Available online at: http://www.iase-adje.ir/
Interdisciplinary Journal of Education
Volume 1, Number 2, (41-49), 2017

The effectiveness of Meta cognitive skills training on the reduction of academic procrastination and anxiety exam in Female students

Rahele taher gholami[1], Shahrbanoo jalaee *[2]

[1] M.A student of General psychology, Islamic Azad University, Bojnourd Branch, Bojnourd Iran
[2]Assistant Professor of General Psychology, Islamic Azad University, Bojnourd Branch, Bojnourd Iran

Article history:
Received date: 25 September, 2016
Review date: 12 October 2016
Accepted date:23 November 2016
Printed on line:
5 January,*2017*

Key words: *depression,* Meta cognitive skills training, academic procrastination and anxiety exam

Abstract

Purpose The aim of the present study was to study the impact of Meta cognitive skills training on the reduction of academic procrastination and anxiety exam in Male students. **Material & Method**: Statistical population in this study consisted of all high school female student of Bojnourd in 93-94 academic year. 40 students were selected using the multi cluster sampling method and they were placed in two groups as experimental group (20 person) and control group (20 person). The used tools include the anxiety exam (1980) and academic procrastination (1989) Questionnaire. This study was a semi- pilot design and its research design (plan) was the pretest - posttest with control group. **Findings:** The data analysis was performed by Covariance Analysis. The results showed that cognitive-behavioral skills training have a significant effect on the reduction of academic procrastination and anxiety exam in Male students of experimental group. In other words, Meta cognitive skills training results in reduction of academic procrastination and anxiety exam in Male students of experimental group. **Discussion:** Through employing Meta cognitive skills and self-information, self-awareness, task awareness and learning strategies awareness students can reduce their academic procrastination and anxiety exam.

Please cite this article as: Taher Gholami, R; Jalaee, Sh (2017). The effectiveness of Meta cognitive skills training on the reduction of academic procrastination and anxiety exam in Male students. ***Interdisciplinary journal of education***, 1(1), *41-49*

* Corresponding author: Email: shjalaei@yahoo.com

1.Introduction

Metacognition is one of the main topics in psychology and education. Although more than two decades of presence of meta cognition in the dictionary of psychology goes, but widespread evidence suggests that a special place among researchers and international experts (Fouladchang, 1381). Meta cognition is an important concept in cognitive theory and it includes two basic processes that occur simultaneously: (Notes the progress during learning) and others (creating change in procedures of learning) if it is not learned well. Meta cognition includes self-organizing, self- response and initiative. Meta cognition beliefs is very deep and wide concept that many of human behaviors affected it. Examples of human behavior is affected by Meta cognition beliefs in education and many educational processes, including self-directed learning of students play an important role. (Fisher and King, 2010).

Test anxiety is a type of anxiety disorders that it can cause anxiety Due to extensive different testing during life stages. Anyone on the path of life is faced with numerous academic tests Test anxiety can be stated serious when test and score the only means of Promotion measuring of students and has high importance. Anxiety disorders are the most common psychiatric disorders in the studied societies. In addition, studies have shown that this disorder causes a lot of problems and complications and high levels of health care services spends for its own and also functioning of the individuals very disturbed (Tahmasbpour, 1390).

Allen (2002) has defined test anxiety as an emotional unpleasant response to assessment situations at school and classroom, this state of excitement usually associated with stress and anxiety, confusion and nervous system arousal, when the crisis of test anxiety means situations are along with a sense of impending danger or feeling of disintegration. Teen helpless and shelter less helpless and cannot find a cause for his emotional state. (Abolqasemi, 1381). The psychologically procrastination means the work devolved to the future that we decided to implement it. But the word has different meanings to different people and Various aspects of it is Harvest, individual desire to do something and that can be effective for him in the future, although at present it does not appear necessary, sometimes even postpone may help individual in continue better that work, but generally involves unpleasant consequences, Negligence in any way be, it is indecent and faulty. (Fan and Zinc, 2009). Negligence has long been considered at Islamic sources it is mentioned in the traditions and prayers.

