



Effectiveness of Cognitive-Behavioral Group Therapy on Symptoms Social Anxiety Disorder in Students

Abu Zar Moradi

Master of Psychology, Islamic Azad University, Kermanshah, Iran.

Abstract: *Purpose: The purpose of this study was to determine the effectiveness of cognitive-behavioral therapy on symptoms of social anxiety disorder in students. Materials and Methods: This is a non-experimental study with pre-test and post-test design with control and follow-up group. The statistical population consisted of all male students studying in Javanrud Secondary School. A multi-stage cluster random sampling method was used to select 24 people and was replaced by two groups. Demographic characteristics questionnaire and Spence Social Anxiety Inventory (SPIN) were used to collect information. Data analysis was done using SPSS-22 software, using descriptive statistics and covariance analysis. Results: The results of this study showed that there was a significant difference between the control and experimental groups in reducing social anxiety disorder and two components of fear and avoidance ($P < 0.05$); however, this difference was not significant in the physiological component ($P < 0.05$). Also, therapeutic effects were observed in the 1 month follow-up phase. Conclusion: According to the findings of this study, cognitive-behavioral therapy can reduce social anxiety disorder in people under treatment. It is recommended to use this therapeutic approach for people with anxiety disorders in Iranian patients.*

Keywords: *Social Anxiety Disorder, Cognitive-Behavioral Therapy, Students.*

INTRODUCTION

Today, we know that the mental health problems of students in childhood and adolescence are considered to be important social issues (Mush and Wolfe, 2005, translated by Mozafari Makeri Abadi and Foroughdin Adel, 2014). Psychological stress was common only in adults, but is now seen in 4-year-old children (Tombson & Rudolph, 2012). Research studies show that one out of every five children has mental health problems (Mush and Wolf, 2005, Mozafari Makariabadi translation and Foroughdin Adl, 2014). Increased psychological stresses tend to seriously disclose psychological disorders such as social anxiety disorder (SAD) and other signs of anxiety and mood; therefore, they should open an account separate from other disorders (Tombson & Rudolph, 2012).

Social Anxiety Disorder (SAD) is a complex neuropsychological syndrome that forms an independent diagnostic class in the International Classification of Psychiatric Disorders (DSM-5) (Saduk, Saduk and Roez, 2017, Rezaei, 2017). The main feature of it is the intense and permanent fear of situations in which one is in the group or must be prevented from doing so. These people are afraid of any social situation they think might have a shy behavior or any situation in which they are negatively evaluated by others and try to get away from them (Sadukk et al. 2017, Translation of Raza'i, 2017). These people almost always experience anxiety symptoms (such as palpitations, tremor, sweating, stomach and bowel discomfort, diarrhea, muscle cramps, blush, confusion and stuttering of the tongue), symptoms that are scary in social situations And in extreme cases, they can adapt to the standards of panic attack (Hallinger & Whitburne, 2017, Sayed Mohammadi translation, 2017).

This disorder is common with the clients of specialized clinics more than is thought to be (Ghazwani, Khalili and Ahmad, 2016). Of the students who are referred for treatment anxiety disorder, more than 20% are based on the initial diagnosis of social anxiety disorder (SAD) and in students who are referred for other anxiety disorders, the most common "Secondary detection "(Bundlvv and Michels, 2015). Despite the wide literature on fears and anxiety, the literature on this disorder (SAD) in children and adolescents is still not well-defined, and its systematic study of students is relatively new (Mush and Wolf, 2011, Translation by Mozafari Makeri Abadi and Foroughdin Adl, 2014). Approximately 1.2% of children and adolescents with SAD still have diagnostic criteria for this disorder for 8 years or more (Bandelow and Michels, 2015). Therefore, the symptoms and symptoms of untreated SAD in this age group are often concealed and intensified (Kendall and Souq, 2018, Amiri and Neshat Doost, 2014). In order to treat symptoms of anxiety disorders, several interventions and interventions have been proposed based on different approaches. One can mention medical therapies (such as O'Heart et al., 2016), non-drug interventions such as supportive-individual and group psychotherapy, cognitive-behavioral therapies, and other psychotherapies (Glover et al., 2016; Hanjir et al., 2016). Despite the relative effectiveness of some psychosomatic and therapeutic treatments for these disorders, SAD, especially in the childhood and adolescent age group, is still a stressful and challenging disease for many, and there is no complete and successful treatment for it, in contrast to social anxiety disorders in adolescents (Hanjir et al., 2016). On the other hand, in our country (Iran), there is a great deal of lack of research about the effectiveness of this treatment on the age range. Cognitive-behavioral therapy (CBT) can be mentioned about psychological treatments for this disorder in children and adolescents. Meanwhile, cognitive-behavioral therapy (CBT) has also been based on a strong theoretical basis, and several studies have been effective in a wide range of mental issues Cognitive and various patients (Kerik & Clark, 1990, translation of Qasemzadeh, 2014). Cognitive-behavioral therapy (CBT) is a collaborative approach between referrals and therapists to effectively target anxiety. The main components used in the treatment of social anxiety include psychological training, rehabilitation, exposure, and assignment (Shannon, Shannon & Padsy, 2012). Based on cognitive-behavioral approach, attention to beliefs, attitudes and beliefs in children and adolescent students is very helpful. The experts in this field believe that "no matter what has happened, it is important that what has happened is how it is interpreted." Cognitive distortions should be considered in people. For example, some of them tend to be catastrophic, that is, they expose events too much (Kerik and Clarke, 1990, Ghasemzadeh translation, 2014; Hoffman and Otto, 2014, translated by Khanzadeh et al., 2013). They should be approached with their nuclear beliefs and they should communicate with them sincerely, and they were taught to record their thoughts and feelings, and then they showed them fundamental and nuclear beliefs and their relationship. They clarified with their current problems and helped them gradually eliminate inefficient beliefs and replace their effective beliefs (Hoffman and Otto, 2014, translated by Khanzadeh et al., 2013). The aim of this study was to investigate the effectiveness of cognitive-behavioral group therapy on the symptoms of social anxiety disorder in students.

