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Effect of Meta-Cognitive Therapy on Self Assertiveness Skill in Patients with Social Phobia Disorder

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Abstract

Background: Self assertiveness can be considered as hearth of interpersonal behavior and weakness in this area is one of the obvious characteristic in the patients with social phobia disorder. This study aimed to determine the effect of meta-cognitive therapy on the rate of self assertiveness skill in patients with social phobia disorder.

Materials and Methods: This experimental study was conducted with pretest-posttest and follow-up design, using control group. From all social phobia disorder patients visited in psychology clinics in Shiraz, south western part of Iran in 2012, 22 patients were selected through the objective sampling method and randomly divided into two experimental (11 persons) and control (11 persons) groups. The instruments of this study were social phobia symptoms assessment questioner (SPSAQ) and self assertiveness scale (SAS). The experimental group received 8 weeks of Wells' meta-cognitive therapy sessions. Data were analyzed through covariance analysis method.

Results: The results showed that the mean of the self assertiveness scores in post-test and follow up in the experimental group is significantly higher than that of the control group ($p<0.05$). The results of analysis of multivariate covariance showed that MCT had a significant effect on increscent of the self assertiveness skill scores of posttest (0.39) and follow up (0.38) in patients with social phobia disorder ($p<0.001$).

Conclusion: This intervention is believed to improve self assertiveness skill in SPD patients by facilitating transmission from the object mode to the meta-cognitive mode and enhancing the efficient and flexible coping skills.

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Introduction

Social phobia is a chronic disorder which shows itself in the fear feeling ashamed in social situations and consequently avoidance of these situations [1]. The 13% frequency of the disorder has placed it in the third position of mental disorders following basic depression and drug addiction [2-3]. This disorder usually leads to long-term disability [4] and the sufferers from this disorder are tremendously hurt in their occupational, social and daily activities [5, 6].

One of the problems that the sufferers from social phobia disorder have to deal with is lack of firmness in behavior and assertiveness in speech [7]. By self-assertiveness, it is meant the ability to make the person stand on his feet without any fear, express his real feeling and get his rights with respect to other's rights [8, 9]. In most treatment methods for curing social phobia disorder the attention has been most paid to the content of thought and avoidance behavior, though, most anxiety disorders disturb information processing like the ability of self-assertiveness too [10]. In addition, those treatment methods that make use of both cognitive procedures and encounterance are the most efficient for this disorder [11].

In the field of new psycho-cognitive treatments, first Wells and Mathews introduced meta-cognitive pattern based on self- regulatory function model, meta-cognition is any knowledge or cognition procedure in which there is evaluation or cognitive control [12, 13]. Meta-cognition is effective in different aspects of individuals` character and has a range starting from severe lack at self-confidence and lack of the ability of self-assertiveness to self-praising and false self-confidence. Meta-cognitive treatments (MCT) are often good options for treating these deep problems [14].

Wells and King, Rees and van Koesvelad, and almost Wells and Sembi have proved the effectiveness at this treatment method in inclusive anxiety disorder, obsession disorder and posttraumatic stress disorder respectively [15-17]. Bennet and Wells investigated the effectiveness of meta-cognitive treatment in the symptoms of posttraumatic stress and reported significant importance the decrease of the symptoms [18]. Also Wells et al. [19] have proved meta-cognitive treatment effective in the symptoms of inclusive anxiety. Behar et al. [20] and Ellis and Hudson [21] also introduced meta-cognitive treatment hopeful for anxiety disorders. The researches done in the country also prove the effectiveness of meta-cognitive treatment in the symptoms of physical deformation, practical-mental obsession, and anti-social behavior of teenagers [22-24].

Considering the extent epidemic rate of social phobia disorder and mentioned literature, the present study conducted to evaluate the effectiveness of Well`s meta-

cognitive on improvement of self-assertiveness skill in social phobia patients.

Materials and Methods

This research is experimental in design with a pretest, posttest and a three-month follow-up in which there is one experimental and one control group. The independent variable was meta-cognitive treatment in 8 ninety-minute group sessions which were held weekly and the dependent variable was the level of self-assertiveness in the patients suffering from social phobia disorder.

