
# The Effectiveness of Time Management Strategies Instruction on Students' Academic Time Management and Academic Self-efficacy

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**Abstract**
*This study investigated the effect of using time management strategies instruction on improving first year learning disabled students' academic time management and academic self efficacy. A total of 60 students identified with LD participated. The sample was divided into two groups; experimental (n= 30 boys) and control ( n= 30 boys). ANCOVA and T .test were employed for data analysis. Findings from this study indicated the effectiveness of time management strategies instruction on improving first year learning disabled students' academic time management and academic self efficacy. On the basis of the findings, the study advocated for the effectiveness of time management strategies instruction on improving first year learning disabled students' academic time management and academic self efficacy.*

**Key words :**time management strategies instruction, academic time management, academic self efficacy, learning disabilities .

## Introduction

Time management which involves goal setting, prioritization, planning, hesitation and ways of coping with it, studying and learning strategies, note taking, stress management, affects individuals' ability for better use of time and giving sense of affairs control power to them (Orgenstern, 2000). Studies demonstrate that time management skills can be trained .MacCann and et al.(2012)posits that time management may be influenced by cognition (e.g. goal setting and intention) and context (e.g. role of the study environment). This is in line with the call to include individual characteristics and others influence in time management research (Claessens et al, 2007). This is also in line with related empirical findings. For example, high achieving students were found to exhibit more self-regulated learning skills (Zimmerman & Martinez-Pons, 1990), and with time management in particular (Eilam & Aharon, 2003).

The construct of self-efficacy has been studied to determine issues related to how students learn and how they may or may not accept the shift of taking more responsibility for their learning (Bandura, 1997). Bandura proposes that the ability of people to bring about significant outcomes assists them with being able to predict such outcomes. Bandura has defined self-efficacy as referring to “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (1997, p. 3). Bandura situates the construct of self efficacy within the context of social cognitive theory, which is, in turn, based on the notions of triadic reciprocal causation and human agency. In relation to the social cognitive theory of triadic reciprocal causation, Bandura (1986, 1997) posits that personal factors (e.g., attitudes and beliefs), behaviors, and environmental events all influence each other and impact individuals’ capabilities to perform in certain ways.

For example, Marcia believes that she is very intelligent (personal factor) and thus chooses to engage in activities that require intelligence (behavior) such as a trivia or problem solving game. In addition, others playing this game may choose her first to be on their team (environmental factor), thus supporting her belief in her intelligence. Human agency refers to the control one has over influencing behavioral and environmental outcomes.

For example, continuing with Marcia, her agency is evident in her choice to play intelligent games and her choice to believe that being chosen first reflects positively on her intelligence. In addition to investigating the processes through which self-efficacy interacts within one’s cognitive and behavioral capabilities, Schunk and Pajares (2002) articulate sources from which self-efficacy beliefs can be constructed or developed such as familial and peer influences.

Existing time management interventions include training in skills such as goal-setting, scheduling, prioritizing tasks, self-monitoring, problem-solving techniques, delegating, and negotiating, as well as conflict resolution (Bruning & Frew, 1987; Higgins, 1986; Morisano, Hirsh, Peterson, Pihl, & Shore, 2010; Richardson & Rothestein, 2008). Those focused specifically on time management are often centered on setting goals and priorities, the mechanics of time management (e.g., making to-do lists), and/or one's preference for organization (e.g., preference for a well-organized rather than disorganized work day; Claessens et al., 2007). Macan et al. (1990) suggested that time management training should lead to increases in those areas and, in turn, this should lead to increased perceived control of time (Claessens et al., 2007).

Studies (see Green & Skinner, 2005; King et al., 1986; Macan, 1994; Slaven & Totterdell, 1993; Van Eerde, 2003) have concluded also that, after training, participants were likely to engage in time management behaviors more frequently (Claessens et al., 2007). Additionally, variables such as accurately estimating time, time on important tasks, anxiety, and procrastination seem to be positively affected by time management training (Burt & Kemp, 1994; Claessens et al, 2007; Eilam & Aharon, 2003; Francis-Smythe & Robertson, 1999; Karim, et al. , 2013; Van Eerde, 2003). Today the use of time or managing time is a critical issue both for individuals and organizations.

