THE RELATIONSHIP OF TIME MANAGEMENT TO ACADEMIC PERFORMANCE OF MASTER LEVEL STUDENTS

Çigdem MERCANLIOGLU
Beykent University
School of Vocational Banking and Insurance Program
Istanbul/Turkey
E-mail: cigdemm@beykent.edu.tr

Abstract

Time is a priceless source. Time is passing by and never comes back. However, we have so many things we dream to do and so many things that we have to do. Because of the competitive conditions in business life nowadays forcing people and businesses to do so many things simultaneously, the importance of right decision making for the right jobs with the right methods become more and more important.

For those who can't perform the necessities of time management effectively in their private and business lives, through not being able to keep themselves updated, it will result in failure and unhappiness. Time, when once consumed, can never be taken back. Therefore, it should be considered consciously, with good planning, and should be used wisely in order for success to be obtained and productivity to be increased.

The purpose of this study is, for those students who give importance to education and therefore having master's degree education; in order to cope with the constant changes and developments of the business life, to know that the most significant challenge ahead will be, the misuse of their time management. With this thought in mind, for those students who are working in different jobs at different times and ages, and studying in the same time frame; finding out the relationship between time management skills and academic performance/success, through the application of time management survey is critically important.

Key words: Time management, Academic performance

JEL Classification: **M19**

1. INTRODUCTION

The concept of time management comes from Frederick Winslow Taylor's early analysis of motion and time studies of workers. Father of Scientific Management formalized the principles of scientific management and rational efficiency in the beginning of the industrial era. He pointed out the key factors of productivity as standardizing work, tools and maintenance techniques hence a great dissection of work tasks into different actions and the timing of each action based on repeated stopwatch studies.

Taylor's aim was to reduce unproductive work task and reduce the amount of time allocated to waste. The goal of time-and-motion studies was becoming more efficient. (www.sage-reference.com/edleadership/Article_n556htlm?searchQuery=y%3D)

"Time" that Taylor considers approximately 100 years ago as the determinative factor of efficiency, is now a concept that has to be emphasized by nowadays' people having to keep up with evolving and improving economic situation. We can say that if competition gets even more intense, the most powerful source of competitive advantage is time. Time management is an art and a science. Everybody has to learn how to do it. Some people have a good skill at it but not everybody.

2. TIME MANAGEMENT

Time is a priceless source. Time is the single resource that can't be accumulated for future use, can't be changed, can't be taken back once it is used and is used completely at the appreciation of the owner. No one can control the moving of time but everyone is able to decide how to use it, that is available. The subject is You.

The term "time management" became familiar in the 1950's and 1960's as referring to a tool to help managers make better use of available time. The tool was based on practical experience, in the form of do's and don'ts. The term appears to indicate that time is managed but actually activities are managed over time. Time management is self-management with an explicit focus on time in deciding what to do; on how much time to allocate to activities; on how activities can be done more efficiently and on when the time is right for particular activities (www.sage-ereference.com/organizationalpsychology/Print_n338.htlm).

Time management is focused on solving problems. Examples of common problems are; being unable to deal with distractions, deadline pressure, procrastination, lack of self discipline, ambiguity of personal goals, not being able to say "no", excessive social relations, indetermination, perfectionism, messy desk...

Effective time management requires several components;

- **List goals and set priorities**

If we don't know what we want to achieve in our lives, we can't manage time and someday, we can be disappointed of where we are.

So, make your list, determine what you are committed to doing, and put these items in the appropriate place in your time management system. You can use A,B,C system.

A= Highest priority

B= Important to be completed, but not absolutely essential for today

C= Nice if I can get to it.

Do the highest priority items first A's, then B's and then C's.

- **Planning to achieve goals**

Having just goals is not enough. We need to have a clean plan to achieve them. "If you don't know where to go, no road can bring you there". If you want to learn French, you either have to attend a language course, live in France for a while or read books about the language. If you are not doing any of those suggestions, your wish would certainly remain as a dream. Dreams that are not becoming true are meaning failure, and failure is meaning unhappiness.

