management and academic achievement

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ABSTRACT

Background: Time management is a skill that perhaps impacts the students' academic achievement. The objective of the study is to study the time management skill and perceived academic achievements among university students.
Methods: A cross sectional study was done among medical students studying in one of the private medical colleges of Odisha. Time management questionnaire developed by Britton and Tesser was used as a study tool. It includes 18 questions distributed in 3 dimensions: short-range planning, time attitudes and long-range planning. All the questions were value based on the Likert scale of five value scores. Data was analyzed using descriptive statistics. Means of various dimensions were compared.
Results: 51.90% of the participants possessed moderate to low level time management score. Participants who obtained higher percentages of mark (70-80%) also had high mean score on general time management.24.1% of the participants never write a set of goals for their self for each day and 21.5% never spend time for each day planning. Whereas 48% always keep their desk clear of everything other than what they are working on it, 40.5% sometimes review their class notes, even when a test is not imminent, 37.9% sometimes make a schedule of the activities that they have to do on work days and 37.9% sometimes make constructive use of their time.
Conclusions: To improve academic performance, students are in need of IEC programs in relation to time management.

Keywords: Time management, Academic achievement, University students

INTRODUCTION

A lot of university students complain about shortage of time when asked them to do a certain task, they get frustrated because they are not able to make it before the deadline. On the other hand, others find enough time to meet their friends and complete their assignments with no struggle. Time management is the art of arranging, organizing, scheduling and budgeting one's time for generating more effectiveness work and productivity.

Gerald defined time management as 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.[1] Time management is a priority-based structuring of time allocation and distribution among competing demands since time cannot be stored, and its availability cannot be increased beyond nor decrease from the twenty four hours. Academic achievement is the outcome of education, that is, the extent to which a student, teacher or institution has

achieved their educational goals.[2] Academic achievement is usually measured by examinations or periodic assessment but there is no general agreement on how it is best tested or which aspects are more important. Academic achievement seems to increase when time management skills are well-handled. Prioritization of tasks may make studying less overwhelming and more enjoyable. Academic stress and frustration occurs when students feel the pressure of academic commitments, cramming for exams, rushing through homework and getting minimal sleep because of disorganizations of time. As we can see, time management is quite essential to any university student. Moreover study conducted by Frazier et al shows time management significantly related to academic performance.[3] Effective time management techniques should not only be applied to the students' academic life but to their overall schedule to achieve success and peace of mind. Keeping all this in mind present study was conducted.

Objective

To study the time management skill and perceived academic achievements among university students.

METHODS

Study participants/Study setting

In this study participants were second year medical students, studying in one of the private medical colleges of Odisha.

Study period

From August 2016 to November 2016.

Sampling

Convenience sampling done. Eighty students were participated.

Study tool

The time management questionnaire (TMQ) developed by Britton and Tesser (1991) was used.[4] It includes 18 questions distributed in 3 dimensions: Short-range planning includes 7 questions, Time attitudes include 6 questions and long-range planning includes 5 questions. All the questions were value based on the Likert scale of five value scores: Always (5), frequently (4), sometimes (3), infrequently (2), Never (1). Except for question number 8, 10, 12 and 15, here the responses were reverse. The range of possible scores was 18-90 on the 18 questions of time management scale, 7-35 on the short range planning sub scale, 6-30 on the time attitudes sub scale and 5-25 on the long range planning sub scale. Higher values on the scale correspond to better time management practices.

Data collection technique

A cross sectional study was done. Written consent was obtained from the participants before proceeding for the study. Self-administered questionnaires on demographic information, percentage of marks obtained in the examination (first year MBBS) and TMQ were given to the participants.

Statistics

One questionnaire form was excluded during analysis as it was incomplete. Total participants were 79. Data was analyzed using SPSS version 20 statistical software. Using descriptive statistics: frequency, percentage, means and standard deviation were calculated. Means of various dimensions were compared using independent sample "t" test and one-way ANOVA.

RESULTS

Table number one shows more than half (51.90%) of the participants possessed moderate to low level time management score. Table number two shows slight difference between male and female participants with respect to their mean scores of GTM and their 3 sub scales: Short-range planning, Time attitudes and long-range planning, but the difference was not significant (Table 1 and 2).

Table 1: Time management levels score of the participants.

Time management levels score	Number of participants (%)
High score (58 and above)	38 (48.10)
Moderate score (46-58)	34 (43.04)
Low score (46 and below)	07 (08.86)

Table number three shows non-significant differences among percentages of mark scored by participants (academic achievement) and the mean scores obtained on general time management with their three sub scales. But the participants who obtained higher percentages of mark (70-80%) also had high mean score on general time management and their sub scales except for short range planning (Table 3).