The purpose of this study is to explore the effectiveness of time management strategies instruction on first year learning disabled students' academic time management and academic self efficacy.

## Methods

*Participants*

60 students participated in the present study. Each student participant met the following established criteria to be included in the study: (a) a diagnosis of LD by teacher's references, and learning disabilities screening test (Kamel,1990) (b) an IQ score on the Mental Abilities Test (Mosa, 1989) between 90 and 118 (c) absence of any other disabling condition. The sample was divided into two groups; experimental (n= 30 boys ) and control ( n= 30 boys )

The two groups were matched on age, IQ, academic time management and academic self efficacy. Table 1.shows means, standard deviations, t- value, and significance level for experimental and control groups on age( by month) ,IQ , academic time management and academic self efficacy ( pre-test).

Table 1. shows that all t- values did not reach significance level. This indicated that the two groups did not differ in age , IQ , academic time management and academic self efficacy ( pre-test) .

Table 1. *means, standard deviations, t- value , and significance level for experimental and control groups on age ( by month),IQ, academic time management and academic self efficacy ( pre-test).*

| Variable | Group | N | M | SD | t | Sig. |
|---|---|---|---|---|---|---|
| Age | Experimental | 30 | 143.66 | 2.03 | -.063 | Not sig. |
| | Control | 30 | 143.70 | 2.06 | | |
| IQ | Experimental | 30 | 111.34 | 3.32 | -.121 | Not sig. |
| | Control | 30 | 111.89 | 3.24 | | |
| academic time management | Experimental | 30 | 26.60 | 1.49 | -1.842 | Not sig. |
| | Control | 30 | 26.33 | 1.58 | | |
| academic self efficacy | Experimental | 30 | 8.80 | 1.12 | -1.673 | Not sig. |
| | Control | 30 | 9.36 | 1.47 | | |

*Instruments*

19-item TMQ developed to measure time management practices of prep school students has 3-point Likert scale. Responses under each item consist of always, sometimes, and never. Higher values on the TMQ correspond to better time management practices. Time Management Questionnaire was administered to subjects at classrooms and it took 10 minutes.

8-items Academic Self-Efficacy Questionnaire for Children (SEQ-C) developed to measure academic self efficacy for students in prep 1 .It has 3-point Likert scale. Responses under each item consist of always, sometimes, and never. Higher values on the Questionnaire correspond to better Academic Self-Efficacy. The Questionnaire was administered to subjects at classrooms and it took 5 minutes.

*Procedure*

*Screening* : Prep1 students who participated met the following established criteria to be included in the study: (a) a diagnosis of LD by teacher's referral. Neurological scanning results indicated that those individuals were neurologically deficient (b) an IQ score on the Mental Abilities Test (Mosa, 1989) between 95 and 115 (c) reading performance scores at least 2 years below grade level (d) absence of any other disabling condition.

*Pre-intervention testing*: All the sixty students in grade five completed the reading comprehension test which was developed to assess reading disabled children 's skills in reading comprehension.

*General Instructional Procedures*: Instruction was delivered to after school, in the multipurpose room. Permissions were obtained from students' fathers, and the school principal. Students received 1 training session a week, for six weeks, lasting 50 min .

*Design and Analysis*

The effects of implementing time management strategies instruction on students' academic time management and academic self efficacy were assessed using a repeated-measures design, pre- post- and follow-up testing.

**Results**

Table 2. shows data on ANCOVA analysis for the differences in post- test mean scores between experimental and control groups in academic time management. The table shows that the (F) value was (1149.034 ) and it was significant value at the level (0.01).

Table 2. *ANCOVA analysis for the differences in post- test mean scores between experimental and control groups in academic time management*

| Source | Type 111 sum of squares | df | Mean square | F | Sig. |
|---|---|---|---|---|---|
| Pre | 3.882 | 1 | 3.882 | | |
| Group | 4010.564 | 1 | 4010.564 | 1149.034 | 0.01 |
| Error | 198.952 | 57 | 3.490 | | |
| Total | 4386.183 | 59 | | | |

Table 3. shows T. test results for the differences in post- test mean scores between experimental and control groups academic time management. The table shows that (t) vale was (43.58). This value is significant at the level (0.01) in the favor of experimental group . The table also shows that there are differences in post- test mean scores between experimental and control groups in academic time management in the favor of experimental group .

