



# Academic Performance of University Graduate Students with reference to Time Management Behavior Skill

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## Abstract

In recent years, the importance of time management behaviour in organizational context has been increased significantly. Effective time management is associated with greater academic achievement and lower levels of stress in students. However, many students find it difficult to make a balance between students' study time they require and the actual time they get for study. Effective time management is a skill which needs to be acquired by students to enhance their academic achievement. This article examines the effect of time management skill of university students on their academic performance. The Time Management Questionnaire developed by Britton and Tesser (1991) was employed to find out the relationship between these variables. Correlation analysis and regression analysis are used to determine which of the dimensions of time management is more strongly associated with better academic performance. It was found that all the time management skills significantly influence university students' academic performance. The study also revealed a significant relationship between all the components of time management skills

**Keywords:** Time management, University students, Regression analysis, Academic performance

Time management refers to the process of planning and exercising conscious control of time and utilizing it on specific activities. It is an indispensable asset possessed by every student equally and its effective management brings positive learning outcome in students. Time management is the art of arranging, scheduling and budgeting one's time purposefully to achieve specific objectives (Mohanty, 2003, Harris, 2008). It is a system for controlling and using time as efficiently as possible (Maitland, 1999). It is also viewed as a process by which an individual obtains control over the timing and the content of what he does (Oncken & Wass, 1985) and as what he can accomplish with time (Mackenzie 1990). David (1999) defined the term as the management of time in order to make the most out of it whereas, Allen (2001) stated that it includes all of the practices that individuals follow to make better use of their time.

Research findings indicate that effective time management is associated with greater academic achievement (McKenzie & Gow, 2004; Trueman & Hartley, 1996) as students gain knowledge of coping strategies that permit them to negotiate competing demands. Scherer, Talley, and Fife (2017) found that non cognitive individual behaviors such as a student's time perspective are effective predictors of academic outcomes. The authors pointed out that students with poor time management approaches find it hard to plan their work in advance. This hardship may lead them feel nervous towards the end of a course especially when their performance is to be assessed. Ling, Heffernan, and Muncer (2003) found a close association between

student performance and their ability to manage time effectively. They found that students perceived with poor time management is closely associated with negative examination outcomes.

The influence of the ability to stay on a task for extended period of time on academic achievement was investigated by Strongman and Burt (2000). The investigators suggest that students with higher academic standing took fewer and shorter breaks. Though they do not necessarily suggest a causal relationship (in either direction) between academic achievement and ability to stay on task, many studies have found that high level of motivation help students to focus on their work (Dupeyrat & Mariné, 2005) and are likely to lead to success in general (Deci & Ryan, 2000) as well as specific success in student outcomes (Harackiewicz, Barron, Tauer, & Elliot, 2002; Husman & Lens, 1999).

### **Rationale of the Study**

Time management is extremely important, especially when it comes to university students because it boosts their grades and enhances their productivity (Laurie & Hellsten, 2002). It is one of the keys to higher academic achievements (Kelly, 2004). Various literatures have shown the significant influence of time management attitude and time management skill of university students on their academic achievement. Researches on time management skill reveal that majority of students possesses moderate level and only a small section of students possess high level of time management skills (Yilmaz, Yoncalik & Bektaş, 2006). Good time management skills have been identified as having a boosting effect on stress (Misra & McKean, 2000) and a key indication of higher performance and lower stress and anxiety in higher education (Kearns & Gardiner, 2007). However, many students find it hard to regulate both their studies and their external lives (Van der Meer, Jansen, & Torenbeek, 2010) leading to time mismanagement, poor sleep patterns and increased levels of stress (Hardy, 2003).

Britton and Glynn (1989) assert that time management skill viz. effective time planning of the students, not falling into time spending traps and attitudes towards time are very important to have success at universities. Time planning is the determination of the purposes and priorities of activities (Can, 2000). Students' failure to adapt to time planning causes time traps. The instability, irresponsibility, uncertainty of the purposes, not to determine the priorities, distraction, postponement, thinking about details etc. are among those traps (Efil, 2000).

An efficient and effective use of time is possible by developing a positive attitude towards time management. However, research findings show that students don't use their time efficiently, they only spend time (Latif *et. al.*, 2005). The effect of positive attitude towards time management in enhancing students' academic performance and reducing their role confusion is reported by Macan at el (1990). Misra and McKean (2000) investigated the relationship between academic stress, anxiety, time management and free activities and reported that some part of the academic stress is related to the perception and attitudes of students towards time management.