- **Using communication tools efficiently**

Telephone and computer are considered as the traps of our era. When the magical tools of communication are used consciously and under control, it is obvious that the contributions are going to be very valuable.

- **Avoiding procrastination**

Procrastination may be seen as a particular time management problem that involves the delay of activities. Procrastinating steals your time and chases you from achieving your goals. In order to achieve something you need to start doing it and to finish it, you need to not procrastinate it. Thus, the reasons of procrastination should be determined and the will of problem solving should be present.

- **Desk planning and building a good filing system**

Even though "A messy desk means a messy mind" for some, "A messy desk is the indicator of genius" for others. If moments where you lose an important file and end up in difficult situation, you probably are the first type of person and a spring cleaning is needed. A messy desk and the lack of a good filing system are important time traps. The desk is not the right place to store documents; it's the place where work is realized. Thereby if only needed documents are on the desk performance would increase and time wouldn't be wasted.

- **Regulation of work time according to your body's energy cycle**

While some people's energy is peeking early the morning, some are successful on the afternoon and some at night. Knowing your best time and doing important and urgent things during that time is a good planning approach.

- **Being able to say "No"**

If it is not a requirement of your job and only by courtesy you are not able to say "No", you are facing the problem of being retained of doing your own job. If you don't learn to say "No", your to-do list is going to get longer. You need to build your own boundaries and learn how to refuse unnecessary work in a kind way.

- **Delegation of some of your responsibilities**

This way, additional time to do other important things would remain to the person.

3. METHODOLOGY

3.1 The purpose of the study, data collection and analysis

The aim of this study is to examine whether time management practices are predictive of academic performance of master level's students.

The population of the study is MBA level's students at Beykent University. There are 231 students. The Time Management Questionnaire was distributed to 108 students, 89 of them were proper to analyze.

The time management attitudes of master level's students were assessed via their scores on a time management questionnaire. The questionnaire includes 18 items that might be descriptive of the

survey taker. The time management questionnaire used was an instrument developed by Britton and Tesser.

The items of the questionnaire are assessing time-management behavior. It requires subjects to answer on a five-point scale which consists of the responses always, frequently, sometimes, infrequently and never. For each item scoring is determined such that responses indicating predefined "good" time management practices are given 5 points while those at the other end of the scale are scored as 1 point. Accordingly other responses are given intermediate values. Thus superior time-management behavior is indicated by higher scores on the scale. (Wells, G., 1993 : 19) Scores on time management questionnaire were correlated with an academic measure called GPA. Semester grade point averages (GPA) were obtained from university records.

Statistical analyses were made by using PASW 18 package program of SPSS Inc.

Reliability test, factor analysis, correlation analysis and student t-test analyses were used to find out if there are significant differences and/or relations among groups and/or among variables.

Our hypotheses can be stated as follows:

1. There are correlations between the factor scales (LRP,TA, and SRP) and grades of students (GRADE)
2. There are differences between demographic groups in terms of the factor scales (LRP,TA, and SRP)

3.2 Results

Factor Analysis is primarily used for data reduction or structure detection. (PASW 18 Statistics Program Tutorial, SPSS Inc. 2009)

• The purpose of data reduction is to remove redundant (highly correlated) variables from the data file, perhaps replacing the entire data file with a smaller number of uncorrelated variables.

• The purpose of structure detection is to examine the underlying (or latent) relationships between the variables.

To determine the significance of the results a 5% significance level is used in interpreting the outcomes of the analyses. (Groebner et al. 2005: 308)

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy is a statistic that indicates the proportion of variance in your variables that might be caused by underlying factors. High values (close to 1,0) generally indicate that a factor analysis may be useful with your data. If the value is less than 0,50, the results of the factor analysis probably won't be very useful. Bartlett's test of sphericity tests the hypothesis that your correlation matrix is an identity matrix, which would indicate that your variables are unrelated and therefore unsuitable for structure detection. Small values (less than 0,05) of the significance level indicate that a factor analysis may be useful with the data. (PASW 18 Statistics Program Tutorial, SPSS Inc. 2009)