2. Research Background

It is unspoken that ethics scholars and mystics Continuously Have warned People Journey from developing the moral and behavioral anomaly. The word in the West, particularly in the field of psychology has been about forty years. Only Professor of psychology who has only discussed the history of it, is "The L T.rychn Bach" and book called Investigate the causes of procrastination has authored, although, his chosen theme is interesting but it does not helped solving the problem. After Him, two persons of the authors named "Alice" and "William James BAL" wrote a psychology book of procrastination that in the kind of own, is innovative and presentable work. (Hassan, 1389). Almost 50 percent of delays are experiencing difficulties in doing homework and other tasks (D., meniscus and Sullivan, 2000, Haykok, 1993; quoted from Anwuegbuzie, 2000).

Procrastination or procrastination due to the complexity of the cognitive, emotional and behavioral components of it has different protests. Including academic procrastination (Hill, Hill, Chabot and Barale, 1978), procrastination in decision-making (Ayfrt and Ferrari, 1989), neurotic procrastination (Ellis and NAS, 1997) and obsessive procrastination (Ferrari, 1991; quoted in Joukar and Delavarpoor, 1386). But the most common form of it is Academic Procrastination (Brvtn and have the batch, 2001; Moon and Ealing Worth, 2005; quoted Joukar and Delavarpoor, 1386). Ruth Bloom, Solomon and palatal Mora (1986), this type of procrastination has been defined as Prevailing and Habitual Inclination of Learners to

postpone academic activities which is almost always associated with anxiety. Obvious example of it is postpone of studying lesson until the exam night and its resulting anxiety that is affecting the students. Some of the most important antecedents or causes of academic procrastination by experts include: Parenting styles, perfectionism, low self-worth, difficult and irritating tasks, and academic self-efficacy, learning styles, lack of proper planning study programs, study habits and (Burka et al., 1990; quoted in Ausadasi, 2010).

Elimination of the above cases and as well as reduce test anxiety can be done with many Secure techniques that one of the most important of it is meta cognitive skills training. Metacognitive strategies include techniques that students use for learn designing, monitor on learning activities and to evaluate the results of their learning activities, these strategies for learners provide tool for self-management tools, self-regulation in order to reaching optimal learning results. Cognitive strategies are related in ways that are working directly on the subject of learning and Tends to increase the interpretation, understanding and acquisition of information. Cognitive processes to strengthen the process of thinking through various learning strategies and are helper for obtaining the cognitive purposes such as Such as comprehension and memorization.

The main objective of cognitive training, self-control and self-learning. As students become independent learners who can reform and guide and monitor cognitive processes and learning toward self-specified objectives. (Kareshki, 1381) Many of learning difficulties and learning transfer is due to lack of skills and Meta cognitive strategies. Mentioned skills and strategies gives to individual possibility of choice, control, and monitor, manage and improves the cognitive processes. Therefore, students should be trained in field of skills such as systematization, monitoring, planning and goal setting to dominate on the cognitive decided strategies and the to create a new learning; Otherwise solve new assignments that have not previously encountered, are difficult for them. Training such strategies means meta-cognitive education is distinct from cognitive training. Cognitive training requires training special strategies of assignments, if that Meta cognition training emphasized on technical training and monitoring, evaluation and how of use of cognitive strategies. However, the question of this study is that does meta cognitive skills training on reducing academic procrastination and test anxiety in students have effectiveness?

3. Method

1.3. Research Model

This study is a quasi-experimental and research design is from a pretest-posttest design with a control group. the statistical society of study include All secondary high school girl students of public high schools of Bojnoord that The number of them based on inquiry from the field of education by the Education Department were about 4328 people. In this multi-stage cluster sampling method will be used, this way that The first lists all public schools for girls (18) High School will be prepared and 6 schools will then choose between them and then from each school one class and then among the volunteers will be selected from each class about 7 people. Then with the made arrangements, all volunteer students will become coordinator at a specific place at a specific time and trainings will do in that place. In total, 40 people will be selected randomly were divided to two groups (n = 20) and control (n = 20) and trainings will do on the experimental group and they were asked that they not transfer done training to other groups.

