

Time management skills impact on self-efficacy and academic performance

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Abstract: In this study, time management skills impact on self efficacy & academic performance was tested. Female first grade high school students of Masjed Soleiman statistical community have formed an experimental group and a control group, 27 patients each that were selected randomly. Research project is of the type pre-test - post test with control group that only the experimental group is exposed to ten sessions of time management skills. The Self-efficacy questionnaire of Schwarzer & Jerusalem (2000) & Grade Point Average was used. Analysis of data from descriptive and inferential statistics was done. Results from this study showed that training of time management skills to increase academic performance and self efficacy is influential.

[Karim, Sevari, Mitra Kandy. **Time management skills impact on self-efficacy and academic performance.** Journal of American Science 2011; 7(12):720-726]. (ISSN: 1545-1003). <http://www.americanscience.org>.

Keywords: Time management skills, academic performance, self-efficacy

1. Introduction

The idea that how people decide the optimal way to use time forms the core theory of time management (Koch & Kleinmann, 2000). In other words, efficient use of time is one of the influential factors in its correct management. The results of reviews conducted (Hanel 1981, Brandon and Daniel in 1982, King's Winett & Lovett 1986, Orpen 1994, Green and Skinner 2005, Zaereyian 2006) implies on this practice. Since Time to achieve goals and aspirations is considered a strategic human resource. The study of the behavior of effective and successful people shows that the time factor in question has a great role and importance; to the extent that before starting anything they focus on the time factor and by eliminating irrelevant and fruitless activities they try to come back to time management.

Humans are different in how they choose to manage time and in the ways so some of them plan their time carefully and use various management techniques such as listing things, while some are not so (Macan, Shahani, Dipboye, & Philips, 1990). Researches done showed that aspects of the practical problems that some people, especially students, during the study are faced with are related to time management; because in high school they are usually managed by their parents or teachers. In this regard Sarp, Yarpuzlu & Mostame (2005) argue that time management skills can be taught to students. So it is better for them to get familiar with planning methods and time management (Xiao-hua, 2007). In regard of its importance, Kisa & Erosy (2005) suggested that first, time management is a need, secondly it is a good goal, and third, it must be taught. Nonis et al (1998) demonstrated the suitable application of good time management skills, did not only help with

reducing student anxiety and stress, but also upgraded the performance and productivity of academic centers. Since good time management is a kind of skill and necessity, therefore, based on some research conducted it can be taught. In other words, time management training can have many benefits. In this regard Macan (1994), claims that time management has positive influence on operation, job satisfaction and stress reduction. Macan (1996) believes that time management training programs can lead to reinforcing three types of conduct: goal setting and priority classification, time management mechanism and organizing. Mancini (2003) also believes that time leads to creativity at work and makes it simple. Mackenzie was the first who offered the concept of management education program. He pointed that teaching these skills along with giving good insight about the time-consuming activities, changing the scale of time consuming and priority classification, has positive effects on time management behavior (cited from Claessens, VanEerde, Rutte & Roe, 2007). Schummacker, Michael & Bemby (1995) concluded that students who scored low in time-management significantly scored lower in academic achievement. Prevatt, Petscher, Proctor, Hurst & Adams (2006) concluded students do not use time-management strategies in their learning environments, students have significantly lower GPAs compared to students that use time-management strategies with significantly higher GPAs.

Time management and proper administration of time are the effective factors in academic success. In this regard Izawa (2002) believes that in learning the text materials, the skill of time management is essential. Studies show that the time organization and

