Relationship between University Students Time Management Skills and Their Academic Performance

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ARTICLE DETAILS

Abstract

The purpose of this study is to determine the relationship of time management skills on the academic achievement of university students. The study used quantitative research design. The population of the study consisted of all Bachelor level students of public sector universities in Malakand Division. A random sample of 900 Bachelor level students from three universities of Malakand division participated in the study. Data were collected through Time Management Behavior Scale (TMBS) developed by Macan, Shahani, Dipboye and Phillips (1990) consisting of 34 items based on five-point rating scale. The students were also requested to provide their results in the last semester. Data were analyzed by using mean, standard deviation, independent samples t-test, and Pearson’s coefficient correlation. The university students exhibited moderate level of time management skills. No significant difference was found between the perceptions of male and female students. A positive significant moderate relationship was found between the four constructs of TMBS and students academic performance. It was concluded that the students who have good time management skills tends to have higher academic achievement and decreased time management skills could result in decreased outcomes. The study recommended that university students should concentrate on developing their capacities in time management areas through trainings, workshops and seminars to increase their academic achievement.

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JEL Classification: J22, J29, P36

1. Introduction

Students often face the problem of not managing their time properly for academic and non academic activities. Consequently, they may not be able to get good marks in their final examination and may not be able to reach their destination. The duration of semester is very short. Up to twelve years of school education, they appear in annual system of examination. They have sufficient time for their studies and other activities. But when they enter to
university education their system of examination has been changed. The annual system of examination has been replaced to semester system of examination. Here the duration of time is very short and the amounts of activities are more. They will have to manage their time to cope with this system.

There are many factors responsible for the performance of university students. Both academic and non academic factors are being responsible to affect the students’ performance. One of the major aims of higher education is to enable the students to develop the critical thinking of students and sharpen their mind to solve their own problems through teaching, feedback and use of appropriate resources to improve their knowledge. One of the non academic factors is time management skill which affects the students’ performance. Students who manage their time effectively perform well and have low level of stress and anxiety (Davis, 2000; Kearns & Gardiner, 2007) and satisfied with their work (Macan, 1994). On the other hand, a student who cannot keep balance between their academic and personal life may face the problems like dissatisfaction, somatic tension, having poor sleep habit and perform poorly (Hardy, 2003; Van der Meer, Jansen, & Torenbeek, 2010). Time management is the way of controlling and monitoring one’s time (Eilam & Aharon, 2003). Claessens, van Eerde and Rutte (2007: 262) have defined time management as “behaviours that aim at achieving an effective use of time while performing certain goal-directed activities”.

Research findings show a positive relationship between time management skills and academic achievement of students (McKenzie & Gow, 2004). On contrary, students having poor time management skills perform poorly in examinations (Ling, Heffernan, & Muncer, 2003; Scherer, Talley, & Fife, 2017). Macan et al., (1990) found that students who perceived control of time significantly perform better in academics, high life satisfaction, less role overload, less role ambiguity, and fewer job somatic and job induced tensions. Students having capacity to manage time effectively can develop good study habits and strategies for success (Krause & Coates, 2008). Britton and Tesser (1991) found that time management behaviour may predict the grade point average of the students. Adams and Blair (2019) found a significant correlation between students’ perceived control of time and cumulative grade point average.

Most of the researchers perceived that students having good time management skills tend to get good marks in examination and having low level of anxiety. However, many students find it difficult to keep a balance between their studies and day to day life activities. These findings were only restricted to European countries and developed countries. The literature shows that this area has remained in ignorance in the local setting. Therefore, to fill this gap the current study aimed to find out the relationship between university students time management behaviour and their academic achievement should be investigated to reach concrete results in the field of education.

Research Questions
To reach to the valid conclusions, following research questions were formulated:

- At what level do the university students demonstrate the time management behaviour?
- Does gender has any effect on time management behaviour of university students?
- Whether time management behaviour of university students is associated with cumulative grade point average?

2. Research Methodology
The nature of the study was quantitative. Descriptive (survey) method was used to collect data from the respondents. The population of the study consisted of all undergraduate level students (BS students) who were studying in the academic session 2017-18. A random sample of three universities was selected from Malakand division. Then, a sample of 900 undergraduate students was selected in stratified sampling. A random sample of 300 undergraduate students was selected from each university.

The researchers used Time Management Behavior Scale (TMBS) developed by Macan et al., (1990) consisting of 34 items based on five-point rating scale ranging from seldom true to very often true was used to collect data. This scale was used for data collection because it was a valid, reliable and predictive for measuring students’ reflection of their time management behaviour strategies and their academic load (Adams & Blair, 2019; Misra & McKean, 2000). This scale is further distributed into four major attributes consisted of setting goals and priorities, mechanics of time management, preference for organizations and perceived control of time. The first attribute setting goals and priorities consisted of 10 items, the second attribute mechanics of time consisted of 11 items, the third attribute preference for organizations consisted of 08 items and the fourth attribute consisted of 05 items. The reliability of the scale was established through inter item consistency and was found 0.76, which was more than that of the
original scale 0.68 calculated by Macan et al., (1990). The Cronbach’s alpha value was also calculated for each attribute. The inter item reliability for setting goals and priorities was 0.78, for mechanics of time was 0.79, for preference for organizations was 0.73 and for perceived control of time was 0.70.

