INFLUENCE OF TIME MANAGEMENT TO ACADEMIC PERFORMANCE: A STUDY OF STUDENTS IN HANOI, VIETNAM

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Abstract

Time management is important and it may affect an individual's overall performance and achievements. For university students, time management plays a vital role in improving their academic performance. Although there have been a number of studies from all around the world showing the relationship between time management and student learning outcomes, in Vietnam, the relationship has not been adequately explored and poorly understood. This study aims to investigate the relationship between students' time management and academic performance. By using quantitative methods with a sample of 455 students studying in economics and business administration fields, the research reveals that two factors namely Planning and using time management tools and Improvement and adjustment positively impact on students' academic performance. Based on analysis, several recommendations are given for students to improve their time management skills.

Keywords: Academic performance, students, time management.

1. Introduction

Students are the key assets of universities. Student's academic performance plays an important role in producing the best quality graduates who will become high quality human resource and will be responsible for the country's economic and social development. Academic achievement is one of the major factors considered by employers in recruitment of labour, especially of fresh graduates. Thus, students need to put the greatest effort into their studies to obtain good grades and to prepare themselves for future opportunities in their career as long as to fulfil society's demands.

There are numbers of factors influencing students' academic performance. Among

them, time management is recognized as a significant factor. Koch (1998) pointed out that time management is considered a very important element for personal and corporate success, especially in the professional environment. For individuals, time plays an important role in completing tasks on time, and in business, every minute can be converted into profit. According to Macan et al. (2000), the secret to achieving success in life is effectively managing the resource that everyone possesses equally, which is time in this case.

In higher education, students from different majors, especially students in economics and business administration, believe that academic success depends on such objective factors as intelligence, assignment accomplishment ability, passing final exams, etc. (Hansen, 2000). Others think it depends on personal time management (Eliseo P. Marpa, 2014; Barbara et al., 2015).

In fact, most university students these days are often prone to falling into unprofitable activities, which in turn affects the time and quality of other jobs. Instead of considering the urgency and importance of the remaining jobs, many of them tend to do things they enjoy or what are easy first. Besides, most students of the current generation are not aware of the importance of planning. As a result, they often neglect important tasks or do not have time for unexpected ones. This may have a bad effect on their daily life in general and academic performance in particular (Ali et al., 2009).

The objective of this study is to investigate the relationship between time management and academic performance of students in Hanoi, Vietnam. The quantitative method is applied with a convenient sample of 455 students studying in economics and business administration. *Based on analysis of the relationship, the study hopes to come up with several recommendations for students and higher education institutions to improve students' time management skills and academic performance.*

2. Literature and hypothesis development

Time management

Shellenbarger (2009) views time management as behavioural change techniques that help people get organized, clarify their thinking and increase their outputs. In this study, the outcomes are learning outcomes. The measure of students' academic performance used in this paper is the Great Point Average (GPA) - a measure supported by the studies of some authors such as Adebayo (2015), Kaushar (2013), and Jalagat (2016).

There are many different ways for effective time management. According to David McDonald (1983), time management consists of four elements: planning, scheduling, monitoring, and control. Jo-Ana D. Chase et al. (2013) suggested that time management approaches include monitoring, setting goals, prioritizing, planning, commiting rights and time analysis.

Based on previous studies, the research team argues that the simplest approach to time management is from consciousness to action. Having positive thoughts helps form good time management habits. Time management routines include planning for certain time periods, testing and evaluating and improving process use of time. At the same time, a person should use time management tools such as notebooks, time management applications, time management matrices, and innovative tools such as 5S, Kaizen, etc.

Previous researches

There has been a growing concern over the relationship between time management and learning outcomes for the last few years. In general, many research and articles from all over the world have indicated this relationship in order to improve students' learning outcomes through time management. However, in Vietnam, there have been several researches on this issue and they mostly were conducted in the South of Vietnam.

In 2014, Miqdadi and colleagues conducted a study on the relationship between time management and academic performance of first-year and second-year male students at Petroleum Institute in Abu Dhabi. The respondents did not include female students and international students because the authors believe that their habits and lifestyles can affect and make a difference in time management habits. This study has come to a conclusion that there is a relationship between time management and academic performance of the male PI Student in UAE. Research has shown that male students tend to use their time inefficiently, leading to unsatisfactory academic results. However, this study has only been conducted on male students of the technical school and has not yet reached female students, so it cannot be generalized to all types of students.

The study of Eliseo P. Marpa (2014) disclosed that correlations existed between mathematics students' time management and study habits and math major students' study habits and academic achievement. Results of the study reveal that time management of mathematics students was average. They do not manage their time well.