Table 1: Time Management Questionnaire Factor Structure and Loadings

Factor Name	Factor Item	Factor Components	Amount of Variability owed to the factor (%)
Short-Range Planning	Q1.Do you make a list of the things you have to do each day?	0,724	17,383
	Q4.Do you plan your day before you start it?	0,740	
	Q7.Do yo make a Schedule of the activities you have to do on school/work day?	0,668	
	Q10.Do you write a set of goals for yourself for each day?	0,601	
	Q13.Do you spend time each day planning?	0,837	
	Q16.Do you have a clear idea of what you want to accomplish during the next week?	0,537	
	Q18.Do you set and honor priorities?	0,537	
Time Attitudes	Q2.Do you often find yourself doing things which interfere with your schoolwork simply because you hate to say "NO" to people? *	0,295	9,475
	Q5.Do you feel you are in charge of your own time, by and large?	0,438	
	Q9.The night before a major assignment is due, are you usually still working on it ? *	**0,565**	
	Q14.Do you make constructive use of your time?	0,293	
	Q17.Do you continue unprofitable routines or activities?*	0,497	
Long-Range Planning	Q3.Do you usually keep your desk clear of everything other than what you are currently working on	-0,383	9,531
	Q6.Do you have a set of the goals for the entire semester?	-0,325	
	Q12.When you have several things to do, do you think it is best to do a little bit of work on each one ?	-0,517	
	* Reverse ordered	Total	36,390

Reliability (Cronbach Alpha)		0,669
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0,757
Bartlett's Test of Sphericity	**Approx. Chi-Square**	448,455
	Df	153
	Sig.	0,000

In our analysis, KMO value of 0,757 shows that Factor Analysis is useful in determining the underlying factors. Again, the significance level of Bartlett's Test of Sphericity value of 0,000 (which is less than 0,05) shows that our variables are suitable for structure detection.

The low value of Cronbach Alpha coefficient (near to 0) means that the variable is not reliable. The evaluations of Cronbach Alpha coefficient estimation measurement are as the following. (Özdamar, 2002 : 673)

$0.0 \leq \alpha < 0.40$, the scale is not reliable

$0.40 \leq \alpha < 0.60$, the scale is low reliable

$0.60 \leq \alpha < 0.80$, the scale is considerably reliable

$0.80 \leq \alpha < 1.00$, the scale is highly reliable

The reliability of the scales with 18 questions is measured with the Cronbach alpha equal to 0,669. This indicates that our questionnaire is reliable for measuring the scales.

In questions related to Short-Range Planning (SRP), our data revealed the same factor components as in the original research. This factor has the highest amount of variability (17,838%). This means that the MBA students are careful about their short-range plans. But we cannot tell the same thing about their time attitudes (TA).

In our analysis, we saw that for TA scale we have different set of items. According to our data, in TA scale Q8 item is excluded and Q9 item included. This factor/scale has the second highest amount of variability (9,475%). This means that the MBA students are not careful about their time attitudes.

Finally, we see similar pattern in long-range planning as in time attitude. Long-Range Planning (LRP) scale has also different set of items. In this scale, only Q3, Q6 and Q12 items are included due to their high factor loadings. And items Q9 and Q15 are not included in this scale. This factor/scale has the least amount of variability (9,531%). This means that the MBA students are not careful about their long-range plans.

Generally speaking, results of the factor analysis shows us that, students are aware of their short-range plans while managing their time. On the other hand, they are not aware their time attitudes. For example, they consider “Q9.The night before a major assignment is due, are you usually still working on it ?” as Time Attitude factor with high loading (0,565), instead of considering that item as Long-Range Planning factor as in the original study.

In the table below, our correlation analysis shows that, only in total points of SRP and LRP there is a significant correlation at the 0,01 level. There is no significant correlation between Grades and the other scales.