The population of the research consisted of all adults suffering from social phobia disorder in Shiraz who had responded to the researcher̀s summon for treating the symptoms of social phobia. First a notice was distributed in all psychological clinics in Shiraz in which all the symptoms of social phobia disorder had been mentioned in details and the treatment had been offered. Then among the individuals responding to the notice and referring these clinics in the summer of 2011, 22 volunteers whose social phobia and inability in self-assertiveness have been judged and approved through a clinical interview by a psychiatrist based on the criteria of cognitive and statistical guide for mental disorders and the social phobia symptoms assessment questionnaire were selected and randomly placed in the experimental group (with 11 members) and a control group (with 11 members).

Being under no medical treatment, having an educational degree of at least diploma and not suffering from type 2 characteristic disorders were the other criteria needed for the participants who entered the experiment. To increase the internal validity of the research the participants were homogenized based on their scores in self-assertiveness test in pretest stage.

After the participants were selected and randomly placed in one experimental and one control group, the pretest was run. Then the experimental group was offered 8 weekly sessions of meta-cognitive treatment free of charge while the control group did not get any treatment. After the interference, both groups were tested by a posttest and a 3-month follow-up.

Since a test-power higher than 0.8 is regarded zero for rejecting the hypothesis and this figure was 0.94 for this research. It can be claimed that sample size was sufficient. For moral reasons, the participant, were orally informed that they can give up participating in the research at any point and their information will be kept private and would not be revealed to anyone.

After the research the participants in the control group were offered 5 sessions of meta-cognitive treatment. The meta-cognitive interference used in this research is based on wellَs meta-cognitive treatment for anxiety disorders such as Practical and mental obsession, and post-accident stress and it is available [15]. It is worth mentioning that no meta-cognitive interference has ever been done on self-assertiveness in social phobia disorder and it is the first meta-cognitive interference on the symptoms of this disorder. So, considering the conditions and nature of the disease and the results gained by quality studies (interview with the patients) in clinics, the method of treatment was changed in order to be applied for the patients suffering from social phobia.

However all the changes were done under the supervision of experts in the field? The treatment was done by a graduated M.A student in clinical psychology who had been trained for meta-cognitive treatment. Below the summary of meta-cognitive treatment in 8 sessions is offered. First session: Introduction, evaluation of symptoms of social phobia disorder, separating normal social anxiety and problematic social anxiety, explaining self-assertiveness and the reasons for the weakness of the patients suffering from social phobia to self-assert, talking about the necessity of on-time treatment.

Second session: investigating the symptoms of anxiety and possible causes of social phobia disorder investigating different treatments for social phobia disorder, discussing human rights and making the participants, familiar each their own rights, talking about the logic of meta-cognitive treatment for social phobia disorder.

Third session: Teaching behaviors based on self-assertiveness and substitute behaviors, giving assignment on distinguishing between brave and non-brave behavior and analyzing the advantages and disadvantages of this behavior.

Fourth session: Discussing anger, causes of anger and excitement, teaching strategies for meta-cognitive control in patients, analyzing the advantages and disadvantages of the strategies of meta-cognitive control used, substituting more helpful strategies of meta-cognitive control.

Fifth session: teaching the technique of keeping far from mind-awareness when facing ineffective meta-cognitive thoughts (patients should learn to deal with their thoughts like a piece of moving cloud if it’s not needed to anodize there), investigating meta-cognitive strategies of controlling anger.

Sixth session: making the patients familiar with 2 ineffective strategies of being worried and ruminating, discussing criticism, how to react properly to criticism, advantages and disadvantages of criticism, analyzing the advantages and disadvantages of being worried and ruminating analyzing the suppression of thoughts as an ineffective procedure (white tiger), making them familiar with the consequences of challenging with the symptoms, teaching the technique of postponing being worried about criticism .

Seventh session: making the patients familiar with attentive-cognitive syndrome in mental disorders, discussing making requests and saying "yes" or "no", offering the logic of the skills of teaching attention to patients and teaching this technique to them.

Eighth session: teaching the technique of concentrating attention on the situation, as an effective meta-cognitive strategy, making the participants ready for finishing the course, discussing the existing problems, and finally summarizing the information. In each session in addition to reviewing the assignments of the previous session new assignment was also given to be done at home.

