

The effectiveness of cognitive-behavioral group therapy on reducing procrastination and academic achievement in secondary school student's first city Saghez

Asyeh Zandi¹, Dr: Omid Moradi ^{*2}

1 -Department of Psychology, Kurdistan Science and Research Branch, Islamic Azad University, Sanandaj, Iran

2 - Department of Psychology, Sanandaj Branch, Islamic Azad University, Sanandaj, Iran,
(Corresponding author: moradioma@gmail.com)

Abstract: Academic procrastination is one of the most common problems among students. This study aimed to assess the efficacy of cognitive-behavioral group therapy on reducing procrastination and increasing motivation in secondary school students of Saqqez city. This study is applied and the method is semi-experimental with pre-and post-test with control group. The study population consisted of all first year of high school female students in the academic year 2015-2016 who were enrolled in the city of Saqqez. Using available sampling method, 24 students with symptoms and characteristics of procrastination and low motivation were selected by using academic procrastination questionnaire of Solomon and Ruth Bloom and Abde Khodaei achievement motivation questionnaire and randomly divided into two groups of experimental and control. the experimental group received 10 sessions of cognitive-behavioral group therapy were 90 minutes. In order to analyze the data, independent t test and analysis of covariance was used. From the results, it can be concluded that cognitive-behavioral group therapy can be effective in reducing procrastination students.

Keywords: academic procrastination, motivation, academic achievement, cognitive-behavioral.

Introduction

Education and training of efficient manpower is one of the most basic needs of each community in order to achieve the goals of the community. Considering that the training of human resources is the most expensive programs of any country, as a result, the importance of removing the causes that can lead to loss of funds spent on education is very important. Students as the most important element in educational system have a special role in achieving the goals of society and the education system. Attention to this group in terms of education and training will be followed by productivity and prosperity of educational-cultural system. Student achievement is among the important issues that is axis of the many educational research and psychology.

Many factors contribute to the success and academic achievement in adolescents, some of which, such as intelligence, abilities and previous learning, motivation, thoughts and beliefs, are cognitive, and others such as personality characteristics, family environment, socio-economic status are non-cognitive (Brown and cross, 1997). Two factors that are closely related to educational failure and the predictors of quality of work in schools and the avoidance or acceptance of assignments are the lack of academic motivation and academic procrastination(Sampson and patchy 2, 2009; quoted the Nikbakht, Abde Khodaei Hassan Abadi, 2013).

Motivation plays a major role in the learning process and people usually consider something that interests them. It has been noticed that students who in terms of learning ability and talent are very similar, but have many differences in academic achievement. These differences are not only in school but also in other not educational activities. This aspect of human behavior is in fields related to motivation. Learners' motivation is a complex part of human behavior that effects the selection, investment, energy spent on homework and how you feel about them. In particular, academic motivation is learning and psychological

motivation that influences different types of educational activities that refer to the tendency of an individual to achieve educational objectives (Garn, and Julie Matthews, 2010).

In fact lack of motivation leads to reduction of resources and potentials and the efficiency of the teaching process and learning (Saif al, 2003). When students are not interested in the subject matter, this affects their reaction and listening, and when many students believe that they are not able to take lessons, teachers are also affected (Tlla, 2007) achievement motivation means the tendency to choose and carry out activities aimed to achieve success and avoid failure. Behavior and performance of students in education varies according to the level of their achievement motivation. In other words, there is a clear difference between students who have high motivation and progress and students who have low achievement motivation. Students with high achievement motivation compared with those who have weak motivation, insist on doing their homework and solve problems for a longer time, even failure does not stop their effort. Students with achievement motivation, relate their success to their effort and their failure to their lack of effort (personal factors, but modifiable).

The learners that their motivation is weak relate their success or failure often on factors such as ability and talent, task difficulty, environmental and other foreign matter or circumstances, instead of effort (Saif al, 2003). Learners who have high motivation make effort to be successful and expect to have success, this expectation help strengthen their efficiency and self-confidence. One of the factors that are associated with achievement motivation is procrastination and students who are negligent, are less motivated (Jackson, 2005; quoted by Avazian, Badri, Sarandi and Ghasemi, 2011).