2.3. Measurement tools

1.2.3. Test Anxiety Inventory

To measure the anxiety level, test anxiety questionnaire of Sarasin (1980) was used. This questionnaire has been made by Sarason (1958) and in 1980 has been revised. Test-retest reliability coefficient of Anxiety Scale at intervals of several weeks, was more than 80 percent. Walkman and Courmayeur (1976) as well

as have reported 87% reliability coefficients for scale test anxiety. The scale is used to compare groups who are at particular situations of high scores and as well as a dependent variable that reflects the impact of an experimental Therapeutic procedure or clinical way. The number of questions is 37. Scoring method on this scale is in this way that The number matters that subject answered correctly them, it Constitutes his exam anxiety score, In the matters of 3,15,26,27,29,33 to select incorrect option and in other test matters to select the right option, one score is given. So the range of scores will be from 0 to 37. Reliability coefficient of Test anxiety questionnaire was obtained 89% using Cranach's alpha.

2.2.3. Scale of academic procrastination

This scale Solomon Bloom's heirs in 1989 mad for investigate the academic procrastination in three areas: preparation of assignments (questions 9 and 17), prepare for the exam (questions 1 to 6) and the preparation of half-year papers (questions 20 and 25). This scale is consisting of 21 items. In front of each item placed range of five options from never with score 1, rarely with a score of two, occasionally with a score of three, often with four scores, and always with a score of five is. In addition to the 21 questions, six questions to assess both the discomfort of being negligent (Questions 26, 17, 7) and the desire to change the habit of procrastination (question 27, 9, 8) is considered. In This scale, questions (2, 4, 6, 11, 13, 15, 16, 21, 23, and 25) are scored in reverse.

The creators of this scale to determine the reliability of academic procrastination scale used from Cranach's alpha coefficient and its value is equal to 0.91% announced. Preparing assignments, exam preparation, preparation of articles a half year, the inconvenience of being negligent, the desire to change the habit of procrastination Anwuegbuzie (2004) from the University of South Florida, Cranach's alpha coefficient for the three categories of the questionnaires, is calculated respectively, 0.84, 0.85, 0.76. The Hop (2011; quoted in Kothari, 1390) that has used this tool in his study, has calculated reliability 0.80 with retest method. Jokar and Delawarpoor (1386) in their study to determine the validity of academic procrastination scale used from method of factor analysis and correlation of item with the total Score.

3.2.3. Package of Meta-cognitive skills training

This package is formed from combining both cognitive and Meta cognitive approach (whether in the form of cognitive therapy and in the context of cognitive psychology and cognitive science base). In cognitive Therapeutic behavior, Strength points of Behavior therapy and cognitive therapy approaches means Objectivity, Assessing and measuring the one hand, and memory in the reconstruction and interpretation of data on the other hand, are gathered and are used. In this approach, cognitive processes as an important element in information processing and individual reactions to stimuli is considered (Houghton et al., 1382). Meta-cognitive skills training in 12 sessions of 90 minutes in 6 weeks (two sessions in a week) based on the cognitive behavioral approach for the experimental group was presented. Collecting data of the present study was conducted in three stages and with above method: 1. pre-test stage, 2. stage of Meta cognitive skills training, 3. Posttest stage.

4. 2.3. Data collection method

In order to test the hypotheses, we used *repeated-measures analysis of variance.* In these analyses, the dependent variable was negative automatic thoughts. The study employed a pretest, post-test, follow-up design and the patients in the study received a five-month, twenty-session schema therapy based on young theory. The treatment protocol of ST for chronic depression is based on the basic protocol of ST developed by Young et al. (2003). The treatment protocol of ST for chronic depression can be divided into two phases: (I) exploration, (II) change, and (III) relapse prevention. In the first two phases, sessions should be scheduled weekly, whereas in the last phase, the frequency of sessions should be decreased to give the client more autonomy and responsibility.