Materials and Methods

This is a quasi-experimental and applied research that was conducted with a pretest-posttest design with control and follow-up one month. The statistical population of the study consisted of all male students who were studying at the Secondary School (Junior High School) in Javanrood, 2017. Using multistage cluster random sampling method, and according to the research design, a sample size of 24 people ($n = 12$) (calculated for each group of at least 12 people) was calculated. Regarding the fact that the number of members in the standard treatment group is 15-6, the standard number was selected and the 24 subjects were randomly divided into two groups of 12 (experimental and control groups). Data collection was done using the following tools:

- A. Demographic characteristics questionnaire: This researcher-made questionnaire was designed to determine the demographic characteristics of the subjects, including age (years), grade, parental occupation, parental education, history of psychological disorders in the family, and ... it was prepared.

B. Spins Social Anxiety Inventory (SPIN): This questionnaire was first proposed by Canver et al. (2000) as a self-assessment scale of 17 materials with three levels of avoidance (7 items), fear (6 items), and physiological symptoms (4 items) is designed. Each substance is graded from (in any way = 0 to infinite = 4) on a five-point scale of likert. This tool can be used as a screening tool to test response to treatment in social anxiety disorder and ultimately, it can distinguish between treatments with different efficacy. The reliability of this questionnaire by re-test in groups with social anxiety disorder was equal to 0.88 to 0.89 (Tsai, Wang, Chang and Fu, 2009). Cut point 19 recognizes the efficacy or accuracy of 79% of people with social anxiety disorder without disturbance. The internal consistency (alpha coefficient) was reported in a group of normal people for the total scale of 0.14 and for phobia scales 0.88, avoidance of 0.92 and for the physiological discomfort subscale of 0.80. In Iran, the Cronbach's alpha of this questionnaire is between 0.44 and 0.89 and its re-test coefficient is 0.66 and the convergence validity of its sub-scales is 0.44 to 0.78 (Ghayour Kazemi et al., 2016).

Data analysis was done using SPSS-22 software, using descriptive statistics and covariance analysis.

Research Findings

The demographic data of the subjects showed that the mean and standard deviation of the age (in years) of the studied students (15.61 ± 2.43) were. Also, the results showed that the highest and lowest frequency of parenting education in students related to Father's degree in bachelor's degree (8 students) is 33.35% and masters and above (2 people) are 29.15%, and in mothers, respectively: under the diploma (17 persons) 70.8% and above Bachelor's degree and higher (0%). Descriptive indexes related to the pre-test scores, post-test and follow-up of the variables of the research in both experimental and control groups are shown in Table (1).

The mean and standard deviation of the social anxiety disorder scores and its components in the experimental and control group in the pretest, posttest and follow-up stages are briefly summarized in Table (2).