time management behaviors are significantly related with academic performance (Britton and Glynn 1989, Macan, Shahani, Dipboye, & Philips 1990, Macan 1996, Ellas and Pofa 1995, Claessens 2004, Frazier, Youngstrom & Glutting 2007, Nofle and Robbins, 2007). Studies done by Britton and Tesser (1991) Kleijn, Topman, & Ploeg (1994) also revealed that high academic performance not only has no relation with high intelligence and hard work, but also is related to often not associated with effective cognitive learning strategies (proper time management, advanced study strategies, better competence in test taking and better competence in general education) is associated. Lay and Schouwenburg (1993) during a study concluded that effective time management strategies on academic performance is impressive. Zimmerman, Greenberg & Weinstein (1994) in their review showed that time management training and planning helps students adjust their study time better and increase their academic performance too. Trueman and Hartley (1996) in a research entitled "the comparison between time management and academic performance of 293 students", showed that female students apply time management skills more effectively than male students, and there is a positive correlation between time management skills and academic performance. Zulaf and Gurtner (1999) in their research showed that skills of time management and study time on average are associated with academic performance (cited from JehanSeyr, 2006).

Misra & McKean (2000) in a study showed that there is a relation between time management, stress reduction and increased academic success. King et al (2003) during a study concluded that there is a correlation between time management skills and academic performance (cited from JehanSeyr, 2006, Sansgiry, Kawatkar, Dutta & Bhosle (2004) during a study as predictors of academic performance on 244 students, concluded that academic competence, time management and study techniques effect academic achievement, and there was a significant difference among students in terms of these variables and Academic performance scores. Proctor, Prevatt, Petscher, Hurst & Adams (2006) reported that the groups who used time-management skills significantly had higher GPA's. Cano's (2006) revealed that affective strategies (e.g., time-management, motivation, concentration) were statistically significant predictors of students' academic performance. Students that used time management strategies significantly had higher standardized test scores.

Tanriogen and Iscan (2009) during a study entitled "university students time management skills" concluded that their time management skills have

been at the intermediate level. Results also showed that positive attitude to time management was impressive, and having a positive attitude on time management can help them promote their time management skills. Wei (2008), Ze-Gang, Chun-xiang & Huai-Hu (2008) studies suggests that there is a significant correlation between time management and academic achievement.

Another variable that is affected by time management is self-efficacy. In management, self efficacy has been defined as doing things well. Efficacy Concept is within the concept of efficiency. Efficiency is a quantity aspect while efficacy is the quality one. In fact, efficacy is the study of the effectiveness level to achieve predetermined goals. In simple terms, in an efficacy study, the achievement rate of goals is measured. But it seems that to define the concept of efficacy we must take some steps beyond it, meaning that the efficacy of a training program will yield when first educational needs are clearly identified. Secondly, an appropriate program design needs to be resolved to be made. Third, programs should be designed and implemented correctly. Forth proper evaluation of the educational process is done, and finally the objectives are achieved. Studies and surveys conducted (Britton and Tesser 1991, West 1991, Trueman and Hartely 1996, Terry 2002) show that between time management skills and self-regulatory effectiveness of their learning there is a positive correlation. In this regard Dombrowski (2006) in a study showed that there is a significant relationship between self efficacy, goal planning and goal priorities. In his study Yan-fang, Xiao-Yan, & Qing-Song (2008) entitled "the relationship between time management and academic self efficacy with anxiety" showed that a negative correlation exists between time management and academic self efficacy with anxiety. In the current study the following hypothesis was tested.

1. Time management skills training is effective in increasing self - efficacy.
2. Time management skills training are effective in increasing academic performance.

2. Material and Methods

The female first high school students of Masjed Soleiman (317) were our subject of study in this research. In order to select appropriate samples first a school was selected among the four girl high school, and 54 students were also randomly selected out of 114 students. All the subjects were divided into two groups of experimental and control groups (each group n=27). Meanwhile, only the experimental group was trained for two months on time management skills (ten two-hour sessions). Data was collected by academic performance & self

efficacy. The students' average grade of the previous academic year was considered as their academic performance. The self efficacy scale by Schwarzer and Jerusalem (2000) composed of ten questions, translated to Persian by Sevari & Borna (2007) was used to be done by Azad university of Ahvaz. The four scale grading method was used as never true (1), rarely is true (2), is approximately correct (3) is absolutely correct (4). In this study, the Cronbach's

Alph. /69 were calculated. The validity of this questionnaire was equal to. /63 by correlating it with the Rosenberg Self-Esteem (1965) respectively. The interventions are described below. The Research projects were of the type pre-test – post-test type for control group.