From table number four it is observed that 19% of the participants never make a list of the things that they have to do each day, 11.4% never make a schedule of the activities that they have to do on work days, 12.7% never plan their day before they start it, 24.1% never write a set of goals for their self for each day, 11.4% never had a clear idea of what they want to accomplish during the next week, 21.5% never spend time for each day planning and 5% never set and honor priorities.7.6% always continue unprofitable activities, 7.6% never believe that there is room for improvement in the way they manage their time, 10.1% always find their self-doing things which interfere with their college work simply because

they hate to say "No" to people, 6.3% never feel that they are in charge of their own time, on an average class day, 17.7% always spend more time with personal grooming than doing college work, 5.1% never make constructive use of their time, 5.1% responded that the night before a major assignment is due; they were never working on it, 10.1% always have a set of goals for the entire quarter,

8.9% never keep their desk clear of everything other than what they are working on it, 6.3% responded when they have several things to do, they never think that it is best to do a little bit of work on each one and 10.2% never review their class notes, when a test is not imminent (Table 4).

Table 2: Gender and mean score with SD of GTM along their 3 sub scales.

GTM and sub scales	Gender		P value
	Male	**Female**	
	Mean (SD)	**Mean (SD)**	
Short range planning	21.86 (05.37)	20.14 (05.95)	0.183
Time attitudes	18.91 (03.17)	20.21 (03.71)	0.100
Long range planning	16.97 (03.35)	17.14 (02.51)	0.797
General time management	57.75 (07.93)	57.50 (09.22)	0.898

Table 3: Academic achievement and mean score with SD of GTM along their 3 sub scales.

GTM and sub scales	Academic achievement (percentage of mark)			P value
	50-60%	**60-70%**	**70 - 80%**	
	Mean (SD)	**Mean (SD)**	**Mean (SD)**	
Short range planning	22.60 (08.55)	20.51 (05.34)	21.08 (05.09)	0.578
Time attitudes	17.60 (04.88)	19.55 (02.88)	20.54 (03.72)	0.081
Long range planning	17.60 (03.02)	16.60 (03.01)	17.70 (02.62)	0.271
General time management	57.80 (13.88)	56.66 (07.51)	59.33 (07.88)	0.473

Table 4: Responses on items of GTM.

Items of GTM	Responses				
	Always	**Often**	**Sometimes**	**Rarely**	**Never**
I make a list of the things that I have to do each day.	13 (16.5)	09 (11.4)	25 (31.6)	17 (21.5)	15 (19)
I make a schedule of the activities that I have to do on work days.	10 (12.7)	16 (20.3)	30 (37.9)	14 (17.7)	09 (11.4)
I plan the day before I start it.	14 (17.7)	24 (30.4)	23 (29.1)	08 (10.1)	10 (12.7)
I write a set of goals for myself for each day.	12 (15.2)	06 (07.6)	25 (31.6)	17 (21.5)	19 (24.1)
I have a clear idea of what I want to accomplish during the next week.	09 (11.4)	13 (16.5)	21 (26.6)	27 (34.2)	09 (11.4)
I spend time each day planning.	09 (11.4)	11 (13.9)	18 (22.8)	24 (30.4)	17 (21.5)
I set and honor priorities.	23 (29.1)	26 (32.9)	19 (24.1)	07 (08.9)	04 (05)
I continue unprofitable routines or activities.	06 (07.6)	18 (22.8)	27 (34.2)	17 (21.5)	11 (13.9)
I believe that there is room for improvement in the way I manage my time.	29 (36.7)	17 (21.5)	21 (26.6)	06 (07.6)	06 (07.6)
I find myself doing things which interfere with my college work simply because I hate to say -No to people.	08 (10.1)	16 (20.3)	21 (26.6)	20 (25.3)	14 (17.7)
I feel I am in charge of my own time, by and large.	25 (31.6)	24 (30.4)	19 (24.1)	06 (07.6)	05 (06.3)
On an average class day I spend more time with personal grooming than doing college work.	14 (17.7)	20 (25.3)	26 (32.9)	13 (16.5)	06 (07.6)
I make constructive use of time.	10 (12.7)	25 (31.6)	30 (37.9)	10 (12.7)	04 (05.1)
The night before a major assignment is due, I still working on it.	26 (32.9)	29 (36.7)	15 (19.0)	05 (06.3)	04 (05.1)
I have a set of goals for the entire quarter.	08 (10.1)	20 (25.3)	26 (32.9)	07 (08.9)	18 (22.8)
I keep my desk clear of everything other than what I am currently working on.	38 (48.0)	13 (16.5)	11 (13.9)	10 (12.7)	07 (08.9)
When I have several things to do, I think it is best to do a little bit of work on each one.	19 (24.1)	20 (25.3)	27 (34.2)	08 (10.1)	05 (06.3)
I review my class notes, even when a test is not imminent.	11 (13.9)	14 (17.7)	32 (40.5)	14 (17.7)	08 (10.2)

Figure in parenthesis indicate percentages.

