

The Effect of Communal Cognitive-Behavioral Therapy Over Addiction Potential and Addiction Tendency of Students Suffering from Social Phobia

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Abstract: *The aim and background: This present research has been done in order to review the effectiveness of communal behavioural-cognitive therapy over addiction potential and tendency of Shahed university students suffering from social phobia. The method of research: This research is a study over clinical trial. The sample of research included 30 students of Shahed University who had got the highest score according to social phobia test on SPIN and suffering from social phobia. Before entering into therapy, these students responded to both addiction potential questionnaire (APS) and addiction acknowledgment questionnaire (AAS). After being homogenized, the samples divided into two groups of control and experimental. The experimental group placed under train of behavioural-cognitive therapy over 20 sessions and the control group did not place under any training program. The data collection instrument was self reporting which was analysed, using the descriptive statistics, the correlation coefficient, the covariance analysis and SPSS 19 software. Findings: There has been a significant different between addiction potential and addiction tendency while entering into research, after therapy and 6 weeks later, but from this view, no significant difference was observed in control group. It means that behavioural-cognitive therapy has effect on reduction of addiction potential and tendency.*

Keywords: *The behavioural-cognitive therapy, The addiction potential, The addiction tendency, Social phobia.*

1. Introduction

The social phobia which is also known as a social anxiety and it includes persistent phobia from negative assessment by others. This disorder is one of anxiety disorder types. Those people suffering from social phobia are extremely scared of being humiliated and embarrassed in a special social situation like conversation in a group or gathering. This phobia may include the anxiety symptoms such as blushing, trembling, and sweating. This disorder has a high morbid comorbidity with the anxiety disorders, mood disorders and disorders related to drug and narcotic. The researches have shown that 81 percent of people with social anxiety disorder also have another disorder (Dan Boer, 2000). Many researchers believe if the social phobia being diagnosed early and being treated with suitable solutions, suffered people will be safe from its complications, but unfortunately these people seek treatment when the disorder has become severe and has been accompanied with other psychological disorders (Maggee, 1999).

The researches have indicated that many people suffering from social phobia, turn to drug and alcohol in order to reduce their phobia and social anxiety (Smail, Stockwell, Canter and Hodgson, 1984, Carey, 2006) and also they use drug for their treatment and as a defense mechanism for mental and social problems (Arndt, Tyrell, Flaum and Anderson, 1992). In other words, social anxiety is one of the risk factors for drug abuse (quoted from Santesso, Schmidt, Fox, 2004). The researchers presented two concepts of addiction potential and addiction tendency in order to review the risk factors of addiction and review personality factors cause that people turn to drug abuse.

The therapy of addiction tendency presents that specific people as a result of unhealthy personality, show the high risk of drug dependence when they expose to it (Gendreau & Gendreau, 1970) and the addiction tendency is person's

tendency, desire, potential which attracts him gradually towards drug or on the other hand or what causes a person to be drawn towards drug and narcotic (Radi, 2003, p. 17). The context of addiction emergence before a person starts using drug, is provided during the growth years with formation of thoughts, beliefs, attitudes, lifestyles, social relationships and personality characteristics. On the other hand, before a person turns to drug, the ground and readiness are provided which are known as the addiction potential (Zeinali, Vahdat, & Eisavi, 2008). Zeinali and his colleagues tell with reference to growth and creation of this readiness during life that people who grow drug dependent, may have more different psychiatric risk factors. They stipulate that in addiction, environmental risk factors facilitate the availability of drug and increase the psychiatric risk factors and probability of drug dependence. As it mentioned before, social anxiety is one of the important psychiatric risk factors in using drug.

Glanze and Hantel (2002) provide a model for behaviour of drug using and they believe that what lead to behaviour of drug using in a person includes the record factors, social factors and individual factors. They believe that individual factors include: the cognitive expectations, individual abilities and skills such as problem solving and control the anxiety and the social skills such as: the communications skills, the strong acting skills and refusal skills and psychological factors such as: self-sufficient, self-confidence, mental health and individual perception of life situations that some of these factors overlap with characteristics of those suffering social phobia such as low self-confidence, the avoidance of intimate relationships, not be resolute and determined, fear of rejecting by others and unlimited generalizing of problems (Furmark, 2006).