3. Results

Table 1. Time management skills training interventions

session	Educational content	session	Educational content
1	Welcome to the subjects, set the day, time and venue for training sessions, stated goals of research and explain its importance Listen Read phonetically	6	Reviewing assignments, training grinding assignments to small parts, training to spend more time for the important activities and less for less important activities, giving the home task (completing table to grind to small sections)
2	Defining concepts of time and time management, stating the time value and its importance, the study of how to deal with wasting of time, giving assignment (studying the factors affecting success and failure time management)	7	Reviewing Homework, training at any moment just a small step, giving the home Task
3	Reviewing assignments before the session, defining goals and objectives and list the types and expression of their importance, giving the home task (corresponding target to complete the table)	8	Reviewing assignments, training to use List timer, giving the home Task
4	Reviewing assignments before the session, the definition of planning, its types and explaining its importance and saying the planning stages, giving the home task (to completing the table on planning obstacles)	9	Reviewing assignments, teaching proper use of time, giving the home Task
5	Reviewing prior sessions assignments, assignments priorities and its benefits, giving the home task (completing table related to assignments priority)	10	Homework review and repeating the previous training sessions briefly, more emphasis on teaching methods learned at home and ..., determine the strengths and weaknesses of training sessions and taking the test

Table 2. Mean, and Sd of pre-test post-test of experimental group and control group in terms of Grade Point Average (GPA)

Variable								
Grade Point Average	Group	Stages	mean	S.d	Sig	df	T Score	
	Experimental	Pre-test		17.5	1.53	.000	52	2.52
		Post-test		19.28	.59			
	Control	Pre-test		17.13	1.69			
		Post-test		17.88	1.57			

Table 3. Mean, and Sd of pre-test post-test of experimental and control group in terms of self - efficacy

Variable								
Self- efficacy	Group	Stages	mean	S.d	Sig	df	T Score	
	Experimental	Pre-test		33.11	4.56	.000	52	8.5
		Post-test		35.00	4.72			
	Control	Pre-test		34.18	4.03			
		Post-test		34.59	4.14			

The contents of the above table shows that the mean and standard deviation scores of pre-test and post test for experimental group is 17.5, (1.53), 19.28, (0.59), respectively. And the index for the control group, in pre-Test test, is 17.13, (1.69), 17.88, and (1.57) respectively. Subtracting pretest scores of experimental from its post-test is 1.78 and for control group is 0.75. Since the calculated value of 2.52 at level .0001 is Meaningful, so results are taken so that time management skills in promoting average is effective, and as a result this intervention has been in favor of the experimental group, and the first hypothesis of the study is approved.

The Contents of the table above shows that the mean and standard deviation scores of pre-test and post test experimental group is 33.11, (4.56), 35.00, and (4.72) respectively, and the same indicators in control group pre-test and post test is 34.18, (4.03), 34.59, (4.14) respectively. Subtracting pre-test scores from post-test score for experimental group is 1.89, and .41 for experimental group. Since the calculated value of T 8.5 at .0001 level is Meaningful, so results are taken so that time management skills in enhancing their effectiveness is effective, and as a result this intervention has been in favor of the experimental group, and the second hypothesis of the study is approved, too.