Whereas 31.6% of the participants sometimes make a list of the things that they have to do each day, 37.9% sometimes make a schedule of the activities that they have to do on work days, 31.6% sometimes write a set of goals for their self for each day, 30.4% often plan their day before they start it, 32.9% often set and honor priorities, rarely 34.2% had a clear idea of what they want to accomplish during the next week, 30.4% rarely spend time for each day planning, 36.7% always believe that there is rooms for improvement in the way they manage their time, 31.6% always feel they are in charge of their own time, 34.2% sometimes continue unprofitable activities, 26.6% sometimes find their self-doing things which interfere with their college work simply because they hate to say "No" to people, on an average class day 32.9% sometimes spend more time with personal grooming than doing college work, 37.9% sometimes make constructive use of their time, 36.7% responded the night before a major assignment is due, they are often working on it, 32.9% responded sometimes they have a set of goals for the entire quarter, 34.2% responded when they have several things to do sometimes they think it is best to do a little bit of work on each one, 40.5% sometimes review their class notes, even when a test is not imminent and 48% always keep their desk clear of everything other than what they are working on it.

DISCUSSION

The results of this study showed that more than half (51.90%) of the participants possessed moderate to low level time management score. Khatib in his study observed that three fourth (74.5%) of the participants possessed moderate to low level time management score.[5] The results mean that the students lack a sufficient amount of knowledge about how to manage their time efficiently. These results were in consistent with study conducted by Pehlivan, he observed 92.25% of the participants had moderate to low level time management score.[6]

When the findings of research are analyzed with respect to the gender variable, it is observed that slight difference between male and female participants with respect to their mean scores of GTM and their 3 sub scales: Short-range planning, Time attitudes and Long-range planning. Male score more in GTM and Short-range planning whereas female score more in Time attitudes and Long-range planning. But the differences were statistically not significant. The findings is in agreement with Omolola study, he concluded that both male and female undergraduates are affected by time management and there is no significant difference in the impact of time management on student's academic performance on the basis of their gender.[7] Subramanian in his study on time management and academic achievement of higher secondary school students observed boys, co-education and girls school students differ significantly in the time management at 0.01 levels.[8] Further, he also observed

that the girls school students have more Time management than boys and co-education school students.

The study shows non-significant differences among percentages of mark scored (academic achievement) by students and the mean scores obtained on general time management with their three sub scales. The results of the study revealed that students' short range planning, time attitude and long range planning did not separately and jointly predict their academic performance. This result was supported by the findings of Elizabeth et al and Yilmaz et al they also observed no significant relationship between the time management behavior and academic achievement.[9,10] But the participants who obtained higher percentages of mark (70-80%) also had high mean score on general time management and their sub scales except for short range planning in this study.

The study shows 29.1% of the students always set and honor priorities, 24.1% sometimes, 8.9% rarely and 5% never set and honor priorities. Oyuga et al in their study mentioned 41.6% of the students always do things in order of priority, 39.2% sometimes, 10.8% rarely and 8.4% of the students never do things in order of priority.[11] The findings are in agreement to the words echoed by Ugwulashi who emphasized that students always do things in order of priority.[12] Denlinger in their study emphasized that majority of the students do not plan well for the academic studies.[13] The findings are in agreement to the sentiments echoed by this study 29.1% sometimes plan their day before they start it, 10.1% rarely and 12.7% never plan their day before they start it. 22.8% sometimes spend time for each day planning, 30.4% rarely and 21.5% never spend time for each day planning.

In this study it is observed that only 12.7% students always make constructive use of their time as compared to 37.9% of the students who sometimes make constructive use of their time and only 10.1% students always have a set of goals for the entire quarter. The findings were in contrast with the findings mentioned by Oyuga et al, they mentioned more than half (51.4%) of the students always make constructive use of their commuting time as compared to 28.7% of the students who only sometimes make constructive use of their commuting time and 80.8% of the students always have a clear idea of what they want to accomplish during the coming semester. Oyuga et al also mentioned 14% of the students rarely able to meet deadlines without rushing at the last minute while 7.7% never meet deadlines without rushing at the last minute. The findings are in contrast with the findings of this study; in this study it is observed that the night before a major assignment is due 32.9% always and 36.7% often working on it. Denlinger in his study emphasized that to improve academic performance, self-attitudes and involvement in activities that keep schedules busy will help enforce the principle influence; time management practices. The findings are in agreement to the findings by Fakude who indicated that most participants were affected by external factors as

compared to their internal locus of control.[14] Similar results obtain in this study on an average class day 17.7% always while 25.3% often spend more time with personal grooming than doing college work. This implies that 43% of the students spend more time with personal grooming than doing college work. 22.8% often continue unprofitable activities in this study. To improve academic performance, self-attitudes and involvement in activities that keep schedules busy will help enforce the principle influence; time management practices.

CONCLUSION

To conclude more than half of the students possessed moderate to low level time management score. Gender wise non-significant differences observed on mean scores of general time management and their dimensions. Students who obtained higher percentages of mark also had high mean score on general time management and their dimensions except for short range planning. Approximately only one third of the students always set and honor priorities, emphasized the students always do things in order of priority. Majority of the students do not always plan their day before they start it and not always spend time for each day planning. Approximately only ten percent of the students always have a set of goals for the entire quarter.

To improve academic performance, students are in need of IEC programs in relation to time management.

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