Negligence from the perspective of psychology, is postponing a work that was decided to be done to future and its importance is that, this undesirable and reprehensible behavior can be gradually as a personality trait for the individual (Fatehi, Kadkhodaei, Azarafrooz and Bakht, 2014). This feature is related to three elements of narcissistic, Machiavelli and anti-socialism and characteristics such as high impulsivity, and low conscientiousness (Levins and Rice, 2014). Rosario, Costa and Nunes (2009) state that although procrastination may happen in all activities of daily living but procrastination in doing homework is more frequent. Negligence or procrastination with respect to the components of cognitive, emotional and behavioral has various appearances that include: general delaying, decisional procrastination, and neurotic procrastination, obsessive and academic procrastination (Dai, Mnsyk and Sullivan, 2000).

In the meantime the academic procrastination is the most common form of procrastination. Procrastination in performing academic tasks is a common problem among students and the most important cause of failure of learners in learning and academic achievement programs. Procrastination is always associated with anxiety. An obvious example is to postpone studying until the night of exam which the anxiety will hurt the students and his type of procrastination sometimes brings irreparable injury to students and because of these results, this subject, is including in topics of interest to scholars in recent years. Further understanding of Procrastination, reduces the consequences of failure in school. Some of the most important causes of academic procrastination according to experts include: parenting styles, perfectionism, low self-worth, personality factors and type of assignments provided (Fatehi et al., 2014).

Research also found relationship between motivation to engage in educational efforts and academic procrastination (Rosario, Costa, Nanz and Pineda, 2009; quoted by Nikbakht et al., 2013). The behaviorists believe that the motivation and procrastination are related to environment, amplifiers and bonuses (Adkins et al., 2005; quoted by Nikbakht et al., 2013). Cognitive theorists believe that through multiple learning strategies more adaptive and more efficient behavior can be created in negligent people and thereby help to reduce procrastination (Shani yeylaghi et al 2006, quoted by Nikbakht et al., 2013). Gheu (2008) considers the most common reason for procrastination as task difficulty and hatred for task and claims impulse, plays an important role in reducing procrastination, to reduce procrastination, the combination of self-control theory and the theory of expected value is taken into consideration.

Selecting a desired pattern and efficient treatment is important in preventing academic procrastination. One of these treatment models to reduce procrastination and motivation is cognitive-behavioral group therapy. This method is a combination of cognitive and behavioral approaches. In this therapy, the patient is helped to understand their distorted thinking patterns and recognize their dysfunctional behavior. To be able to change these thoughts, exactly organized discussions and assignments for behavior are used. In some aspects of treatment, the emphasis is mainly on behavioral component and other aspects on

cognitive components. The main objective of treatment is to help the patient in such a way that the desired changes in their lives are brought about (Houghton, Keith, 2013).

The efficacy of cognitive-behavioral group therapy accuracy and reliability has been confirmed in scientific research that has been conducted since 1970. For example, early studies in the field of depression of holon and colleagues showed that group cognitive-behavioral therapy is more effective than other treatments, but not as much as the efficacy of individual cognitive-behavioral (Beck et al., 1979). Further research, especially the results of a meta-analysis conducted at the same time, represents a high performance of group cognitive behavior therapy, the same as individual cognitive-behavioral in the treatment of depression (Borlingm, MacKenzie and Strauss, 2004; Robinson, Berman and Niemeyer, 1990). For example, in other clinical areas, such as disorders of anxiety, there is little evidence about the effectiveness of the group approach (Morrison, 2001). According to the subjects mentioned regarding the importance of research subject and conditions that it can create, this research aimed to answer question of whether cognitive-behavioral group therapy on reducing procrastination and motivation of students?

The research methodology:

This study is applied and the method is semi-experimental with pre-and post-test with control group. Cognitive Behavioral Group Therapy in the design was conducted as the independent variable on the experimental group.

Diagram layout is as follows:

Groups	Pretest	Experiment	posttest
G _E	T ₁	X	T ₂
G _C	T ₁	---	T ₂

The statistical society:

The study population consisted of all first year of high school female students in the academic year 2015-2016 who were enrolled in the city of Saqhez.

The research sample:

The sample consisted of 24 students with low achievement motivation procrastination who are selected randomly and assigned to experimental and control groups.

Sampling method:

After explaining the city and recommending educational authorities to schools, three schools were selected from schools across the city. After coordinating the research for school administrators and students, questionnaires were given to the students. Using available sampling, 24 negligent students were selected and were put into two groups of 12 people in experimental and control group.