For example, correlation between Grades and SRP is 0,086 and the significance value is equal to 0,421, which is not significant at the 0,05 percent level. Similarly, correlation between Grades and TA is -0,124 and the significance value is equal to 0,249, which is not significant at the 0,05 percent level and correlation between Grades and LRP is -0,054 and the significance value is equal to 0,617, which is not significant at the 0,05 percent level.

Table 2 : Correlations among the variables

Correlations

		GRADE	Short-Range Planning	Time Attitudes	Long-Range Palanning
GRADE	Pearson Correlation	1	,086	-,124	,054
	Sig. (2-tailed)		,421	,249	,617
	N	89	89	89	89
Short-Range Planning	Pearson Correlation	,086	1	,177	,305**
	Sig. (2-tailed)	,421		,097	,004
	N	89	89	89	89
Time Attitudes	Pearson Correlation	-,124	,177	1	,153
	Sig. (2-tailed)	,249	,097		,153
	N	89	89	89	89
Long-Range Palanning	Pearson Correlation	,054	,305**	,153	1
	Sig. (2-tailed)	,617	,004	,153	
	N	89	89	89	89

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

The following section is the results of comparisons among demographic groups in terms of factor scales SRP, TA, and LRP. Marital Status, Gender, Type of Establishment, Number of Children, and Type of Job.

Since our demographic question marital status has two groups as married and single, we used Student T-test to analyze the differences between these groups in terms of the Grade variable and the SRP, TA and LRP scales. In the table below, we can see the mean and standard deviations of each group in each variable.

Table 3 : Mean and std. deviation values for marital status groups

Group Statistics

	marital status	N	Mean	Std. Deviation	Std. Error Mean
GRADE	Married	28	3,2811	,5034	,0951
	Single	61	3,1104	,5005	,0641
Short-Range Planning	Married	28	24,5714	4,61422	,87201
	Single	61	24,0820	5,33946	,68365
Time Attitudes	Married	28	19,6071	2,93560	,55478
	Single	61	19,6557	2,19002	,28040
Long-Range Palanning	Married	28	15,4643	2,78198	,52574
	Single	61	14,6557	2,35857	,30198

According to the table below, the significance level of 0,05 percent there are no significant differences between married and single students in terms of their GRADE (sig.=0,125), total points of Short-Range Planning (sig.=0,677), total points of Time Attitudes (sig.=0,931), and total points of Long-Range Planning (sig.=0,160).

Table 4: Student t-test results among marital status groups

	t-test for Equality of Means			
	t	df	Sig. (2-tailed)	Mean Difference
GRADE	1,549	87	,125	,1773
Short-Range Planning	,418	87	,677	,48946
Time Attitudes	-,087	87	,931	-,04859
Long-Range Palanning	1,418	87	,160	,80855

Since our demographic question, gender has two groups as female and male, we used Student T-test to analyze the differences between these groups in terms of the Grade variable and the SRP, TA and LRP scales. In the table below, we can see the mean and standard deviations of each group in each variable.

Table 5: Mean and std. deviation values for gender groups

Group Statistics

	gender	N	Mean	Std. Deviation	Std. Error Mean
GRADE	Female	41	3,303	,4361	,0681
	Male	48	3,037	,5320	,0768
Short-Range Planning	Female	41	23,5854	5,32436	,83152
	Male	48	24,7917	4,89010	,70583
Time Attitudes	Female	41	19,3659	2,54712	,39779
	Male	48	19,8750	2,33042	,33637
Long-Range Palanning	Female	41	14,7073	2,85696	,44618
	Male	48	15,0833	2,19121	,31627

According to the table below, the significance level of 0,05 percent, There is a significant difference between Females and Males in terms of their GRADE (sig.=0,012). Females are more successful than males with average grades 3,303 and 3,037 respectively. On the other hand, there are no significant differences between married and single students in terms of their total points of Short-Range Planning (sig.=0,269), total points of Time Attitudes (sig.=0,328), and total points of Long-Range Planning (sig.=0,485).