Table 3. *T- test results for the differences in post- test mean scores between experimental and control groups in comprehension test*

| Group | N | Mean | Std. deviation | T | Sig. |
|---|---|---|---|---|---|
| Experimental | 30 | 44.56 | 2.01 | 43.58 | 0.01 |
| Control | 30 | 27.86 | 1.71 | | |

Table 4. shows data on ANCOVA analysis for the differences in post- test mean scores between experimental and control groups in academic self efficacy. The table shows that the (F) value was (1009.780) and it was significant value at the level (0.01).

Table 1. *ANCOVA analysis for the differences in post- test mean scores between experimental and control groups in academic self efficacy*

| Source | Type 111 sum of squares | df | Mean square | F | Sig. |
|---|---|---|---|---|---|
| Pre | 1.782 | 1 | 1.782 | | |
| Group | 1157.092 | 1 | 1157.092 | 1009.780 | 0.01 |
| Error | 65.316 | 57 | 1.146 | | |
| Total | 1280.333 | 59 | | | |

Table 5. shows T. test results for the differences in post- test mean scores between experimental and control groups academic self efficacy. The table shows that (t) vale was (32.842). This value is significant at the level (0.01) in the favor of experimental group The table also shows that there are differences in post- test mean scores between experimental and control groups in academic self efficacy in the favor of experimental group .

Table 3. *T- test results for the differences in post- test mean scores between experimental and control groups in academic self efficacy*

| Group | N | Mean | Std. dev. | t | Sig. |
|---|---|---|---|---|---|
| Experimental | 30 | 18.66 | .75 | 32. 842 | 0.01 |
| Control | 30 | 9.66 | 1.29 | | |

## Discussion

The main objective of the present study was to explore the effect of effects of implementing time management strategies instruction on students' academic time management and academic self efficacy.

The results of this study as revealed in tables 3, 5, show that implementing time management strategies instruction was effective in improving academic time management and academic self efficacy of students in experimental group, compared to the control group whose individuals did not recieve such training in time management.

Results of Bandura et.al studies indicated that individuals with strong feelings of their competence can make better decisions when face with difficulties. Similarly, the efficient and powerful role of self-efficacy believes on cognitive procedures of self-regulation were confirmed in other studies. Findings have indicated that individuals with strong efficient believes use self regulation procedures including monitoring on comprehension and planning, widely (Pintrich & De Groot, 1990; Zimmerman et al, 1992).

Other studies and investigations (Terry, 2002) indicated that there is a positive relationship between time management skills and efficient self-regulation. In this regard Dombrowski (2006) indicated that there is a significant relationship among self efficiency, planning, prioritizing goals and a part of self-regulation and time management.

Results obtained from Hajar Naser et al's(2014) investigation indicated that instructions of time management strategies has significant and positive effect on promoting students' self-efficacy. Moreover obtained results revealed that the effects of mentioned instructions in different educational fields were different.

Overall , results showed that time management skill in the experimental group were better than the control group. In other word, the people that were in the experimental group and under intervention, their time management skills were improved than another group (control group).

## Implications

The results of this study have several important implications. This study adds to the literature on the effectiveness of time management strategies instruction with learning disabled students. Results appear to indicate that time management strategies instruction is an effective instructional strategy for improving academic time management and academic self efficacy of students with learning disabilities.

## References


Bandura, A. (1986). *Social foundations of thought and action*. Englewood Cliffs: Prentice Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman & Company.

Bruning, N. S., & Frew, D. R. (1987). Effects of exercise, relaxation, and management skills training on physiological stress indicators: A field experiment. *Journal of Applied Psychology*, *72*, 515–521.

Burt, C. D. B., & Kemp, S. (1994). Construction of activity duration and time management potential. *Applied Cognitive Psychology*, *8*, 155–168.

Claessens,B.J.C., van Eerde, W., Rutte,C.G.,&Roe,R.A. (2007).A review of the time management literature. *Personnel Review*,36(2),255-276.