Research tools

Achievement Motivation Questionnaire

Academic Motivation Questionnaire (form of high school) was built in 2012 by Abde Khodaei. This questionnaire is drawn from eight theories of motivation in education, including the need for progress, expected value, goal orientation, motivation of competence, self-worth, self-efficacy, inner-outer motivation.

The questionnaire consisted of 53 questions that the Likert rating scale is used to respond to it. Researchers reported three components of the "need to improve", "efficacy" and "intrinsic motivation" for

this scale. For grading the answers, options are awarded grades one to four. Cronbach's alpha coefficient was used to calculate the reliability which has been reported 91%. Also retest reliability was also 88%. The content validity with the investigation by several specialists in psychology and psychometric scale has been approved. The criterion validity is 33%.

Scale of academic procrastination

This scale was built in 1984 by Solomon and Ruth Bloom, which has 27 items, which in addition 6 other items are considered to measure both the "discomfort of being negligent" and "to change the habit of procrastination". This tool examines the three major components.

- Preparing for the exam, which includes questions 1 to 8.
- Prepare for assignments that included questions 9 to 19.
- Prepare for the end of semester assignments that include questions 2 to 27.

The method to respond to items is that respondents rate their agreement with each item by choosing one of the options "never," "rarely," "sometimes", "often" or "always" and these options have score of 1 to 5. Also on this Scale items 2, 4, 6, 11, 15, 16, 21, 23 and 25 are scored in reverse. Solomon (1988) has reported reliability of internal consistency of this scale as 84% (Dehghani and HoseichariI, 2008). This questionnaire was translated into Persian and standardized by Joukar and Delavarpour (2007) the validity and reliability have been reported respectively 61% and 88%.

Cognitive-behavioral group therapy in the treatment of procrastination According to Monica Ramirez Basque Treatment Guide Translated by Mosleh Mirzaee and Mehdi Akbari (2011).

The treatment method:

Cognitive-behavioral group therapy sessions to treat Treatment Guide Monica Ramirez negligence on the Basque translation of reformer Mirzaee and Mehdi Akbari (1390)

Table 3-1 head-season training sessions of CBT content

Sessions	Subject and objectives of treatment Sessions
First	Pre-test, communication the introduction of treatment and its objectives, the rules of Group familiarity with each other and with the members of the group leader
Second	Explanations and definitions about procrastination, study its causes, identifying the desire to procrastination, writing treaties by members for change, providing homework
Third	Review of the previous session assignments, training solutions to deal with procrastination, motivation and define solutions to motivate, identify dysfunctional beliefs, provide homework
Fourth	Review of the previous session assignments, explanations about fear and how fear leads to procrastination, explaining the thoughts, feelings, behavior and distinguish them from each other, identify errors of thought and training solutions to deal with them, provide homework
Fifth	An overview of the assignments of the previous session, review the positive and negative self-talk, realistic self-talk, and their effects on the individual, training, time management and prioritizing tasks, reaffirm the promise for Members for Change, provide homework
Sixth	Review of the previous session assignments, talk about the doubt and confidence, the power of words, introducing children inside and adults within and their thoughts. Identify tunnel thoughts and approach to deal with it. Provide homework
Seventh	A review of assignments of the previous session, study procrastination in relations between the individual and its consequences, assertiveness skills, examine how to say no as passive, aggressive, courageous, provide homework
Eighth	A review of assignments of the previous session, explaining all or nothing negligent (extreme, committed, perfectionist), hormonal fluctuations and energy levels, provide homework
Ninth	An overview of the assignments of the previous session, laziness and its consequences, transfer from pleasure seeking to work, how to eliminate procrastination habits, commitment

	to change again, providing homework
Tenth	An overview of the assignments of the previous session, re-evaluate their readiness for change, redefine themselves, reformation of issue and find solution Schema changes and how changing schemas about procrastination. An overview of first to ninth sessions, getting feedback from members, the implementation of the post-test.

Data(s) analysis method:

The statistical analysis has two parts: descriptive and inferential. In the descriptive part of descriptive statistics including frequency, mean, percentage and standard scores are used, and in inferential statistics to verify the hypotheses, SPSS version 20 software and the analysis of covariance analysis and independent t test will be used.

Findings:

The first hypothesis:

Group cognitive-behavioral therapy is effective in reducing students' academic procrastination.

To test this hypothesis because the default parametric test (analysis of covariance) is not respected independent t test conceptual framework is used which the results are given in Table 4-7.