Table 6: Student t-test results among gender groups

	t-test for Equality of Means			
	t	df	Sig. (2-tailed)	Mean Difference
GRADE	2,555	87	,012	,2663
Short-Range Planning	-1,113	87	,269	-1,20630
Time Attitudes	-,984	87	,328	-,50915
Long-Range Palanning	-,702	87	,485	-,37602

For our third demographic question, type of establishment has two groups as private and public, we used Student T-test to analyze the differences between these groups in terms of the Grade variable and the SRP, TA and LRP scales. In the table below, we can see the mean and standard deviations of each group in each variable.

Table 7: Mean and std. deviation values for type of establishment groups

Group Statistics

	establishment	N	Mean	Std. Deviation	Std. Error Mean
GRADE	Private	48	3,134	,5321	,0768
	Public	40	3,195	,4821	,0762
Short-Range Planning	Private	48	25,0625	4,48831	,64783
	Public	40	23,3750	5,66902	,89635
Time Attitudes	Private	48	19,5833	2,49112	,35956
	Public	40	19,7250	2,41775	,38228
Long-Range Palanning	Private	48	15,0625	2,38262	,34390
	Public	40	14,7500	2,70564	,42780

According to the table below, the significance level of 0,05 percent, there are no significant differences between students working in private and public sector establishments in terms of their GRADE (sig.=0,579), total points of Short-Range Planning (sig.=0,123), total points of Time Attitudes (sig.=0,788), and total points of Long-Range Planning (sig.=0,566).

Table 8: Student t-test results among type of establishment groups

	t-test for Equality of Means			
	t	df	Sig. (2-tailed)	Mean Difference
GRADE	-,556	86	,579	-,0608
Short-Range Planning	1,558	86	,123	1,68750
Time Attitudes	-,269	86	,788	-,14167
Long-Range Palanning	,576	86	,566	,31250

The demographic question number of children has been grouped into two as None (having no child) and Yes (having at least one child). For this reason, we used Student T-test to analyze the differences between these groups in terms of the Grade variable and the SRP, TA and LRP scales. In the table below, we can see the mean and standard deviations of each group in each variable.

Table 9: Mean and std. deviation values for number of children groups

Group Statistics

	number of children	N	Mean	Std. Deviation	Std. Error Mean
GRADE	None	79	3,154	,5073	,0571
	Yes	8	3,225	,5392	,1906
Short-Range Planning	None	79	24,1519	5,23570	,58906
	Yes	8	24,1250	4,05101	1,43225
Time Attitudes	None	79	19,5823	2,36756	,26637
	Yes	8	19,2500	2,71241	,95898
Long-Range Palanning	None	79	14,9873	2,53940	,28570
	Yes	8	14,0000	2,39046	,84515

According to the table below, the significance level of 0,05 percent, there are no significant differences between students having no child and students having at least one child in terms of their GRADE (sig.=0,710), total points of Short-Range Planning (sig.=0,989), total points of Time Attitudes (sig.=0,710), and total points of Long-Range Planning (sig.=0,295).

Table 10: Student t-test results among number of children groups

	t-test for Equality of Means			
	t	df	Sig. (2-tailed)	Mean Difference
GRADE	-,373	85	,710	-,0706
Short-Range Planning	,014	85	,989	,02690
Time Attitudes	,373	85	,710	,33228
Long-Range Palanning	1,053	85	,295	,98734

The demographic question type of job has been grouped into two as Manager and Non-Manager. For this reason, we used Student T-test to analyze the differences between these groups in terms of the Grade variable and the SRP, TA and LRP scales. In the table below, we can see the mean and standard deviations of each group in each variable.

Table 11: Mean and std. deviation values for type of job groups

Group Statistics

	job	N	Mean	Std. Deviation	Std. Error Mean
GRADE	Manager	16	2,907	,5147	,1287
	Non-Manager	70	3,224	,4977	,0595
Short-Range Planning	Manager	16	26,3750	3,50000	,87500
	Non-Manager	70	24,0857	5,10965	,61072
Time Attitudes	Manager	16	20,5625	3,03246	,75812
	Non-Manager	70	19,4714	2,28239	,27280
Long-Range Palanning	Manager	16	14,7500	2,48998	,62249
	Non-Manager	70	14,9714	2,58183	,30859

According to the table below, the significance level of 0,05 percent, There is a significant difference between managers and Non-managers in terms of their GRADE (sig.=0,025). Non-Managers are more successful than managers with average grades 3,224 and 2,907 respectively. On the other hand, there are no significant differences between married and single students in terms of their total points of Short-Range Planning (sig.=0,093), total points of Time Attitudes (sig.=0,109), and total points of Long-Range Planning (sig.=0,756).