The study of L. Miertschin and colleagues (2015) suggests that relationships do exist between students' time management behaviours, development of time management skills, and the design of online courses. However, these relationships are not close. In the other words, time management has an unremarkable impact on students' academic performance.

The research by Hoang Khac Hieu & Huynh Van Son (2011) focuses on studying students' time-consuming habits in Ho Chi Minh City. In this study, 1021 students from different universities had been surveyed. The research results show that these student's time management ability is only average. In addition, many students have difficulty maintaining good time management habits such as planning, dividing work, etc.

Dinh Thi Hoa and colleagues (2018) conducted a study to analyse factors that affect

the learning outcomes of students in the economics department at Dong Nai University. The authors gradually removed the unreasonable variables, reran the model after eliminating the inconsistent variables and the results were consistent. However, the limitation of the research model is that the survey scale only focuses on final-year students, so the generalization of all students is not high.

In general, there have been a number of studies conducted to learn about the influence of time management on student academic performance. However, the results of each study differ in the impact of time management, caused by different groups of students in specialized, personality and culture. The sample of the study is not large, and also made the results of the study not overall. In particular, in all studies, no research has pointed to the factor "Improvement and adjustment" as a factor that directly affects the management of time. Most studies only mention this factor as a condition added to the study.

In Vietnam, previous studies have not specified how time management affects student academic performance. Studies providing an overview of factors that influence academic performance are mostly concentrated in Southern Vietnam. Given the reasons, the authors focus on the impact of time management on the academic performance of Economics and Business Administration students in Hanoi.

Hypothesis development

Attitude to time management

The perception of how their time requires to be used up or planning including utilizing short and long period goals and time attitudes or students accomplished that both planning and encouraging time attitudes initiated that they had much more time to finish their everyday jobs because they experiences more in control of how their time (Nasrullah & Khan, 2015). Denlinger (2012) also reported that self-perception of having good time-management skills proved to have a direct correlation to performance levels. Considering these views, it was hypothesized that:

[H1] Having a good time attitude has a positive impact on the academic performance of economics and business administration students in Hanoi.

Planning

Planning is defined as the process of identifying goals and choosing ways of action to achieve goals. Kaushar's research (2013) has shown a positive relationship between student planning and academic performance. In other words, when students plan well, the academic results will also be better. Other authors such as Dahie, Osman & Mohamed (2015), Narsrullah & Khan (2015), etc. It is also agreed that planning has the same impact on student academic performance. Thus, the second hypothesis is that:

[H2] Good planning positively has a positive impact on the academic performance

of economics and business administration students in Hanoi.

Using time management tools

Research by Jo-Ana & Associates (2013) published in the Western Journal of Nursing Research has produced research that suggests that people who are likely to refuse jobs that don't create value often achieve better personal achievements. Through in-depth interviews with a number of subjects, the team obtained the result that students who regularly use time management tools often have better academic results. The third hypothesis is stated as following:

[H3] Using time management tools has a positive impact on the academic performance of economics and business administration students in Hanoi.

Self-examination and evaluation

Research by Hamoud Mohammed Alshaya & associates (2017) has shown that students who perform a routine goal-based results assessment often have good academic performance. Research by Karima Sayari, Revenio Jalagat & Van Dalluay (2017) also agrees with this view. The fourth hypothesis is stated as following:

[H4] Self-examination and evaluation has a positive impact on the academic performance of economics and business administration students in Hanoi.

Improvement and adjustment

Improvements and adjustments are necessary activities after detecting problems that arise during the use of learning time to repair, adjust and eliminate them. At the same time, improvement is constantly growing, finding ways to be able to use time more and more effectively. Thus, we suppose that:

[H5] Improving and adjusting time management has a positive impact on the academic performance of economics and business administration students in Hanoi.