Social phobia symptoms assessment questionnaire: To measure social anxiety of people social phobia questionnaire is used. It has 38 questions and is prepared by Moshaveri [25]. One part of the questions is formed by using valid diagnosis criteria and studying the literature related to social phobia. The other part of the questions in this questionnaire comprising 15 questions is made by using Davidson`s social phobia questionnaire.

The reliability of social phobia symptoms assessment questionnaire is calculated through Cronbuch Alpha as 0.83 [27]. Validity of the questionnaire is also 0.78 which is reported acceptable [7].

The alternatives for the questions are not at all, a bit, to some extent, a lot and extremely and they scored respectively 0, 1, 2, 3, and 4. The range of the scores in this lest was between 152 and scores higher than 100 were regarded as the existence of social phobia symptoms in the individuals.

Self-Assertiveness scale: Self-assertiveness scale was prepared by Hershberger et al. according to Hormozinejad et al. [27]. The scale which is self-reporting has 25 items. The items answered "yes" are scored 1 and those answered "no" are scored zero. Scores higher than 18 indicated as assertiveness and the ability to self-express and scores lower than 10 indicated as lack of self-assertiveness in the person. Reliability coefficient of the scale is calculate 0.81 through re-test and the validity of it is reported 0.79 [7].

Results

The participants in this research were between 18 to 36 years old while 14 individuals out 22 participants were female. The investigation of the results of independence *t*-test showed the numbers of the experimental and the control groups are not significantly different considering demographic traits. Therefore, due to lack of correlation between demographic traits and dependent variable, there was no need to statistically control them.

Table 1 shows some demographic traits as well as mean and standard deviation table 2 shows the mean and standard deviation of the scores of self-assertiveness in social phobia disorder classified in groups and stages. Since lower scores in this indicates inability in social situations, it is seen than the mean of the scores of the experimental group is significantly higher than that of the control group in posttest and follow-up ($p<0.05$). Moreover, after 3 months this skill is still significantly different in the experimental group ($p<0.05$). In order to find out whether the interference has led to a significant difference in the mean of self-assertiveness in posttest and follow-up, covariance analysis was used, the results of which are shown. In this research pretest score was regarded as interfering variable and the effect of that on -test and follow up scores was controlled by covariance analysis.

Table 2. Mean and standard deviation of self assertiveness scores in two groups and processes

Groups	Processes	Mean± SD
Control	Pretest	7.90±4.56
	Posttest	7.83±3.45
	Follow Up	7.77±3.12
Experimental	Pretest	7.54±4.25
	Posttest	10.76±3.07
	Follow Up	10.21±2.82

Table 3. Covariance analysis of group membership on self assertiveness in two groups

Dependent variable	Processes	Research variables	*p*-Value
Self assertiveness	Posttest	Pretest	0.001
		Group membership	0.001
	Follow up	Pretest	0.001
		Group membership	0.001

Since covariance analysis is among parametric tests, the presumption of the normality of distribution and equality of variances was investigated to investigate normality, Shapirovilc test was applied and the results showed. Shapirovilc figure for the control group was 0.86 and this figure for the experimental group was 0.95.

Therefore, it was found out that the scores are normally distributed in two groups. Also, Lowin test was applied to investigate the equality of variances. The results showed the distribution of the scores of pretest is the same in both experimental and control groups. Therefore the presumption of the equality of variances is maintained. The other presumption of using covariance analysis is equality of covariance. The results of box test revealed the covariance of the two groups are equal.

Therefore there is no problem for using covariance analysis. Using covariance analysis to determine the effectiveness of meta-cognitive treatment in self-assertiveness skill in the experimental group, it was found out that there is a significant difference between the mean of the scores of self-assertiveness in patients suffering from social phobia disorder in the experimental group and control group in posttest and follow-up ($p<0.001$). Considering the results in table 3, the effectiveness of the interference in improving the skill of self-assertiveness in posttest stage is 39% and in the follow-up stage it is 38%. The rate of the variance in follow-up stage is because of meta-cognitive interference. Test power was 0.94 in posttest and 0.92 in follow up which indicates sample-size was sufficient.