Table 1: Descriptive data of social anxiety disorder and its components in the experimental and control groups, in the pre-test, post-test and follow-up stages

Follow up		After ours		Before us		Number	group	Subscales
standard deviation	average	average	average	standard deviation	average			
2/46	14/69	2/39	18/11	2/98	26/26	12	test	Avoiding
3/37	26/43	3/16	26/78	3/07	28/43	12	Control	
2/03	14/05	2/13	16/76	3/57	23/14	12	test	fear
3/42	26/07	3/98	26/29	3/72	25/01	12	Control	
2/03	13/06	2/11	15/16	3/32	27/14	12	test	physiologic
2/30	27/84	3/75	27/53	3/41	29	12	Control	
2/64	11/60	2/84	11/50	3/30	48/30	12	Test	Total
3/67	55/40	3/69	54/50	3/47	51/40	12	Control	

As shown in Table 1, the mean of the total experimental group in the pre-test phase was 48.30 and the mean in the control group was 51.45, while the post-test mean of the social anxiety disorder group The experiment was 11/50 and in the control group, this mean was 54/50. Also, the mean score of social anxiety disorder in the experimental group was 11.66 in the follow up phase, but in the control group, this mean has not changed. Also, the information for each of the sub-scales is presented separately in Table (1)

Before analyzing the data, the necessary assumptions were first considered for the analysis of covariance. The results of the review of statistical defaults showed that both the prerequisites for the equality of variances (Levin test) and normalization (Shapiro-Wilkes test) were established ($P < 0.05$). The results of the box test also indicated that the homogeneity assumption of the variance-covariance matrix was confirmed ($P = 0.88$, $F = 0.634$); also, regression slope homogeneity was supported by non-significant condition and pre-test ($143 / (P = 0/2 = F)$), and considering the fact that the sample size was equal in both the experimental and control groups ($n = 12$), the use of multivariate covariance analysis (MANCOVA) was recognized (Table 2).

Table 2: Shapiro-Wilkes and Levine tests for observing statistical assumptions

Shapiro-Wilkes Test			Levine test				
P-Value	Degree of freedom	Yeah	P-Value	Degree of freedom		Coefficient F	Variable
				2	1		
0/253	12	0/227	0/136	22	1	2/352	fear
0/223	12	0/163	0/263	22	1	1/124	avoid
0/209	12	0/155	0/219	22	1	1/130	Physiological symptoms
0/568	12	0/956	0/470	22	1	2/249	social anxiety
(Box's M)							
P-Value			Coefficient F				
0/128			1/634				

Table 3: Multivariate covariance analysis on anxiety symptoms and its components in the experimental and control group after controlling the intervention variable (pre-test), at the post-test stage

Statistical power	Effect level	Significance level	Coefficient F	Averages of squares	Degrees of freedom	variable	Scale
0/091	0/625	0/491	0/573	4/459	1	pre-exam	avoid
0/064	0/646	0/003	0/193	1/504	1	Group membership	
0/091	0/125	0/492	0/570	1/799	1	pre-exam	fear
0/745	0/651	0/001	0/475	3/574	1	Group membership	
0/423	0/125	0/341	0/341	2/561	1	pre-exam	physiologic
0/512	0/062	0/679	0/175	4/732	1	Group membership	
0/054	0/014	0/821	0/058	0/226	1	pre-exam	Total Social Anxiety Score
0/782	0/771	0/011	13/497	52/508	1	Group membership	

The results of covariance analysis of the groups in the dependent variable of social anxiety disorder and its components after controlling the pre-test interventional variable were presented in the post-test phase in Table (3).

As shown in Table (3), the difference between the two experimental and control groups in the total score of social anxiety disorder and the two components of avoidance and fear are statistically significant ($P < 0.05$). Therefore, the hypothesis of the research is that the cognitive-behavioral group therapy is effective in reducing the symptoms of social anxiety disorder in students in the post-test phase. In other words, providing cognitive-behavioral therapy (CBT) has reduced 77% of social anxiety scores and 64% and 65% of the scores of the two components of avoidance and fear in the post-test phase. Also, the results of Table 3 showed that the difference between the two experimental and control groups in the component of the physiological symptoms of the disorder was not confirmed in the post-test ($P < 0.05$), and it was concluded

that cognitive-behavioral therapy CBT) had no significant effect on the physiological symptoms. Also, the results of Table (4) showed that this effect was persistent during the follow-up phase

Table 4: Analysis of covariance in the social anxiety variable and its components in the experimental and control group after controlling the intervention variable (pre-test), in the follow-up phase

Statistical power	Effect level	Significance level	Coefficient F	Averages of squares	Degrees of freedom	Variable	Scale
0/556	0/416	0/167	2/852	274/7	1	follow	avoid
0/675	0/734	0/001	4/591	710/11	1	Group membership	
0/051	0/004	0/904	0/017	0/145	1	follow	fear
0/794	0/762	0/005	3/23	35/171	1	Group membership	
0/272	0/552	0/163	0/124	125/673	1	follow	physiologic
0/458	0/428	0/630	2/628	48/023	1	Group membership	
0/670	0/320	0/733	0/830	2/100	1	follow	Total Social Anxiety Score
0/820	0/790	0/001	14/563	52/423	1	Group membership	