4.Findings

Table 1. Descriptive statistic of variable and sub variables in test anxiety in the pre-test and post-test

Group	T		P a	e	p h A	,Ibn	dchp	A p	Es
Co	pre	Av	20.87	17.10	26.18	8.19	8.23	1.889	16.10
		SD	1.18	1.28	1.56	0.18	0.31	1.04	2/08
	post								
	pre-	Av	20.36	17.14	59.18	7.88	8.58	23.88	16/56
	post	SD	1.22	1.33	1.76	0.13	0.04	5.04	2/36
	pre	Av	20.44	17.21	18.29	7.92	8.28	12.89	15/42
Ex									
		SD	1.33	1.29	1.28	0.14	0.12	12.4	2/21
	post								
	pre-	Av	18.33	13.77	14.22	5.18	5.11	0.88	/4412
		SD	2.01	1.87	2.01	0.96	0.05	6.04	/21

Note: Sd, Av, pre, T, Group, co, Ex, Pa, Pe,The,PHA,Ibn, Dchp,ap, ES standard deviation, Average pretest, test, Group, Control, Experiment, Prepare assignments, Preparation for the exam, preparation of half-year Articles, The inconvenience of being negligent, The desire to change the habit of procrastination, Academic procrastination, exam stress

The results presented in Table 1 indicate that in the pre-test, procrastination average of academic cooperation and test anxiety haven't much difference in the experimental group and the control group. But in the post-test stage, Scores of experimental group in all variables and sub-variables of procrastination of academic cooperation and test anxiety is lower than control group.

Table 2. Kolmogorov-Smirnov test results

	1	2	3	4	5	6	7
N	40	40	40	40	40	40	40
Z	1.22	0.44	0.37	730/	0.82	1.11	0.88
s	0.17	0.67	0.72	0.42	360/	0.13	0.23

Note: N, Z, And And S stand for Number, Significance level: Numbers are stand in turn 1-Preparing assignments2 Exam preparation3 the preparation of half-year Articles4- The inconvenience of being negligent5- The inconvenience of being negligent6- Academic procrastination7. Test anxiety

Based on the results presented in Table 2 and Z values less than 1.96 and significantly level higher than 0.5 can be inferred that the distribution of variables (academic procrastination (p = 1.11, Z =0.13) and test anxiety (p = 0.23, Z 0.8) is in the normal in society.

Table 3. homogeneity of variance-covariance matrices for academic procrastination and test anxiety

Variables	**Box's M**	**s**	**df**	**F**
Prepare assignments	22.11	1.02	38	0.31
Preparation for the exam	11.10	1.11	38	0.66
The preparation of half-year Articles	12.32	1.55	38	0.22
The inconvenience of being negligent	14.12	1.10	38	0.41
The desire to change the habit of procrastination	15.14	1.22	38	0.36
Academic procrastination	43.43	1.54	38	0.21
exam stress	26.33	1.35	38	0.35

Degree of freedom, Significance level, F

The results presented in Table 3 shows that Assumption of homogeneity of variance-covariance matrices Is respected about negligence of academic cooperation (Box`s M= 43.43 54/1 , F = 1.54 P =0.21)

and Its sub-components such as Preparing assignments (Box`s M = 22.11 , F =1.02, P 0.31), readiness for the exam ( Box`s M= 11/10 ,F =1.11, P = 0.66) Preparing semester papers (Box`s M = 12.32, F=1.55, P =0.22), the inconvenience of being negligent ( Box`s M=14.12, F = 1.10 , P = 0.41) and the desire to change the habit of procrastination (Box`s M = 15.14, F = 1.22 , P = 0.36) as well as the assumptions on test anxiety ( Box`s M=26.23, F = 1.35, P=0.35) .

Table 4, the check the assumption of homogeneity of regression slopes for performing the analysis of covariance

S C	ss	Df	As	F	p
Ap	10.88	1	10.88	0.351	50.6
es	0.33	1	0.33	0.331	4 0.9

S C, ss, Df, As, p, AP, Source Changes, sum of squares, degree freedom, Average of squares, probability, Academic procrastination, exam stress

As amounts of probability and variance analysis test in variable of academic procrastination (p = 0/56, F = 1.35) and test anxiety (p = 0.49, F =1.33) show, homogeneity assumption The slopes of the regression established about research variables and therefore can be used for checking the research hypothesis from covariance analysis test.