Dombrowski, J. (2006). *The relationship of self efficacy, time management behavior, intervolve conflict, and number and ages of children in the household to physical activity in working mothers.* The Catholic University of American.Unpublished dissertation.

Eilam, B., &Aharon, I. (2003). Students' planning in the process of self-regulated learning. *Contemporary Educational Psychology*, 28, 304-334.

Francis-Smythe, J. A., & Robertson, I. T. (1999). On the relationship between time management and time estimation. *British Journal of Psychology*, *90*, 333–347.

Green, P., & Skinner, D. (2005). Does time management training work? An evaluation. *International Journal of Training and Development*, *9*, 124–139.

Hajar Naser Naeemi Aval a, Ramin Dastouri a, Seyed Davood Hoseyni Nasab a, Mansour Bayrami(2014). Efficiency of Time Management Strategies Instruction on Students' Self-efficacy. *Reef Resources Assessment and Management Technical Paper, Vol. 40 (5), pp. 408-417*

Higgins, N. C. (1986). Occupational stress and working women: The effectiveness of two stress reduction programs. *Journal of Vocational Behaviors*, *29*, 66–78.

Karim Babayi Nadinloyia , Nader Hajloob , Nasser Sobhi Garamaleki c, Hasan Sadeghid (2013). The Study Efficacy of Time Management Training on Increase Academic Time Management of Students . *3rd World Conference on Psychology, Counselling and Guidance (WCPCG-2012)*

King, A. C., Winett, R. A., & Lovett, S. B. (1986). Enhancing coping behaviours in at-risk populations: The effects of time-management instruction and social support in women from dual-earner families. *Behaviour Therapy*, *17*, 57–66.

Macan, T. H. (1994). Time management: Test of a process model. *Journal of Applied Psychology*, *79*, 381–391.

Macan, T. H., Shahani, C., Dipboye, R. L., & Phillips, A. P. (1990). College students' time management: Correlations with academic performance and stress. *Journal of Educational Psychology*, *82*, 760–768.

MacCann, Carolyn; Fogarty, Gerard J.; Roberts, Richard D.(2012). Strategies for Success in Education: Time Management Is More Important for Part-Time than Full-Time Community College Students. *Learning and Individual Differences*, v22 n5 p618-623.

Morisano, D., Hirsh, J. B., Peterson, J. B., Pihl, R. O., & Shore, B. M. (2010). Setting, elaborating, and reflecting on personal goals improves academic performance. *Journal of Applied Psychology*, *95*, 255–264.

Mosa, Farouk. A.( 1989) *Mental Ability Test,* Cairo, El Nahda Al Masrya .

Orgenstern, J. (2000). *Time management from the inside out*. New York: Hencry holt.

Pintrich, P.R., & De Groot, E.V. (1990). Motivational and Self- Regulated learning components of classroom academic performance. *Journal of Educational Psychology.* 82, 33-40.

Richardson, K. M., & Rothstein, H. R. (2008). Effects of occupational stress management intervention programs: A meta-analysis. *Journal of Occupational Health Psychology, 13*, 69–93.

Schunk, D. H., & Pajares, F. (2002). The development of academic self-efficacy. In A. Wigfield & J. Eccles (Eds.), *Development of achievement motivation*. San Diego: Academic Press.

Slaven, G., & Totterdell, P. (1993). Time management training: Does it transfer to the workplace? *Journal of Managerial Psychology, 8*, 20–28.

Terry P S, (2002). *Effect of time management practice on self-regulation, and academic self-efficacy.* Dissertation of curriculum and instruction, Virginal University.

Van Eerde, W. (2003). Procrastination at work and time management training. *Journal of Psychology, 137,* 421–434.

Zimmerman, B. J., & Martinez-Pons, M. (1990). Student differences in self-regulated learning: Relating grade, sex, and giftedness to self-efficacy and strategy use. *Journal of Educational Psychology,* 82, 51−59.

Zimmerman, B.J., Bandura, A., & Martinez-pons, M. (1992). Self-Motiration Disabilities and Behavior Disorder. *Exceptional children*, 6,5, 97- 389.