Discussion and Conclusion

The study of the hypothesis of the present study, namely, cognitive-behavioral group therapy, is effective in reducing the symptoms of social anxiety disorder in students (post-test follow-up), showing that cognitive-behavioral therapy (CBT), on reducing the total score of social anxiety disorder and two The components of it are avoidance and fear in the experimental group in the post-test and follow-up stage compared to the control group. Cognitive-behavioral therapies (CBT) have been used to treat anxiety disorders and increase psychological well-being and mental health successfully; this finding is consistent with previous studies such as Nordgreen et al. (2016) Romijn et al. (2015), El Alaoui et al. (2015), Tsai et al. (2012), Ghayoor Kazemi et al. (2016) and Armand and Golden (2012).

King et al. (2011) also compared the effectiveness of CBT and supportive care for parents with control group in three groups of 12 children who were sexually abused by PTSD. In this study, there was a significant difference between experimental and control groups. Both treatments reduced the symptoms of PTSD, fear, anxiety and depression. However, there was no significant difference between the CBT group and the supportive care of the parents. In general, cognitive-behavioral therapy that targets self-referential symptoms tends to target negative, cognitive, and avoidable behaviors more effectively than long-term confrontation alone. In order to focus only on avoidance behaviors.

Cognitive-Behavioral Therapy (CBT) is a collaborative approach between referral and therapist in order to effectively target anxiety. The main components used in the treatment of social anxiety include "psychological training, rehabilitation, exposure and assignment" (Shannon et al., 2012). Based on cognitive-behavioral approach, attention to beliefs, attitudes and beliefs in children and adolescent students is very helpful. The experts in this field believe that "no matter what has happened, it is important that what has happened is how it is interpreted." Cognitive distortions should be considered in people. For example, some of them tend to be catastrophic, that is, they expose events too much (Kerik & Clarke, 2014, translation of Qasimzadeh, 2014). They should be approached with their nuclear beliefs and they should communicate with them sincerely, and they were taught to record their thoughts and feelings, and then they showed them fundamental and nuclear beliefs and their relationship. They cleared up their current problems and helped them gradually eliminate inefficient beliefs and replace their effective beliefs. In this method, it is assumed that there is a relationship between the thoughts, feelings and behavior of the patients with this disorder, in which negative auto-thoughts cause emotional arousal and impairment of performance. Therefore, informing people about this disorder and helping them to

rehabilitate them can help control thoughts and prevent emotional and behavioral problems (Hoffman and Otto, 2014, translated by Khanzadeh et al., 2013).

Also, this treatment, by increasing the self-esteem of people with social anxiety disorder and empowering them to accept themselves, allows them to focus less on their mistakes in social situations, and to exert an adverse effect on such situations. Less negative experiences. On the other hand, doing exposure exercises and role plays an opportunity to become familiar with the functional problems of an individual and find alternative ways for disruptive behaviors (Hoffman and Otto, 2014, translated by Khanzadeh et al., 2013). A follow-up of one month showed that cognitive-behavioral therapy (CBT) still maintained its effectiveness. In explaining this result, it should be stated that this method, using the cognitive techniques identifying and modifying negative thoughts about social situations, as well as by providing the conditions for the role play for each member of the group, simultaneously reflect the thoughts and behavior. The problem has corrected the person and led to a reduction in social anxiety symptoms in them. Overall, the present study showed that cognitive-behavioral therapy (CBT) has been effective in improving the symptoms of social anxiety disorder in students with this disorder and the effect of this treatment has continued over time. Since social anxiety disorder is one of the most common psychiatric disorders, especially in this age group, it can lead to academic failure and many functional problems for students, to take appropriate measures for the treatment and prevention of future problems related to it is very important. Because cognitive-behavioral therapy (CBT) is short-lived and is effective in improving the symptoms and symptoms of social anxiety disorder, the use of this method can be effective and economically and economically most of the problems caused by this disorder. Improve.