The researchers distributed 900 survey packets among undergraduate students of sampled universities. A written consent letter was also attached with each questionnaire to invite the participants to participate and rank their opinion on continuum. The consent letter also consisted of describing purposes of study and ensuring confidentiality and anonymity for the institution and teachers. Six hundred and seventy filled questionnaires were collected from the respondents. Out of which seventeen were un-useable and were discarded. Thus 653 useable questionnaires were used for data analysis with a final response rate 72.55%.

3. Data Analysis
The researchers used parametric tests to analyze the collected information. Negatively worded items were reverse scored. The researchers analyzed the undergraduate students’ demographic information through frequency and percentage. The objectives related to determining the level of time management behaviour was determined through mean and standard deviation scores. Using the mid-point mark 3.0 on the five points Likert scale, it was assumed that a statement having mean score of more than 3.0 will demonstrate high level of evidence of time management. To find the gender effect of the students independent samples t-test was used. Pearson’s co-efficient correlation was used to find the relationship between students’ perceived time management behaviour and their academic performance. Out of 653 respondents, 407 (62.33%) were male and 246 (37.67%) were female.

Table: 1 Undergraduate students time management level

<table>
<thead>
<tr>
<th>Time management attributes</th>
<th>Number of Items</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting goals and priorities</td>
<td>10</td>
<td>653</td>
<td>3.56</td>
<td>0.567</td>
<td>2</td>
</tr>
<tr>
<td>Mechanics of time</td>
<td>11</td>
<td>653</td>
<td>3.44</td>
<td>0.644</td>
<td>4</td>
</tr>
<tr>
<td>Preference for organization</td>
<td>08</td>
<td>653</td>
<td>3.61</td>
<td>0.592</td>
<td>1</td>
</tr>
<tr>
<td>Perceived control of time</td>
<td>05</td>
<td>653</td>
<td>3.49</td>
<td>0.813</td>
<td>3</td>
</tr>
<tr>
<td>TMBS</td>
<td>34</td>
<td>653</td>
<td>3.52</td>
<td>0.523</td>
<td></td>
</tr>
</tbody>
</table>

The above table shows the perceptions of students about their time management behaviour. The mean scores show that each construct has more than the mid-point 3.0, which shows that the level of time management behaviour of undergraduate students for each construct was found high. The mean score for the construct preference for organization was found to be higher than that of other constructs, this shows that students gave much importance to manage their time than that of other constructs. On the other hand, the mean score for the construct mechanics of time was found to be lower than that of the other constructs on the scale, which demonstrated that undergraduate students perceived this construct to be least important to manage their time than that of the other constructs. The overall time management behaviour level of undergraduate students was found to be high.

Table: 2 Comparison between male and female students’ time management behavior

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>407</td>
<td>3.57</td>
<td>0.572</td>
<td>1.356</td>
<td>0.07</td>
</tr>
<tr>
<td>Female</td>
<td>246</td>
<td>3.51</td>
<td>0.541</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above table shows the difference in the perceptions of undergraduate students regarding time management behaviour. As the value of t-statistics was found greater than that of the significance level value, therefore, no statistical significant difference was found between the perceptions of male and female students regarding time management behaviour.
Table: 3 Relationship between TMBS constructs and Academic Performance of Students

<table>
<thead>
<tr>
<th>Variables</th>
<th>Relationship</th>
<th>SGP</th>
<th>MTM</th>
<th>PFO</th>
<th>PCT</th>
<th>TMBS</th>
<th>AP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting Goals and Priorities</td>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanics of Time Management</td>
<td>Pearson Correlation</td>
<td>.427**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>199</td>
<td>199</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preference for Organization</td>
<td>Pearson Correlation</td>
<td>.662**</td>
<td>.505**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>200</td>
<td>199</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Control of Time</td>
<td>Pearson Correlation</td>
<td>.247**</td>
<td>.329**</td>
<td>.452**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>200</td>
<td>199</td>
<td>200</td>
<td>200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Management Behavior Scale</td>
<td>Pearson Correlation</td>
<td>.791**</td>
<td>.716**</td>
<td>.859**</td>
<td>.674**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>199</td>
<td>199</td>
<td>199</td>
<td>199</td>
<td>199</td>
<td></td>
</tr>
<tr>
<td>Academic Performance of Students</td>
<td>Pearson Correlation</td>
<td>.369**</td>
<td>.434**</td>
<td>.475*</td>
<td>.428**</td>
<td>.489**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.007</td>
<td>.000</td>
<td>.013</td>
<td>.001</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>200</td>
<td>199</td>
<td>200</td>
<td>199</td>
<td>200</td>
<td>200</td>
</tr>
</tbody>
</table>