So what important in social phobia and other anxiety disorders are timely diagnosis and treatment in order to be safe from the complications of being without treatment. The social phobia treatment places in 2 classes of pharmacological and non-pharmacological. The pharmacological treatment includes: the selective inhibitors of Serotonin reabsorb, Monoamine Oxidase inhibitors (Figueira, 2002) and Benzodizepines (Davidson, 2003) and other concerned treatment of psychological treatment includes: the cognitive-behavioural therapy, the therapy based on acceptance and commitment, the exposure therapy and social skills training (Heimberg, et al., 2003). The researches have shown that cognitive-behavioural therapy is effective in treatment of social phobia individually or in a group because the purpose of this method is to change the thinking patterns and physical reactions to situations which cause anxiety (tang, et al, 2007). The research review of Iranian and foreigners suggests the effectiveness of cognitive-behavioural methods in reduction of social phobia and some of those are the research of Ghafarzadeh and his colleagues (2005), the research of Ghasemzadeh (2010), Foa (2003), Wells and his colleagues (2001), Heimberg (2003), Liebowitz (1999). The research review of Iranian and foreigners suggests the effectiveness of cognitive-behavioural methods in addiction treating and preventing relapse. Alizedeh and his colleagues (2008), compared inefficient attitudes in people suffering from drug abuse to normal and usual people and its psychological consequences and they come to this conclusion that the cognitive-behavioural therapy is effective to prevent addiction, and also Shahmohammadi and his colleagues (2008) evaluated the effectiveness of communicative skills training on marital compatibility and adjustment and the prevention of returning of male drug users Isfahan city and they came to this conclusion that cognitive-behavioural therapy is effective in prevention of drug using and relapse.

Reviewing domestic and foreign researches, it is felt the vacuum of research on the effect of COGNITIVE-BEHAVIORAL THERAPY over addiction potential and addiction tendency in social phobia sufferers. So, the researcher of this paper decided to examine the effect of COGNITIVE-BEHAVIORAL THERAPY over addiction potential and addiction tendency in this group of people. The COGNITIVE-BEHAVIORAL THERAPY applied in this study is based on the package of COGNITIVE-BEHAVIORAL THERAPY for Leahy social phobia disorder adjusted in 20 sessions performance (Dehghani quoted from Leahy, 2006). Results concerning the effect of COGNITIVE-BEHAVIORAL THERAPY over social phobia will be stated in another paper.

2. Methodology

2.1 Participants

The statistical universe includes all male and female students of Shahed University suffering from social phobia. Of them, 30 students were chosen voluntarily and with available random sampling. For this purpose, some announcements were put at colleges and interested people gathered at a particular day and filled in questionnaire of social phobia on SPIN and on addiction potential and addiction tendency. After statistical revision, those students with higher social phobia were chosen; however, it should be noted that there is a positive correlation between social phobia and addiction tendency and potential, and the students were given a number 1 to 30 and were placed randomly in test control and groups. Each test and control groups were equally 15 people. Both groups filled in AAS and APS questionnaires once before and once after

doing treatment program, and once after 6 weeks for follow-up program (in order to examine the effect of intervention on individuals).the treatment programs were performed on test group in 20 weekly sessions (twice a week). This entire time control group was waiting.

3. Tools

3.1 SPIN

To diagnose social phobia, SPIN 17-item questionnaire was used. This scale was provided for the first time by Connor (2006) in order to evaluate social anxiety. This scale is a self appraisal scale which has 17 articles: 3 subscales of fear (6 articles), avoidance (7 articles) and psychological discomfort (4 articles) (Hasanvand, Amouzadeh, 2010). Each scale or question rates based on 5 rates Likert scale (never=0, a little=1, partly=2, very much=3, unlimited=4). The retest method of questionnaire reliability in groups with diagnosis of social phobia disorder was 78% to 89%. The internal consistency with alpha coefficient in group with normal individuals for the total scale was 94% and for subscales of fear was 89% and avoidance was 91% and subscales of psychological discomfort was equal to 8% has been reported(Conner and colleagues, 2006). Hasanvand Amouzadeh, (2007) attained the reliability and validity of this scale in Iran. The alpha coefficient of questionnaire was 82% in the first half and 76% in the second half and also the correlation of the two halves was 84% and the Spearman, Brown index was equal to 91% also, calculation of Cronbach's alpha related to total tests in subscales of social phobia was 75% for avoidance and 74% for fear and 75% for discomfort which indicates the calculated reliability is satisfactory.