4. Discussions

Obviously, time and how to manage it is one of the things that are very important for humans. In other words, the value is not equal for all and not everyone uses it the same. Many of them are interested in using it at their best, while others not. How to use time at optimum level, a range of skills and special management is required. In other words, the more we are familiar with it, the better we can control and manage it. As previously noted, in this study the effect of time management skills on self-

efficacy and academic performance was examined. The results of this study and the results of other researches like Britton & Glynn (1989), Macan, Shahani, Dipboye, & Philips (1990) Britton and Tesser (1991) Lay and Schouwenburg (1993) Kleijn, Topman, & Ploeg (1994) Zimmerman, Greenberg & Weinstein (1994), Schummacker, Michael & Bemby (1995) Maccan (1996) Trueman and Hartely (1996) Ellas and Pofu (1998) Misra & McKean (2000), Claessens (2004) Sansgiry, Kawatkar, Dutta & Bhosle (2004), Prevatt, Petscher, Proctor, Hurst & Adams (2006), Frazier, Youngstrom & Glutting (2007) Nofl and Robins (2007) Wei (2008) Ze-Gang, Chun-xiang & Huai-Hu (2008) Tanriogen & Iscan (2009) is coordinated. In other words, the current study showed that subjects exposed to time management skills training (10 sessions) in comparison with those who did not receive such training showed higher academic performance, and skills learned affect on their academic performance. In the same way, Claessens (2004) suggested that the application of time management behaviors are positively associated with understanding time control, work - job interference, job performance, academic performance, job satisfaction, health and time allocation for high priority tasks. The results Steinert, Nasmith & Daigle (2003) also showed that by holding workshops on time management training, the time management skills, set goals and prioritize tasks in the workshop participants found upgrading. Loomis (2000) also believes that most recently time management is considered as a major factor in self - regulation that has high correlation with learning progress. Thus, understanding the value of time in reaching their individual goals is a determining factor, because, it can come into account in achieving success as a limiting factor. It should be noted that two internal and external factors impact on the waste of time putting the first batch to external environment

and organizational conditions and internal aspects and the latter rooted in the individual patterns and habits. So time management skills should be taught.

In the line of time division and separation, a person must clarify his time in one day a week and a month. In time division, hours of reading in a week, sleeping, commuting, personal hygiene, eating and leisure activities must be clarified, and there must be a specific criteria for academic performance in one day, a week, one month, three months and six Month. Therefore, the purpose of time separation is to know, in general, how the time is spent and which parts can be canceled. It must be known that how the daily, weekly and monthly time is spent and how to program it for success in educational process. Many people suffer a lot of costs for success in education, but do not consider an important principle, i.e. considering time management. On the other hand, some people also plan their time, but their plan is not consistent with scientific standards, and perhaps, one of the important causes of their failure in education, is the case. Although time is a valuable investment, but it is endable, and only those who use it perfectly for their perfection and prosperity do not regret in future. Among all the resources that we provide, time is the most valuable, but does not enjoy its position in our life as its importance and dignity. Most educational failures are due to the lack of optimal use of time. Time is the only capital with which everything can be acquired, but not vice versa. In this regard, what factors should be effective in wasting time trying to say that over trying on one course of a concept, delaying and not being interested in what we read, creating interruptions in the learning process, hear nothing, being incapable of saying "no", incapable of regulating the priorities, too much attention to detail, less attention to the main content, having no suitable plan, little attention to the whole educational process and its goals, less attention to relaxation that causes fatigue, having lots of materials to be read, mobile phone, non-parental support, lack of teaching aids and friends, laziness and ... are the factors that can be as effective time – wasting factors. Solutions, based on studies done, in using time management skills in academic performance include: identifying educational process, writing goals, determine the right time to reach to small academic goals, doing several smaller activities to achieve any educational goal.

The results of this study also showed that students exposed to education in time management skills showed higher level of self efficacy than those not receiving such trainings, and such trainings have influences on increasing their self - efficacy. Therefore, the results of this research has been consistent with the findings of Britton and Tesser

(1991) West (1991) Trueman and Hartely (1996), Terry (2002) Dombrowski (2006) and Yan - Fang Xiao-Yan, & Qing-Song (2008), because the results of their study showed that there is a negative correlation between self - efficacy, set goals, prioritizing objects, time management and effectiveness of education and anxiety.

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12/2/2011