An analysis of the above studies suggested that time management skill is a determining element of students' academic achievement. In spite of knowing about the significant impact of time management on academic achievement, this relationship is not given much importance by students (Sevari & Kandy, 2011). A lot of university students complain about running out of time when asked to do a certain task and get frustrated because they fail to complete it before the deadline. Besides, the free and flexible environment of the university may distract students from their study who haven't mastered the time management skill.

Therefore, the present study was conducted to examine the impact of time management skill on academic achievement. The study was also carried out to determine the individual factors of time management that affect the academic achievement of university students.

## Purpose of the Study

The purpose of this research was to determine the relationship between time management skills and academic achievement of university students. The following objectives were framed to achieve the purpose:

1. To find out the relationship between time management skills and academic achievements of university students.
2. To explore the concealed association between time management skills and academic achievement of university students
3. To find out whether each subtitle of time management skills has anything at all to contribute to the prediction of academic achievement of university students

## Hypotheses

1. There is no significant relationship between time management skills and academic achievements of university students.
2. The components of the time management (time planning, time attitude and time traps) are significantly correlated to the academic achievements of university students.
3. None of the subtitle of time management skills will contribute significantly to the prediction of academic achievements of university students.

## Classification of sub hypothesis

| Hypotheses   | Tools for analysis       | Code           |
|--|--------------------------|----------------|
| Time management is highly correlated with students' academic achievement                                     | Correlation              | H <sub>1</sub> |
| The components of time management have a significant relationship with the academic achievements of students | Regression & Correlation | H <sub>2</sub> |
| Time management skills predict student's academic achievement  | Regression               | H <sub>3</sub> |

## Research Design:

The present research was descriptive in nature conducted through survey in Kanpur district of Uttar Pradesh. The research participants for this study include 220 students selected by random sampling technique.

## Data Collection Tools

For this study, students' academic performance is defined in terms of CGPA of the last qualifying examination. The Time Management Questionnaire developed by Britton and Tesser (1991) was employed on them to find out if there exists any relationship between time management skills and academic performance of university students. The questionnaire consists of three subtitles viz. Time Planning with 16 items, Time Attitude with 17 items and Time Trap with 4 items. A five point Likert Scale was used to record the data. It starts from 'Never' and ends at 'Always' with 'Rarely', 'Sometimes', and 'Often' in between respectively.

## Data Analysis

The information gathered was used to measure the association between time management skill and academic achievement. The collected data was transferred into SPSS 11 (Statistical Package for Social Sciences) program. Responses to the Likert scale statements were converted to numerical values for calculating time management behavior and academic performance. Pearson r values were calculated

between dependent and independent variables to identify significant correlations in the data. Multiple linear regression was performed between students' academic performance and time management behavior skill to determine the predictive value of these models for student performance based on time management behaviour skills.

## Findings

**Table 1**

Relationship between time management skill and academic performance

| Respondent                 | N   | Mean | S.D   | Correlation (r) | P-Value |
|----------------------------|-----|------|-------|-----------------|---------|
| Time management techniques | 220 | 2.39 | 0.421 | 0.317           | 0.03    |
| Academic performance       | 220 | 2.45 | 0.758 |                 |         |

The  $r$  value of 0.317 in table 1 indicates a significant but relatively low relationship between university students' time management and academic performance at  $p=0.03<0.05$ . Therefore, it can be concluded that there exists a significant relationship between time management and academic performance of university students. Researches have shown that time management skills are positively related to intrinsic motivation. This time management is possible through self-motivation; practical performance, ability and motivation of students (Brigitte, Claessens, Eerde, & Rutte, 2005).

**Table 2**

Correlation between factors of time management skills and academic performance

|                                | 1 | 2       | 3       | 4       | 5       |
|--------------------------------|---|---------|---------|---------|---------|
| 1. Time planning               | - | 0.351** | 0.183** | 0.930** | 0.181** |
| 2. Time attitude               |   | -       | 0.279** | 0.310** | .059*   |
| 3. Time traps                  |   |         | -       | 0.425** | 0.128*  |
| 4. Total time management skill |   |         |         | -       | 0.317*  |
| 5. Academic achievement        |   |         |         |         | -       |

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

\*Correlation is significant at the 0.05 level (2-tailed).