The APS questionnaire (Weed and colleagues, 1992): The APS questionnaire or the scale of addiction potential includes 39 questions. This scale has been built by Weed and colleagues (1992).The scale content is fully heterogeneous and most of its articles seem not to be directly related to drug abuse. Some of its articles are related to extroversion, thrill seeking and risk taking. Others are related to self-doubts, alienation and cynical attitudes towards others. Reliability coefficients of this scale for normative sample (within 1 week) were respectively, 0.69 and 0.77 (Graham and colleagues, quoted from Hamid Yaghoubi,2000). The questionnaire is scored based on two choices of "Yes" and "No".

AAS questionnaire: Addiction acknowledgement subscale (AAS) was also formed by Weed, Butcher, Mckenna and Ben Porath (1992), using some of MMPI-2 questionnaire articles, which their content was clearly related to drug abuse. Using internal consistency method, the scale was tested and modified; thus, the final scale of AAS has 13 articles. Using MMPI-2 normative data, raw scores are transformed to linear T scores (Graham and colleagues, quoted by Yaghoubi, H.,2000). Like AAP questionnaire, this one is also a "Yes" and "No" two-choice questionnaire. Minouie and Salehi (2004) examined the reliability of total subscales of MAC-R, AAS, APS in Iranian society. In their research, Cronbach's alpha was equal to 0.5338 and reliability via spilt-half was calculated at 0.533.

4. COGNITIVE-BEHAVIORAL THERAPY

In order to conduct the research, the test group testees attended 20 sessions of COGNITIVE-BEHAVIORAL THERAPY, per session 2:30 hours, twice a week. In this time, the control group was awaiting. In the initial sessions, they got familiar with stressful sources, response to stress, stress and relaxation consequences, imaging and role playing. Next sessions were based on COGNITIVE-BEHAVIORAL THERAPYS, so the group members got familiar with the relationship between thought, feeling and behaviour ; with how to recognize thoughts and distorted self-talks; with thoughts restructuring and more rational thoughts replacement as well as recognition of schemata. When sessions were completed, control and test groups were again evaluated through questionnaires of social phobia, addiction tendency and addiction potential.

5. Results

5.1 Descriptive data

Table1. statistical indices of testees scores in the addiction potential scale (APS) in MMPI-2 test

Scores	Test group		Control group	
	Mean	SD	Mean	SD
Pre-test	24.33	5.23	22.87	5.05
Post-test	14.87	4.89	22.87	5.05
Follow-up	15.73	4.25	22.87	5.05

As shown above, in the pre-test, there is not a big difference between addiction potential mean of both control and test groups. But, in the post-test, addiction potential scores of group, influenced by COGNITIVE-BEHAVIORAL THERAPY, were lower than control group. Also, test group follow-up mean is lower than that of control group which indicates COGNITIVE-BEHAVIORAL THERAPY effect on addiction potential.

Table 2. Statistical indices of testees' scores in the addiction acknowledgement scale (AAS) in MMPI-2 test

Scores	Test group		Control group	
	Mean	SD	Mean	SD
Pre-test	7.67	2.24	7.20	1.69
Post-test	3.53	1.89	7.20	1.69
Follow-up	4.27	2.18	7.20	1.69

In the pre-test, as shown above, there is no big difference between addiction acknowledgement mean of both test and control groups; however, in the post-test the addiction acknowledgement scores of test group influenced by COGNITIVE-BEHAVIORAL THERAPY have been lower than that of control group. And also, test group follow-up scores are lower than those of control group which shows that COGNITIVE-BEHAVIORAL THERAPY affects addiction acknowledgement.

5.2 Analytical data

Table3. Covariance analysis results for addiction potential scores (APS) of MMPI-2 test in two groups of test and control

Change resources	Sum of squares	Degree of freedom	Mean square	F	Significance
Pre-test	246.11	1	246.11	18.22	0
Group	467.25	1	467.25	34.60	0
Error	364.55	27	13.50		
Total	12167.00	30			

With respect to above results, the amount of calculated F for post-test scores of addiction potential in both test and control groups will be significant after stabilizing pre-test scores effects of addiction potential. ($F(1,27)=34.60, P<0.01$)

Table 4. Covariance analysis results for addiction acknowledgement scores (AAS) of MMPI-2 tests in two groups of test and control

Change resources	Sum of squares	Degree of freedom	Mean square	F	Significance
Pre-test	3.21	1	3.21	0.834	0.369
Group	67.19	1	67.19	17.42	0
Error	104.11	27	3.85		
Total	1158.0	30			

With respect to above results, the amount of calculated F for post-test scores of addiction acknowledgement in both test and control groups will be significant after stabilizing pre-test scores effects of addiction acknowledgement. ($F(1,27)=17.42, P<0.01$)

6. Results

As seen on Table1, in the pre-test, there is no big difference between addiction potential mean of two groups of test and control. But in the post-test, influenced by COGNITIVE-BEHAVIORAL THERAPY, addiction potential scores of test group

has been lower than those of control group. Also, follow-up mean of test group is lower than that of control group releasing that COGNITIVE-BEHAVIORAL THERAPY affects addiction potential.