The above table shows the relationship between TMBS constructs scores and total scores of student’s Academic Performance. The results show that there is positive significant moderate relationship between MTM and SGP (.427); positive significant strong relationship between PFO and SGP (.662) and positive significant moderate relationship between PFO and MTM (.505). There is positive significant weak relationship between PCT and SGP (.247); PCT and MTM (.329) and positive significant moderate relationship between PCT and PFO (.452). The results also shows that there is positive significant strong relationship between TMBS and SGP (.791); TMBS and MTM (.716), TMBS and PFO (.859); and TMBS and PCT (.674). On the other hand, there is positive significant moderate relationship between AP and SGP (.369), AP and MTM (.434); AP and PFO (.475); AP and PCT (.428); AP and TMBS (.489) respectively.

5. Discussion
The findings of the study show that undergraduate students exhibit high level of time management behaviour. There was no statistical significant difference between the time management behaviour of male and female undergraduate students regarding their time management behaviour. There is moderate positive significant relationship between undergraduate students’ time management behaviour and their academic performance. Students who manage their time effectively are expected to show good results.

The mean score of time management behaviour was found higher than the cutoff point 3.0, which shows that undergraduate students time management level are high. This shows that students who are enrolled in semester system are well aware of the sensitivity of limited time. They are aware in advance about semester schedule. Therefore, they do planning according to the set schedule. They try to achieve target goals through doing short and long range planning. They prioritize their tasks according to their importance. They set to-do list for each day, week and moth through short range planning. Similarly, they set long term goal i.e. semester based goals which is to perform well in the semester. They try to achieve these long term goals through long range planning. The mean
scores for all the four constructs were found more than the mid-point 3.0, which shows that students manage their time by setting goals and prioritizing the tasks, making to-do list and plan consciously and realistically to achieve set goals through short and long range planning, and effectively handling interruptions that destruct them from their study. These results were testified by many other studies which have been conducted in different western and other countries (Kaya, Kaya, Palloş, & Küçük, 2012; Mohamed, Hamal, & Mohamed, 2018; Razali, Rusiman, Gan, & Arbin, 2018).

The study also found no statistical differences between the male and female undergraduate students about perceived control of time. Both the gender takes care of the available time and utilized it efficiently and effectively. They set goals and prioritize tasks, plan and make to-do lists, organized their workplace and handle interruptions effectively and perceived that they have control over the use of their time. Many studies conducted internationally confirmed the results of this study (Adams & Blair, 2019; Razali, Rusiman, Gan, & Arbin, 2018) while many have found significant difference regarding gender (Karakose, 2015; Kaya, Kaya, Palloş, & Küçük, 2012).

It was found that there is moderate positive relationship between time management behaviour of undergraduate students and their academic achievement. All the sub categories of the time management behaviour have moderate positive relationship with academic performance of the undergraduate students. It shows that if students’ academic and personal life is well organized then they will achieve higher grades and vise versa. These results have been confirmed and testified by many researchers throughout the world in different fields of studies like engineering and medical (Adams & Blair, 2019; Britton & Tesser, 1991; Burt & Kemp, 1994; Karakose, 2015; Kelly, 2002; Macan, 1994; Razali, Rusiman, Gan, & Arbin, 2018).

6. Conclusions
Following conclusions were drawn on the basis of study findings:

- The undergraduate students’ time management behaviour was found of high level. Students believed that practices like setting goals and priorities, planning and scheduling, handling interruptions and well-organized workspace and having positive attitude towards time management.
- No significant difference was found in time management behaviour of undergraduate students by gender. Both gender considered time management equally important in their academic and personal life.
- A positive moderate significant relationship was detected between undergraduate students’ time management behaviour and academic performance. The scores on time management behaviour scale was positively significantly associated with students cumulative point average scores. The increase in time management behaviour of students accompanies with the increase in academic achievement of the students.

7. Recommendations
Following recommendations and suggestions are offered to undergraduate students and university officials.

- It is recommended that undergraduate students must study books related to time management strategies through which they will get information about the skills, strategies and practices to manage their time efficiently and effectively.
- The university officials should arrange seminars and workshops for students to make them sensitize about managing time and increase their productivity. Through this they can maintain a balance between their academic and personal lives.
- Students should recognize that managing time will help them to maximize their academic performance and quality of life. For this seek to learn skills like setting goals, prioritize the tasks on urgency basis, accomplish for short and long term goals, schedule and planning their activities, handling interruptions and organize workplace and have positive attitude towards use of time.

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