Since the default equality of regression coefficients in both experimental and control groups for the neglect is not equal, covariance analysis cannot be used for this scores.

If the scores of pre-test questionnaire of neglect do not have significant difference but after the intervention, there was significant difference between the experimental and control groups it shows the effectiveness of the intervention.

In the table below are shown for two independent samples t test scores.

Statistical inference of negligence scores:

Since the default regression coefficients for two case and control group in pre-test of neglect is not equal, covariance analysis cannot be sued for this scores.

If the scores of pre-test questionnaire of procrastination do not have significant difference but after the intervention, there was significant difference between the ex In the table below are shown for two independent samples t test scores.

Table 4-7: independent t test for variant procrastination

		Levene's test for equality of variance		T test for independent samples of two						
		F	sig	t	df	Sig. (2- tailed)	The mean differences	Std. Error Differen ce	95% confidence interval for mean difference	
										Lower bound
										upper bound
procrastinatio n-pre-test	Equal variances	0.034	0.856	1.962	22	0.063	3.25000	1.65660	-0.18557	6.68557
	Lack of equality of variances			1.962	21.999	0.063	3.25000	1.65660	-0.18558	6.68558
procrastinatio n-post-test	Equal variances	0.000	0.992	2.984	22	0.007	-12.33333	4.13335	20.90538	3.76129
	Lack of equality of variances			2.984	21.580	0.007	-12.33333	4.13335	20.91507	3.75160

Results for Table 4-7 showed that the effect of independent variable, cognitive behavioral group therapy on the dependent variable, academic procrastination ($F = .000$, $Sig = .992$) were statistically significant.

As you can see pre-test scores are not significantly different ($\text{sig} > 0.05$) but after the intervention, scores of the two groups have statistically significant difference ($\text{sig} < 0.05$). This means that cognitive behavioral group therapy managed to significantly reduce academic procrastination in the experimental group compared to the control group. Cognitive behavioral group therapy is effective in the academic achievement of students.

The second hypothesis:

Group cognitive-behavioral therapy is effective in the creation of academic achievement motivation.

To analyze the data related to the hypothesis of covariance was used. In this analysis, the mean of experimental group is compared with the control group. In Table 4-8 variable analysis covariance of motivation model results can be seen.

Table 4.8: analysis of covariance Motivation post test score

variables	sum of squares	df	average of squares	F	sig
pretest	108.848	1	108/848	1.864	0.187
group	133.465	1	133/465	2.286	0.145
Error	1226.319	21	58/396		

Table 4.9 Adjusted averages

group	mean	Std. Deviation	95% confidence interval	
			Upper bound	Lower bound
experimental	110.452	2.217	115.062	105.842
control	115.214	2.217	119.824	110.605

Results for Table 4-8 showed that effect of independent variable of cognitive behavioral group therapy on the dependent variable academic motivation is not statistically significant. According to sig value of the variable in the analysis of covariance model a significant difference between the scores of experimental and control groups do not exist. the adjusted average academic motivation is shown in Table 4-9.

Discussion and conclusion:

In this study, according to the study objectives there were two hypotheses: In the first hypothesis: Cognitive-behavioral group therapy has an effect on reducing procrastination in students. T-nonparametric analysis contained in No. 4-11 showed that cognitive-behavioral group therapy reduces procrastination in the experimental group compared to the control group and has been effective and therefore first hypothesis is proven.

The present finding is consistent with the findings of Binder (2000) concluded that at the end of the training sessions procrastination in the experimental group compared with the control group has considerably decreased. Also Rosenthal, Forrester, Nielsen, Risotto and Karlbryng (2014) and Hobak, Mycsn, Nyskonz and Depo (2004) in their study have achieved to findings similar to results of this study. Their results demonstrate the effectiveness of cognitive-behavioral group therapy was significant in reducing procrastination. The results of the research are in line with results of Shani Yeylaghi and colleagues (2006) and Essen (2004), and Mundell (2014).

In the second hypothesis, results showed that cognitive-behavioral group therapy has not significant effects on student achievement motivation. Covariance analysis contained in Table 4-9 shows that the

effectiveness of cognitive behavioral group therapy on increasing the motivation of female students is not significant and the hypothesis is rejected.