An analysis of the distribution of relationship between time management skills and academic achievement of the students as reflected in Table 2, has revealed that there is a significant relationship [ $r= 0.181 p<.01$ ] between time planning and academic achievement and so also between time traps and academic achievement [ $r= 0.128 p<.05$ ]. Accordingly, it can be concluded that the more the students plan their time and more they are aware of the time traps, the more the academic achievement of students. The results of the studies of Ros Garcia *et al.*, (2004), Latif *et al.*, (2005), Demirtaş *et al.*, (2007), Britton and Tesser, (1991), Truman and Hardley (1996), Sırmacı (2003), Könihg and Keleinman (2007), Alay (2000) support the results of this research.

When the determination coefficient of time planning and time trap of  $r^2 = .03$  and  $r^2 = .09$  respectively are taken into account, it can be suggested that 3% and 9% of the total variation of the student success may be caused because of time planning and time traps. The  $r$  value (0.59) is significant at  $\alpha=0.05$  as  $p<0.05$ . It is therefore concluded that there also exists significant relationship between university students' time attitude and their academic performance. In his research, Macan (1990) also stated that university students with a positive attitude towards time planning show better performance and low role confusion.

The Pearson  $r$  value (0.317) is significant at  $\alpha=0.05$  for correlation between time management skills and academic achievement. It is therefore concluded that there exists a positive and meaningful relationship between time management skills and academic achievement of university students [ $r = .317$   $p<.05$ ]. The determination coefficient ( $r^2 = .05$ ) suggested that 5% of the total variation of the student achievement is caused from students' time management skills. From the above discussion, it can be concluded that time planning and time traps serve as important factors in deciding the academic achievement of students whereas time attitude does not significantly influence the academic achievement of university students.

The results of inter-correlation among the dimensions of time management skills, as displayed in table 2, shows that all the dimensions have statistically significant correlation with each other. The correlation coefficient indicates that all the dimensions are also positivity correlated to each other.

**Table 3**

Stepwise regression to predict students' academic performance  
from time management skills

(n=220)

| Sl. No. | Model<br>Time Management Skills                          | Standardize d coefficient ( $\beta$ ) | Standar d error      | t value                  | Adjusted R2 | F value |
|---------|--|---------------------------------------|----------------------|--------------------------|-------------|---------|
| 1       | Step I<br>Time planning                                  | 0.47                                  | 0.05                 | 7.42*                    | 0.23        | 53.79   |
| 2       | Step II<br>Time planning<br>Time attitude                | 0.46<br>-0.19                         | 0.04<br>1.27         | 7.77*<br>-3.35*          | 0.26        | 35.26   |
| 3       | Step III<br>Time planning<br>Time attitude<br>Time traps | 0.49<br>-0.21<br>0.17                 | 0.04<br>1.25<br>1.18 | 7.73*<br>-3.25*<br>2.72* | 0.27        | 26.01   |

\*Significant at 5% level

Table 3 depicts the stepwise regression analysis predicting the academic achievement of university students. The regression model reveals time planning, time attitude and time traps as significant predictors of students' academic performance. In step I, time planning alone contributed to 23 percent variance in academic performance of students. The model for time planning is significant ( $F = 53.79$ ,  $p<0.05$ ). When time attitude was added, it accounted for 26 percent variance towards the academic performance of university students and the model is significant ( $F = 35.26$ ,  $p<0.05$ ). Further, time planning of students in conjunction with time attitude and time traps contributed to 27 percent variance and the regression data produced F-ratio value significant at 0.05 level ( $F = 26.01$ ). The results of the studies of Ros Garcia *et al.*, (2004), Latif *et al.*, (2005), Demirtaş *et al.*, (2007), Britton and Tesser, (1991), Truman and Hardley (1996), Sırmacı (2003), Köniğ and Keleinman (2007), Alay (2000) also support the results of this research.

The analysis of t test relating to the regression coefficient has shown that each of the three variables is effective predictor of academic achievement of students. Though many researchers confirmed the significant relationship between time management skills and the academic achievement of students, the results of the present study is in sharp contrast to the findings of Swart (2010) which indicated no



statistically significant relationship between time management skills and the academic achievement of (engineering) students.

## Conclusion

Results of the study reveal a positive and significant relationship between time management skills and academic performance of university students. It also indicates a meaningful relationship among all the dimensions of time management skills viz, time planning, time attitude and time traps. From the regression equation model it is also evident that each of three dimensions of time management skills are important predictors of academic performance of students. The study demands proper planning and concern of time on the part of university students to achieve better academic achievement.

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