Table 5. the correlation matrix of academic procrastination and test anxiety and its sub-components in Post-test.

	1	2	3	4	5	6	7
1.	1						
2.	0.46^*	1					
3.	0.41^**	0.37	1				
4.	0.52^**	0.30^**	0.41^**	1			
5.	0.31^**	0.49^**	0.21^**	0.57^**	1		
6.	0.54^**	0.43^**	0.58^**	0.41^**	0.37^**	1	
7.	0.63^**	0.53^**	0.15^*	0.36^**	0.54^**	0.33^*	1

$0.05 \leq P$ * $0.01 \leq P$**

1. Prepare assignments2. Preparation for the exam3. The preparation of half-year Articles4. The inconvenience of being negligent5. The desire to change the habit of procrastination6. Academic procrastination7.exam stress

The results of checking the correlation between and test anxiety and its sub-components in Post-test show that there are significant correlation coefficients Between two variables and all sub-components together. Thus, according to the assumptions of usage of analysis of covariance, we will test the research hypotheses.

Table 6. Results of Independent t-test to compare the average of the experimental and control groups in pretest.

Variables	t	df	Significance level
Prepare assignments	0.44	38	0.66
Preparation for the exam	0.54	38	0.56
The preparation of half-year Articles	0.71	38	0.34
The inconvenience of being negligent			
The desire to change the habit of procrastination	0.32	38	0.76
Academic procrastination	0.31	38	0.80
exam stress	0.51	38	0.49

The results presented in Table 7 indicate that in the pre-test in any of the research variables, there is no meaningful difference between the experimental and control groups.

Table 8. The results of analysis of difference variance between experimental and control groups in procrastination of post-test academic cooperation.

Source of changes	Wilks` Lambda	F	Significance	Partial η^2	Power of test
Academic procrastination	0.49	2 8.1	0.03	0.46	1

As shown in Table 8, the difference of The adjusted averages in academic procrastination of experimental and control groups is statistically significant (P =0.03, F = 8.21). The difference size of experimental and control groups scores or The size of the effect of training method is (η2 = 0.46); This means that the 46% variance of the remaining total scores, is influenced by meta cognitive skills training. The statistical power is also 1; this means that the accuracy amount of this analysis in finding significant differences is in the high level. And also suggests that the sample size is sufficient for this test.

Table 9. Multivariate analysis of variance of difference between experimental and control groups in dimensions of academic procrastination of post-test.

Source of changes	**f**	**MS**	**F**	**S**	Partial η^2	**Pt**
Prepare assignments	0.02	0.02	2.40	0.11	0.03	0.09
Preparation for the exam	0.18	0.18	9.22	0.03	0.18	0.81
The preparation of half-year Articles	0.20	0.20	3.11	0.04	0.31	0.72
The inconvenience of being negligent	0.19	0.19	6.22	0.03	0.19	0.83
The desire to change the habit of procrastination	0.21	0.21	2.13	0.03	0.33	0.76

The results presented in Table 9 shows the difference between control and experimental groups was statistically significant at all in sub-variables. This means that training of meta cognitive skills would greatly increase students' skills in self-preparing for assignments, exam preparation, preparation of papers semester, the inconvenience of being negligent The desire to change the habit of procrastination is effective. In general, we can say that the first hypothesis of this study based on effectiveness of Meta cognitive skills training on reducing academic procrastinations approved. The results of Covariance analysis to control the effect of pretest on posttest anxiety is presented in the table.

Table 10. the results of analysis of variance of test anxiety difference between control and experimental groups.