Table 1. The table encodes indicators

	Variables	Encode	Reference
Time Attitude			
1	I feel that I need to use time effectively.	TĐTG1	Supplementation and development
2	I am satisfied with the way I use my time.	TĐTG2	Karim et al. (2015)
3	I don't delay what I need to do the next day.	TĐTG3	Supplementation and development

|		Variables	Encode	Reference
4		I feel that I use my time effectively.	TĐTG4	Karim et al. (2015)
Planning				
5		I regularly take the time to plan.	LKH1	Supplementation and development
6		I have a clear determination of what to do in the coming period.	LKH2	Supplementation and development
7		I clearly identify what to do in the next month.	LKH3	Najnin Khanam & Associates (2017)
8		I have a clear idea of what I want to accomplish during the next week.	LKH4	Najnin Khanam & Associates (2017)
9		I plan the day before I start it.	LKH5	Najnin Khanam & Associates (2017)
10		I frequently leave gaps for unexpected events when planning.	LKH6	Supplementation and development
11		I followed the plan correctly.	LKH7	Supplementation and development
Use management tools				
12		I regularly assign work to other individuals instead of doing it all myself.	CCQL1	Supplementation and development
13		My plan is built on important work.	CCQL2	Jo-Ana & Associates (2013)
14		I do things in order of priority.	CCQL3	Patricia Adhiambo Oyuga & Associates (2016)
15		I regularly turn down time-consuming jobs that don't benefit my goals.	CCQL4	Jo-Ana & Associates (2013)
16		I regularly use other management tools such as books, job management apps, etc.	CCQL5	Supplementation and development
Self-examination and evaluation				
17		I check the accomplishments of my tasks based on the priorities made.	KTĐG1	Karima Sayari, Revenio Jalagat & Van Dalluay (2017)

		Variables	Encode	Reference
18		I periodically re-assess my activities in relation to my goals.	KTĐG2	Hamoud Mohammed Alshaya & Associates (2017)
19		During my studies, I noticed signs that were affecting my time management.	KTĐG3	Supplementation and development
Improvements and adjustments				
20		I believe that there is room for improvement in the way I manage my time.	CTĐC1	Najnin Khanam & Associates (2017)
21		I find to remedy the causes that affect time management.	CTĐC2	Supplementation and development
22		I learn effective ways to manage time.	CTĐC3	Supplementation and development
23		I use many time management methods.	CTĐC4	Supplementation and development
24		I have discontinued any wasteful or unprofitable activity or routines.	CTĐC5	Hamoud Mohammed Alshaya & Associates (2017)

Source: Summarised by the research team

Research model

The research model consists of 5 proposed variables which are 5 factors that affect time management, affecting the learning results of the students: (1) Attitude to time, (2) Planning, (3) Using management tools, (4) Self-examination, evaluation, (5) Improvement and adjustment. Dependent variables are student academic performance (Grade Point Average).

Observation variables are built on a Likert scale of from 1 (Completely disagree) to 5 (Completely agree).
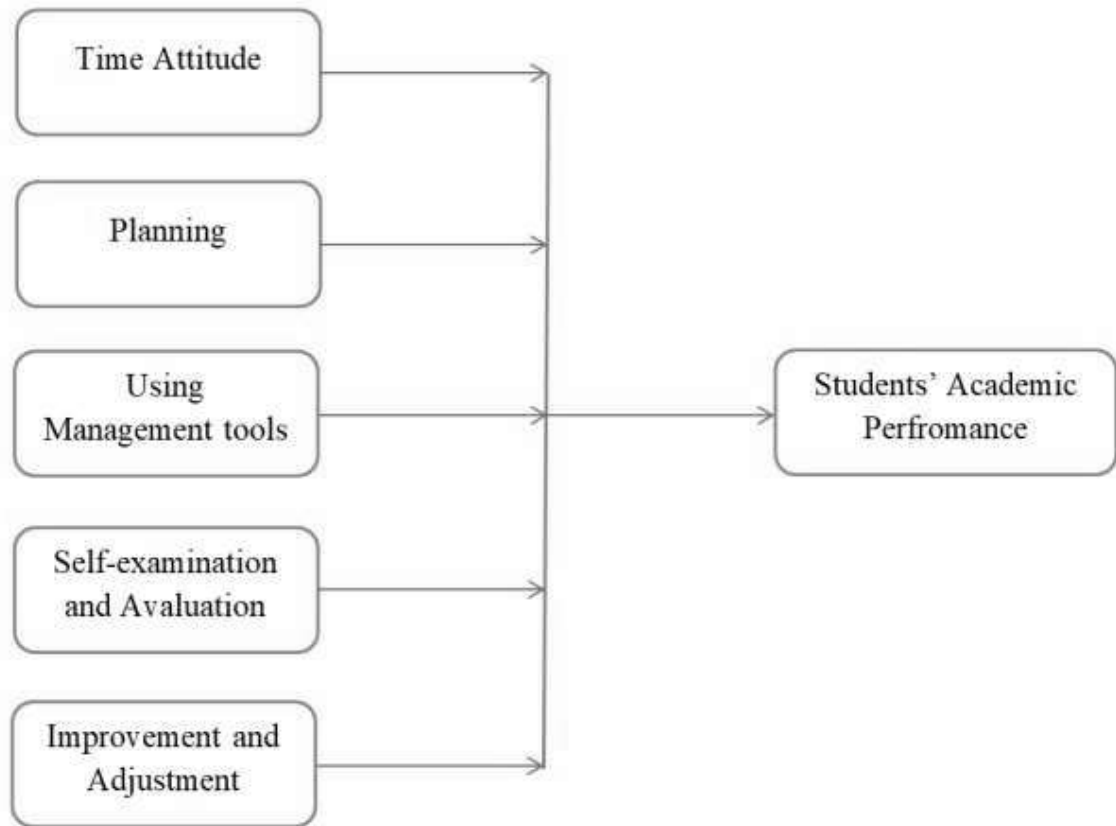
Figure 1. Research model