As observed on Table 2, in the pre-test, there is no big difference between addiction acknowledgement mean of two groups of test and control. But in the post-test, influenced by COGNITIVE-BEHAVIORAL THERAPY, addiction acknowledgement scores of test group has been lower than those of control group. Also, follow-up mean of test group is lower than that of control group releasing that COGNITIVE-BEHAVIORAL THERAPY affects addiction acknowledgement.

With respect to results of Table 3, the amount of calculated F for post-test scores of addiction potential in both test and control groups will be significant after stabilizing pre-test scores effects of addiction potential. ($F(1,27)=34.60$, $P<0.01$) so, there is a significant difference between post-test scores mean of addiction potential in both test and control groups and keeping the pre-test effects constant. Comparing adjusted mean of the groups shows that addiction potential mean of test group ($M=14.87$) is lower than that of control group ($M=22.87$). Therefore, doing COGNITIVE-BEHAVIORAL THERAPY has resulted in addiction potential reduction in test group.

With respect to results of Table 4, the amount of calculated F for post-test scores of addiction acknowledgement in both test and control groups will be significant after stabilizing pre-test scores effects of addiction acknowledgement. ($F(1,27)=17.42$, $P<0.01$) so, there is a significant difference between post-test scores mean of addiction acknowledgement in both test and control groups and keeping the pre-test effects constant. Comparing adjusted mean of the groups shows that addiction acknowledgement mean of test group ($M=3.53$) is lower than that of control group ($M=7.20$). Therefore, doing COGNITIVE-BEHAVIORAL THERAPY has led to addiction acknowledgement reduction in test group.

7. Discussion

In this research, theories related to effect of COGNITIVE-BEHAVIORAL THERAPY on the reduction of addiction potential and addiction tendency were tested on the population of Shahed University students suffering from social phobia. The obtained results confirm the effectiveness of COGNITIVE-BEHAVIORAL THERAPY. In other words, addiction potential and addiction tendency in test group show a significant reduction comparing to control group. The research findings are in consistent with those of Alizadeh and colleagues (2008), in which they compared inefficient attitudes of people suffering from drug abuse, common people and its psychological consequences, and found that COGNITIVE-BEHAVIORAL THERAPY is efficacious on the prevention of addiction. The findings are also in consistent with those of Shahmohammadi and colleagues (2008), in which they studied effectiveness of communicative skills training on marriage adaptation and prevention of Esfahan city's mal addicts relapse, and concluded that COGNITIVE-BEHAVIORAL THERAPYs are effective in prevention of drug abuse as well as drug abuse relapse. The findings are also in consistent with those of Manshaie (2005) who studied the role of life skills training on the addiction prevention of Esfahan city's youth. Findings are also in consistent with those of Dabbaghie and colleagues (2008) who studied the effectiveness of relapse prevention based on mindfulness on the treatment of drug dependence and mental health. They found psychological therapies on addiction prevention more efficacious than other therapies.

These individuals' mental health improvement is another point that should be considered in explaining the findings, because based on the self-medication theory of Kantzian (Baschnagel, Kufi, Schumacher, Droubz and Saladin (2008), people turn to drug use, in fact try to resolve their problems such as depression and anxiety by doing self-medication. During the treatment employed in this research, patients were familiarized with stressful sources, response to stress, stress and relaxation consequences, thought restructuring, replacing more rational thought and identifying schemata. Therefore, reducing the individuals' anxiety, COGNITIVE-BEHAVIORAL THERAPY can be useful in reduction of addiction potential and addiction tendency in social phobia sufferers.

The research was carried out on the student population (suffering from social phobia). Thus, the findings can be generalized for the student population suffering from (clinical) social phobia. This class of society seems to be specifically vulnerable to confrontation with life pressures and should be dealt with a high priority. The depression and anxiety derived from student life and their effects on the students' mental health have apparently drawn researchers' attention in recent years. Notice that the research limitations including, using Shahed University students and not those of other universities, samples being all students and lack of non-specific parallel treatment make the generalization of findings face with caution. It is recommended that this research be conducted on the non-student populations with more extended samples.

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