SC	**ss**	**Df**	**M S**	**F**	**P**	Partial η	**Pt**
Ta	0.51	1	227.51	20	0	0.44	1
	227			0.51	0.03		

Note: Source Changes, sum of squares, Degree of freedom, Mean Square, Test anxiety, sum of squares, Degree of freedom, Mean Square, Power of test

Results The table above shows that the post-test scores of test anxiety in the experimental and control group by removing the effect of pre-test scores are significantly (F= 51.20, P = 0.003) are different together. And the effectiveness amount of meta-cognitive skills training on reducing anxiety is 0.44.it means that the 44% of the variance of remaining total scores Arises from test anxiety education. The amount of statistical power is 1; this means that the accuracy amount of the analysis in finding significant differences is in the high level and the sample size is sufficient for this test.

4. Discussion

The results showed that the difference between control and experimental groups was statistically significant at all in sub-variables. This means that training of meta cognitive skills would greatly increase students' skills in self-preparing for assignments, exam preparation, preparation of papers semester, the inconvenience of being negligent The desire to change the habit of procrastination is effective. In explaining the effectiveness of meta-cognitive skills training on reducing academic procrastination can have referred ability to meta-cognitive skills training for the planning, growth strategies, monitor on strategies or evaluate the effectiveness of strategies and their consequences or the essential knowledge to use these abilities in a task (Saldana, 2004). In this connection Glover and Browning (1376) also suggest that people are less aware of their autonomous activities, unless they face with problem during a cognitive task, such as inspiration in word or he wrong in sentence in reading, here, Meta cognition warn them that they have the problem in the fact that they have no choice but should think to solve the problem.

Yang (2005) in this regard and consistent with findings of this study, considers Meta cognitive strategies as A powerful tool for revealing how to develop the learning process that it makes enhance self-learning skills, promoting independence and facilitating the learning ability. August, Brady (2005), Makaya& Korial (2008) in line with the findings of this study suggest that Meta-learning has the positive relationship with learning and preventing from negligence of academic cooperation. And students who know themselves more efficient, have more Cognitive and meta cognitive strategies and are The more successful problem solving and as a result, they eschew.

The negligence, in line with the above findings Sun and Metcalf, 2000; Hoffman and Aspataryv (2008) have also expressed that Meta-cognition has positive relationship with learning and comprehension. Processes of Meta cognitive review and control have interactive relationship together. Recognition of a person about his ability and knowledge of cognitive and Meta cognitive strategies improve learning and academic performance is increased. The results obtained are along both directions the research results Howell Watson (2007), Cycle (2000) and Walters (2003, 2004).

In this regard, psychologists say that Students who are not motivated to do homework, have more likely poor Learning and study strategies, also , Since that time management is also a critical and effective components on Learning Curricula among students and On the other hand ,significant and direct relationship with negligence of academic cooperation has been proven in various studies, It seems that with improving and growing of Methods and learning strategies and study can reduce negligence of academic cooperation(Askvnbrg, 2004; quoted Havel and Watson, 2007).

This finding can be Statements Hussein and King (2011) based on Procrastination as a problem can be associated with a lack of learning and communication skills, homework annoying, lack of planning for study and learning Inappropriate Styles in addition to psychological pressure and stress and irrational beliefs.

In explaining the findings obtained in this study, it can be said that Students who have a greater meta-cognitive skill, they have more willing to study and do their homework. The students who benefit poor study and learning methods, they have more willing to avoid, it is something that we know it as negligence of academic cooperation.

References

Flavell j. H. & Miller p (1998). *Social cognition*. Handbook of child psychology: vol 2. New York: Wiley.

Flavell, J. H. (1988). *Cognitive development*. Englewood cliffs, N.J. Prentice – hall.

Ferguson, C. (2001). *Effects of metacognitive strategy instruction on sixth grade students content reading comprehension*. Boston University.

Gilman, R., & Huebner, E. S. (2000). Review of life satisfaction measures for adolescents. *Behavior Change*, 3, 178-83.

Gordanshekan M, Yarmohammadian MH, Ajami S. Effects of metacognitive Instruction on Selfdirected Learning. *Iranian Journal of Medical Education*. 2011; 10(2):1. [In Persian].