Source: conducted by the author

3. Method

This study was conducted with students studying economics and business administration universities in Hanoi, Vietnam. By conducting the official survey on a total of 22 universities educating these two majors, the research team obtained 455 valid responses.

Data collection and analysis:

Step 1: Secondary data collection: collected from previous research papers on similar or related topics.

Step 2: Research overview: synthesizing information from sources, secondary data collected in the first step and writing a research overview. From those data, the research team confirms a research gap.

Step 3: Building research models and hypotheses.

Step 4: In-depth interview: after building the research model, the research team continued to interview students and lecturers at universities in different fields of economics and business administration in Hanoi to build the questionnaire.

Step 5: Building the expected questionnaire.

Step 6: Trial survey: conducted on a small group of students to receive comments and edit the survey.

Step 7: Rebuilding the survey and conducting the official survey at universities under the research scope.

Step 8: Data synthesis, processing and analysis: synthesizing processing the primary data obtained. After that, start to analyze and evaluate the analytical results obtained, verify the hypotheses given.

Step 9: Synthesizing all the content done to complete the research to make conclusions and recommendations.

4. Results

4.1. General information of the sample

According to the data analysis result, among these surveyed students, 47.3% belong to the third-year students, whereas 21.5% belong to the second-year ones. The freshmen and the seniors are 12.1% and 13.0% respectively.

It also reveals from the study that students studying Business Administration account for 33.2%, Economics' occupy 28.1%. The student rate of the remaining three surveyed factors (Banking - Finance, Accounting - Auditing, and other majors) is quite equal. The majors mentioned in the survey have a large number of students studying at the School of Economics. The sample is representative of the overall.

Among the 455 valid answers, 25.9% of students come from National Economics University, Foreign Trade University placed in second place with 19.6%, Thuong Mai University constitutes 14.9%, and the 19.8% left belongs to the University of Economics and Business - Vietnam National University, Hanoi and others.

The academic performance within the last semester, 42.2% of students have got GPA at level 3 (from 2.5 to 3.19). 35.4% of students have scored level 4 (from 3.2 to 3.59). Around 15.0% of students have got 3.6 to 4.0 at GPA while there are no students who have scored lower than 1.99 GPA in their last semester.

4.2. Findings

After analysing Cronbach's Alpha coefficients for each group of observed variables depending on different factors, only the factor TĐTT1 is eliminated because the corrected item-total correlation is less than 0.3, the others factor are kept with the Cronbach's Alpha is higher than 0.6.

After selecting the qualified variables, the research team continued to determine the

number of factors to retain in EFA with 3 times of conducting.

Table 2. Final EFA analysis result

Rotated Component Matrix			
	Component		
	1	2	3
TĐTG4	0,811		
TĐTG2	0,798		
TĐTG3	0,796		
LKH7	0,712		
LKH6	0,592		
LKH1	0,549		
LKH4	0,534		
KTĐG1	0,529		
CTĐC3		0,830	
CTĐC2		0,749	
CTĐC4		0,746	
CTĐC1		0,628	
CTĐC5		0,563	
CCQL1		0,533	
LKH2			0,792
LKH3			0,698
CCQL3			0,583
CCQL2			0,541
Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization..			
Rotation converged in 5 iterations.			

Source: Result of the study

In Bartlett's test, the sig. value = 0,000 <0.05, it means the data used for the analysis is appropriate, the remaining variables are convergent, suitable for analysis purposes in the next steps.

The results also showed that the remaining 18 variables were allocated to 3 new groups.

Group X_1: Including 8 variables, TĐTG2, TĐTG3, TĐTG4, LKH1, LKH4, LKH6, LKH7, KTĐG1. The variables are mainly about student attitudes and awareness of the importance of planning and time management. The research team named this group is Attitude to time management.