Table 12: Student t-test results among type of establishment groups Type of Job

	t-test for Equality of Means			
	t	df	Sig. (2-tailed)	Mean Difference
GRADE	-2,286	84	,025	-,3173
Short-Range Planning	1,699	84	,093	2,28929
Time Attitudes	1,618	84	,109	1,09107
Long-Range Palanning	-,311	84	,756	-,22143

4. CONCLUSION

The competition conditions of nowadays are pushing teenagers and employees to do more. Their believes in the fact that they won't gain money until the end of time with their degrees and talents pushes them to an endless quest and conduct them to constant learning and acquiring of knowledge and skills in new fields.

Due to the information, communication and technology era we are living in, everybody needs to be more attentive while planning their careers. They thought if they don't rise to the challenge, someone else will. So they know that they must work too hard. Many persons are willing to increase their professional improvements by doing post graduate educations, especially executive MBA's. But when studentship is added to the already existing work life tempo, they complain about not being able to study or conduct research. They take some difficulties of time mismanagement when they become pressured by their daily chores and they can't respond to their responsibilities in a good manner. Even if they could feel a lot of pressure, they should plan out how much time they want to spend with each occupation.

Time is something that human being created. If we created time, we can also manage it Nowadays the ability to use time advantageously becomes even more critical.

The key to improving your skills in this area is increasing your awareness of your attitudes, thinking and behaviors regarding how you manage your time and workload. Do you manage it, or it manages you? Once you are aware of what doesn't work, you can take responsibility and make choices that will support your efficiency and effectiveness.(Topf.)

REFERENCES

Atkinson, J., Zamanı Yönetme Sanatı, (çev:İslam, C.,), Nehir yayınları, 1997 İstanbul

Burt, C.D.B., Forsyth, D.K., "Relationshipb between supervisor behavior, family support and perceived time management ability"

www.questia.com/PM.qst?action=print&docId , 26.04.2010

Davidson, J., "Six Myths of Time Management" www.questia.com/PM.qst?action=print&docId , 26.04.2010

Groebner, D. F., Shannon, P. W., Fry, P. C., Smith, K.D., Business Statistics: A Decision-Making Approach, 6th Edition, Pearson, 2005

Macan, T.H., "Time Management Training:Effects on Time Behaviors, Attitudes and Job Performance" www.questia.com/PM.qst?action=print&docId , 26.04.2010

Özdamar,K., Paket Programlar ile İstatistiksel Veri Analizi, 4.basım (vol 1), Kaan Kitabevi, Eskişehir, 2002

Sabuncuoğlu, Z., Paşa, M., Zaman Yönetimi, Ezgi kitabevi, 2002

Scoot,M., Zaman Yönetimi, (çev: Çelik,A.,), Rota Yayın, 1997, İstanbul

Stinson, L.S., "Measuring How People Spend Their Time" www.questia.com/PM.qst?action=print&docId , 26.04.2010

Topf, M., "Is What You Are Doing Contributing to Your Success?" www.questia.com/PM.qst?action=print&docId , 26.04.2010

Wells, G.D. "Time-Management and Academic Achievement", Thesis, University of Windsor, Ontario, Canada, 1993

www.sage-ereference.com/edleadership/Article_n556htlm 14.05.2010

www.sage-ereference.com/organizationalpsychology/Print_n338.htlm 14.05.2010

www.proquest.umi.com/pqdweb?index=1&sid=2&srcmode 25.02.2010

www.proquest.umi.com/pqdweb?index=3&sid=4&srcmode 25.02.2010