Maleki B. Effects of Cognitive Strategies Training to Increase Learning and Retention of Textbooks. *Cognitive Science*. 2006; 7(3):1. [In Persian]

Kareshki H. Effect of instructing metacognitive strategies on students' comprehension. *Journal of Psychology*. 2002; 6 (1): 63-84. [Persian]

Akinsola, M. K., Tella, A. & Tella A. (2007). Correlates of academic procrastination and mathematics achievement of university undergraduate student. *Science Eurasia Journal of Mathematics &Technology Education*, 3(4), 363-370.

Balkis, M. & Duru, E. (2009). Prevalence of academic procrastination behavior among pre service teachers, and its relationship with demographics and individual preference. *Journal of theory and practice in Education Articles*. 5(1): 18-32.

Benight, C. and Bandura, A. (2004). Social cognitive theory of post traurnatic recovery: the role of Perceived Self-efficacy. *Behavior Research and Therapy*, 42, 1129- 1148.

Boehler ML, Schwind CJ, Folse R. (2001). An evaluation of study habits of third-year .medical *students in a surgical clerkship*; 181 (3): 268-71.

Brothen. T. &Wambach. C. (2001). Procrastination and personality. Performance. And mood, *Personality and Individual Differences*. 30, 95-106.

Carroll, A. M., Houghton, S., Wood, R., Unsworth, K., Hattie, J., Gordon, L., & Bower, J. (2009). Self- efficacy and academic achievement in Australian high school student: The mediating effects of academic as portions and delinquency. *Journal of Adolescence*, Vol. 32, Pp. 797-8 17.

Chu. A. H. C., & Choi, J. N. (2005). Rethinking procrastination: Positive effects of" "active' procrastination behavior on attitudes and performance. *Journal of Social Psychology*. 14. 245-264.

Coutinho, S. A. & Neuman. G. (2008). A model of met cognition, achievement goal orientation, learning style and self-efficacy. *Journal of Learning Environ Research*. No, 11, 131-151.

Franklin, F. A. (2006). *Study habits of undergraduate education students*. Dissertation. Houston: University of Houston: 2-8.

Gary J. Kennedy & Bruce W. Tuckrnun. (2010). *The Mediating Role of Procrastination and Perceived School Belongingness on Academic*. Paper Given at AERA Annual Meeting. Denver. CO. 2010.

Goetz, E-T., Alexander,P.A.& Ash, M.J.(1992). *Educational psychology: A classroom perspective*. Maxwell Macmillan International.

Greene, B. A., Miller, R. B., Crowson, M., & Akey, K. L. (2004). Predicting high school student's cognitive. Engagement and contemporary. Educational *Psychology*, Vol. 29(4), PP. 462-482.

Howell, A. J., & Watson, D. C. (2007). Procrastination: Association with goal orientation and learning strategies. *Personality and Individual Differences*, 43, 167-1 78.

Kagan,M, Osman C, Tohsin f, Mehmet K, (2010). The explanation of the academic procrastination behavior of university Students with perfectionism. Obsessive - compulsive and five factor personality traits. *Procardia Social and Behavioral Sciences.* 2 2121-2125

Lawless. Amanda. (2011). *the Impact of Procrastination and Internet Use on College Students' Academic Performance*. Xavier University press.

Schraw. G., Wadkins, T., & Olafson L. (2007). Doing the things, we do: A grounded theory of academic procrastination. *Journal of Educational Psychology*, 99(1). 12-25.

Sirois, F. M. (2004). Procrastination and counter-factual thinking: Avoiding what might have been. *British journal of social psychology* 43, 209-289.

Skender. Murat. (2011). the influence of self-compassion on academic procrastination and dysfunctional attitudes. *Educational Research and Reviews* Vol, 6(2), pp. 230-234, February 2011, *Social Behavior and Personality*. 56. 478— 484

Wernersbach, B. (2011). *The impact of study skills courses on academic self-efficacy in college freshman.* A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science.

West, R. (1991). *Psychological theories of addiction in I.B, Glass*. (Eds), the International Handbook of addiction behavior, 20-24. London: Tar stocky Rout ledge.

Yaghob khani, M. (2010). Relationship between learning strategies and academic achievement. *Social and Behavioral sciences*, 5, 1033-1036.