Table 1. Mean and standard deviation of demographic characteristics in two groups

Groups \ Demographic variable	Age (yr)	Education (yr)	Disorder period (Month)	Drug use period (Month)	Parent's education(yr)
	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Experimental Group	23.2±4.34	14.25±2.75	26±7.19	7.10±6.38	10.86±6.75
Control Group	23.4±4.87	13.73±1.67	27.33±10.66	6.56±5.83	11.73±5.28

Discussion

The results of covariance analysis in order to control interfering variables showed that (after modifying the means and controlling the variable of pretest) the experimental group generally had a significant increase in the scores of self-assertiveness compared to the control group.

According to the results posttest, it seems that well's meta-cognitive pattern is effective in improving the skill of self-assertiveness in the patients suffering from social phobia disorder. Cognitive theories have explained what causes useless thought patterns very briefly.

It is very native to attribute these thought patterns to the existence of back ground beliefs in ourselves and the world (sentences such as "I am vulnerable "and" I am failed"). These beliefs lead to impaired thought patterns which are generally pessimistic and progressive and lead to a wide range of reactions. Meanwhile, these beliefs do not necessarily always lead to long-lasting emotional pressures. The existence of pessimistic beliefs cannot explain thought pattern and the can prevent reactions.

What is necessary here is to consider factors that control thought and change the mind. These factors are the base of meta-cognitive theory. Meta-cognitive theory and treatment emphasizes on pessimistic thoughts and beliefs as a result of meta-cognitive controlling of cognition and explains how meta-cognitive beliefs are effective in maintaining or changing cognition, explains how meta-cognitive beliefs are effective in maintaining or changing cognition. Meta-cognitive treatment is effective since it makes the patients aware of the process of their meta-cognitive process system and helps them think of meta-cognitive process method.

It has importance because it changes the focus of the treatment from sticking to obsessive thoughts to learning the fact that obsessive thoughts and avoiding self-expression and self-assertiveness in social and inter-personal interactions is nothing more than a personal meta-cognitive necessity and is completely changeable through focusing on treatment methods.

For example, a patient who has thoughts about social seclusion and keeping silent learns that merely having thoughts related to social phobia does not mean the reality is like this. The patient learns that this thought is just an interrupting and interfering thought and should not make him feel anxious, or a shamed to express himself or reject or accept other people's requests. In meta-cognitive treatment, behavioral experiences and verbal documentation techniques challenge the confusion of thoughts. This is something which is less focused on in cognitive treatments.

On the other hand the patients learn how to develop a more developed meta-cognitive method. These purposes are achieved through since the results of the treatment in follow-up stage was still as strong, it can be said that increasing meta-cognitive control has helped the patients form a new relationship with their thoughts and has made them able to change the meta-cognitions which increase the lack of self-assertiveness and of self-control or increase pessimistic beliefs about fear of criticism or social rejection.

In addition the patients were thought some techniques to fight with interrupting thoughts related to social phobia in case these thoughts come to there in the future. The results of the research are in line with the results of the studies by Wells and King, Rees and van Koesveld, as well as Wells and Sembi who respectively shown the effectiveness of this treatment in social parameters existing in inclusive anxiety disorder, obsessive disorder and post-accident stress disorder as anxiety disorder [15-17].

The results of the recent findings support the effectiveness of meta-cognitive pattern in the treatment of emotional disorder [28, 29]. This research is the first study on the effectiveness of meta-cognitive treatment in social phobia disorder and especially self-assertiveness skill. Therefore no previous research which is completely in line with it was found by the researcher. However, meta-cognitive treatment has been reported effective for other anxiety disorders [22, 23]. For instance Behar et al. [20] and Ellis and Hudson [21] have reported the effectiveness meta-cognitive treatment for anxiety disorders.

Generally, considering the results of this research and similar research studies and vivid meta-cognitive parameters in patients suffering from social phobia, meta-cognitive treatment can be used as a psychological method of treatment for increasing social skills and abilities of such patients.

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Authors' Contributions

All authors had equal role in design, work, statistical analysis and manuscript writing.

Conflict of Interest

The authors declare no conflict of interest.

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