Group X_2: Including 4 variables, LKH2, LKH3, CCQL2, CCQL3. Due to these observed variables mainly referring to short-term and long-term planning habits, and showing how often students are using management tools, the research team named this group is Planning and using the detective management tools.

Group X_3: Including 6 variables, CTĐC1, CTĐC2, CTĐC3, CTĐC4, CTĐC5, CCQL1. Because the variables mostly belong to the Adjustment, Improvement factor, the research team decided to remain the name of this group as Adjustment Improvement.

In the table of Coefficients analysis, the sig. value of group X1 = 0.888 > 0.05 whereas the sig. value of group X2, X3 < 0.05. It means, group X1 has no statistical significance, group X2 and X3 are statistically meaningful in the model.

So, group X1 has no statistical significance in the model. In other words, group X1 has no effect on student academic performance. But according to the result of testing the correlation, there are multi-collinearity phenomena between X1 and X2, X1 and X3. In conclusion, group X1 has effects on group X2 and X3, but has no effect on student academic performance.

Regression model: KQHT = β0 + β1 X2 + β2 X3

Table 3. Model summary

Model summary					
Model	R	R square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0,450[a]	0,202	0,199	0,744	1,930
a. Predictors: (Constant) X3, X2					
b. Dependent Variable: GPA of the last semester					

Source: Result of the study

Regression function: KQHT = 1,186 + 0,275*X2 + 0,377*X3

The result shows that, if X2 (Planning and Management Tools) increases by 1 unit, the academic performance will increase by 0.275 units. And if the variable X3 (modified improvement) will increase by 1 unit, the academic performance increases by 0.377 units as well.

4.3. Discussion

The factor X3 has β = 0.372. The results show that the set of factors that have the highest mean and highest influence on the academic performance of students are Improvements and Adjustments in time management. The influence of this factor accounts for 37.2% of academic performance. The fact shows that most students are aware that they need to improve their time management process but do not believe that modifying their time management process can improve their results. According to descriptive statistics, most of the questions about improvement and adjustment in time management are responded to by research subjects at a neutral or agreed level, which proves that students at economic schools are somewhat aware of the adjustment but vague and not implemented seriously and methodically.

The factor X2 has β = 0.275, reflecting the influence of this factor accounting for 27.5% on learning results. Thus, when there are no adjustment factors, planning and using the detective management tools increases by 1 unit, the results of students' learning results increase by 1,461 units. Many students now choose the form of planning, implementing, applying the formulas, and allocating time to their time management to easily track the journey in pursuit of their goals. However, that number is not the majority. Students who do not plan for their life are still aware of the importance of time but cannot maintain the habit or think of planning and learning about time management tools that are time-consuming, effortless, and useless. Planning does not inevitably give students an excellent result. But planning will improve the results of students' academic endeavors.

The adjusted R2 value of 0.199 determined by the two groups of factors above means time management accounts for 19.9% of student learning outcomes. So, time management is a factor that positively affects learning outcomes, but the impact is not too good. This result is perfectly plausible because time management, especially "Planning and management tools"; "Adjustment and Improvement" are not the only factors influencing student learning outcomes. Previous studies have also shown that many factors influence student learning outcomes. Research by the authors Dinh Thi Hoa, Hoang Thi Ngoc Diep & Le Thi Kim Tuyen (2018) has shown that many factors affect student learning outcomes such as (1) knowledge and how faculty organization (2) friends (3) steadfastness (4) competition (5) service (6) facilities (7) school impression (8) classroom interaction (9) learning methods (10) commitment to learning, and ultimately (11) motivation. In conclusion, time management is just one of many factors that can affect a student's academic performance. However, this is a factor that can be changed and developed over time.

5. Conclusions and recommendations

5.1. Conclusions

In general, the research has answered the proposed questions, including the use of time and time management of students in economics and business management field in Hanoi; the relationship between time management and students' academic performance, and what time-management factors influence students' academic performance? The study also systematized the factors of time management and their influence on student learning outcomes, including "Planning and using time management tools" and "improvement and adjustment" two groups of factors that have high impacts on learning outcomes.

5.2. Recommendations

In order to make students achieve higher learning result, students should increase their awareness of time management, learn how to plan and use effective time management tools. They should also constantly learn new things, improve time management skills to achieve better academic peformance. Lecturers and managers of universities play an important role in orienting and creating a favorable environment for students to improve this soft skill. They should eliminate activities that are not beneficial for students, focus activities that bring value to students, and orient students to practise time management skills.

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