References

1. Armand, A., and Golden, Ali. (2012). The Effectiveness of Stress Management Training in Cognitive-Behavioral Approach on Reducing Psychological Problems and Symptoms of Premenstrual Syndrome. *Journal of Obstetrics and Gynecology*. 15 (21): 24-31.
2. Bandelow B & Michaelis S. (2017). Epidemiology of anxiety disorders in the 21st century. *Dialogues Clin Neurosci*. 17(3):327-35.
3. El Alaoui S, Hedman E, Ljótsson B & Lindfors N. (2015). Long-term effectiveness and outcome predictors of therapist-guided internet-based cognitive-behavioural therapy for social anxiety disorder in routine psychiatric care. *BMJ*. 5(6):117-26.
4. Ghayyur Kazemi, F., Sepehri Shamloo, Z., Mashhadi, A., and Ghana, Chaman Abad, AS. (2016). Comparison of the effectiveness of meta-cognitive and neurofeedback therapy on reduction of anxiety symptoms in female students with social anxiety disorder. *Semnan Clinical Psychology Quarterly*. 7 (3): 21-35.
5. Ghazwani JY, Khalil SN & Ahmed RA. (2016). Social anxiety disorder in Saudi adolescent boys: Prevalence, subtypes, and parenting style as a risk factor. *Journal of family & community medicine*. 23(1):25-31.
6. Glover NG, Sylvers PD, Shearer EM, Kane MC, Clasen PC, Epler AJ & et al. (2016). The efficacy of Focused Acceptance and Commitment Therapy in VA primary care. *Psychological services*. 13(2):156-61.
7. Hallinger, R., and Whitburn, SA (2017). *Psychological Pathology: Clinical Perspectives on Psychiatric Disorders Based on DSM-5. Volume II First Edition*. Yahya Seyyed Mohammadi translation. Tehran: Ravan Publication.
8. Hoffman, A., and Otto M. (2014). *Cognitive-Behavioral Therapy Social Anxiety Disorder*. Translation by Mostafa Khanzadeh et al. Tehran: Avaya Noor Publications.
9. Kendall, F., and Swog, S. (2018). *Child and adolescent anxiety treatment work book*. Translation by Sholeh Amiri and Hamid Taher Neshat Dost. Esfahan: Jahad University Press.
10. Kerik, A., and Clarke, S. (2014). *cognitive behavioral therapy*. Translation by Habibollah Ghasemzadeh. Tehran: Arjmand Publications.

11. King NJ, Tonge BJ, Mullen P, Myerson N, Heyne D, Rollings S & et al. (2011). Treating sexually abused children with posttraumatic stress symptoms: a randomized clinical trial. *Journal of the American Academy of Child and Adolescent Psychiatry*. 39(11):1347-55.
12. Mush, oh J., and Wolf, d. Ah (2005). *Psychology of Child Abnormal*. Translation by Mozaffar Mekerri Abedi and Foroughdin Adel. Tehran: Growth Publishing.
13. Nordgreen T, Haug T, Öst LG, Andersson G, Carlbring P, Kvale G & et al. (2016). Stepped Care Versus Direct Face-to-Face Cognitive Behavior Therapy for Social Anxiety Disorder and Panic Disorder: A Randomized Effectiveness Trial. 47(2):166-83.
14. O'Heart, Shin E, Ha J, Shin D, Shin Y, Lim SW. (2016). Early Improvement in One Week Predicts the Treatment Response to Escitalopram in Patients with Social Anxiety Disorder: A Preliminary Study. *Clin Psychopharmacol Neurosci*. 31;14(2):161-7.
15. Romijn G, Riper H, Kok R, Donker T, Goorden M, Van Roijen LH & et al. (2015). Cost-effectiveness of blended vs. face-to-face cognitive behavioural therapy for severe anxiety disorders: study protocol of a randomized controlled trial. *BMC psychiatry*. 12;15:311.
16. Saduk, BJJ, Saduk, VA, and Roetz, p. (2017). *Kaplan & Sadook Psychology Summary: Behavioral Sciences / Clinical Psychiatry*. Volume II, First Edition. Translation by Farzin Rezaee. Tehran: Arjmand Publications.
17. Shannon J, Shannon D, Padesky C. (2012). *The Shyness and Social Anxiety Workbook for Teens: CBT and ACT Skills to Help You Build Social Confidence*. New York: New Harbinger. pp; 106-117.
18. Tombson CHL, Rodlf LB. (2012). *Counseling with children*. Translated by; Tahorian J. 2nd ed. Tehran: Roshd. pp:188-9.
19. Tsai CF, Wang SJ, Juang KD & Fuh JL. (2009). Use of the Chinese (Taiwan) version of the Social Phobia Inventory (SPIN) among early adolescents in rural areas: reliability and validity study. *J Chin Med Assoc*. 72(8):422-29.
20. Wait P, Mc Manus F, & Shafran R. (2012). Cognitive- Behavioral Therapy for Low Self-esteem. *Journal of Behavioral therapy and Experimental Psychiatry*. 43, 1049-1057.