The explanation for the lack of success of cognitive-behavioral group therapy in increasing academic achievement is that the reluctance of students has formed in a long time due to various factors such as lack of self-esteem, lack of efficacy, lack of regulation or lack of satisfaction and a longer time is required to change these beliefs. But to change the attribute of procrastination, responsibility, commitment and emphasis on new behaviors that cognitive-behavioral group therapy focuses on it can be effective. The present study was conducted to determine the effectiveness of cognitive-behavioral group therapy on reducing procrastination and increase the academic achievement of high school students in Saqqez, showed that procrastination in the experimental group compared to the control group has significantly reduced, but this approach has not been effective in increasing student achievement motivation.

Reference

- Akbas, A., & Kan, A. (2007). Affective Factors That Influence Chemistry Achievement (Motivation and Anxiety) and the Power of These Factors to Predict Chemistry Achievement-II. *Journal of Turkish Science Education*, Volume 4(1), 10-19.
- Avazyan, F; Badri, R, Sarandí, P, Ghasemi, Z. (2011). The relationship between the Achievement Motivation Zt-Nfs Ahmal-Ktary and high school female students of Kashan city. *Journal of Educational Sciences*. Volume 4, Issue 14, 151-164.
- Binder, Kelly, (2000), The Effects of an Academic Procrastination Treatment on Student Procrastination and Subjective Well-Bing, For the degree of master of Art, Carlton University.
- Day, V., Mensink, D., & O'Sullivan, M. (2000). Patterns of academic procrastination. *Journal of College Reading and Learning*, (30), 120-134.
- Fatehi, Y; Abdkhodaie, S; Azarafroz, M and Bakhti, M. (2014). Ahmal-Kary school and five factor model of personality. *personality psychology*. Volume 9, Issue 4. 34-29.
- Garn, M., Matthews, S. & Jolly J. L. (2010). Parental Influences on the Academic Motivation of Gifted Students: A Self-Determination Theory Perspective. *Gifted Child Quarterly*, 54, 263 – 272.
- Horebeek, W. V., Michielsen, S., Neyskens, A., & Depreeuw, E. (2014). A cognitive-behavioral approach in group treatment of procrastinators in an academic setting. *Counseling the Procrastinator in Academic Settings*. 22 (4).
- Houton, K; Salkos K, Paul. M, Kirk , J and David Clark. (2013). *Cognitive-Behavioral Therapy: A Practical Guide for the treatment of mental disorders*. Translation Habibullah Ghasemzadeh. Tehran: Venerable.
- Jokar, B. and Delavarpour, M. (2007). Relationship neglect educational achievement goals. *Journal of New Thoughts on Education*. Volume 3, Issue 4.
- Khodaei, S; Khazayi, K; Kazemi, T and Ali Abadi, Z. (2012). 17. Group cognitive-behavioral therapeutic effect on reducing anxiety and depression in patients with myocardial infarction. *Journal of Nursing and Midwifery University of Medical Sciences*. Volume 9, Issue 4.
- Lyons, M., Rice, H. (2014). Thieves of time? Procrastination and the dark triad of personality. *Personality and individual difference*. 61, 34-37.
- Mandel, H. P. (2004). Constructive confrontation: Cognitive-behavioral therapy with one type of procrastinating underachiever. *Counseling the Procrastinator in Academic Settings*. 12 (2).
- Nikbakht, E., , Abdkhodaie, M. S and HasanaBady, H. (2013). The effectiveness of reality therapy on increasing academic motivation and academic procrastination decrease in students. *Research in clinical psychology and counseling*, 3 (2).
- Rosario, P., Costa, M., Nunez, J. (2009). Academic procrastination: associative with personal, school and family variables. *Spanish Journal of Psychology*, 12, 118-127.
- Rozental, A., Forsström, D., Nilsson, S., Rizzo, A., & Carlbring, P. (2014). Group versus Internet-based cognitive-behavioral therapy for procrastination: Study protocol for a randomized controlled trial. 1, 84-89.
- Saif, A.A. (2003). *Educational psychology (Psychology Learning and Teaching)*. Tehran: Cognizant.
- Solomon, L. J. & Rothbloom, E. D. (1984). Academic procrastination frequency and cognitive-behavioral correlates. *Journal of Counseling Psychology*. 31, 504-510.
- Tella, A. (2007). The Impact of Motivation on Student's Academic Achievement and Learning Outcomes in Mathematics among Secondary School Students in Nigeria; *Eurasia Journal of Mathematics. Science & Technology Education*, 3(2), 149-156.