



Original Article

Efficacy of group behavioral activation on social anxiety, avoidance and negative evaluations among individuals with social anxiety

Hanieh Taheri¹; Elham Taheri^{2*}; Mahdi Amiri³

¹ MS. in clinical psychology, Sciences and Researches University of Khorasan Razavi, Iran

² Ph.D. in clinical psychology, Tehran Psychiatric Institute, Iran University of Medical Sciences, Tehran, Iran

³ Assistant professor of clinical psychology, Psychiatry and Behavioral Sciences Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

Abstract

Introduction: Regarding to the importance of appropriate treatment for social anxiety, the present study aimed to assess the efficacy of group behavioral activation on social anxiety, avoidance and negative evaluations among individuals with social anxiety.

Materials and Methods: In this clinical trial in 2016, 30 cases with symptoms of social anxiety and other inclusion criteria entered to the research through convenient method of sampling and divided into two groups randomly. The experimental group received 8 weekly (ninety minutes) sessions of behavioral activation while control group received no treatment. The research instrument concluded social anxiety scale, cognitive-behavioral avoidance scale and questionnaire of negative social events fulfilled before and after intervention. Data analyzed through descriptive and explanatory statistics.

Results: Behavioral activation can impact significantly on symptoms of social anxiety, cognitive-behavioral avoidance and negative evaluations ($P < 0.05$).

Conclusion: It seems that group behavioral activation is effective in social anxiety and it may be applied in prevention and treatment of social anxiety disorder.

Keywords: Avoidance; Behavioral activation; Social anxiety

Please cite this paper as:

Taheri H, Taheri E, Amiri M. Efficacy of group behavioral activation on social anxiety, avoidance and negative evaluations among individuals with social anxiety. *Journal of Fundamentals of Mental Health* 2017 Aug-Sep; 19(5): 361-5.

Introduction

Social Anxiety Disorder (SAD) is concerned as a costly, common and disabling disorder among psychiatric disorders. It is mentioned that this disorder may be accompanied with depression and the other anxiety disorders and impact on most of dimensions of life (1-3).

Social anxiety is a term for obvious and permanent fear of social and functional situations which causes negative evaluation about participation in these situations and it may lead to social isolation. Also, this disorder tends to chronicity without appropriate treatment and causes great stress even in daily relationships and activities (4-7).

At present there are different treatments such as

pharmacotherapy and psychological interventions and there are various opinions about each of methods (8,9).

One of the cognitive treatments which has been used for different psychiatric disorders is behavioral activation. This treatment is a structured process that increases contact to the environment and it can enhance mood, though and quality of life (10,11).

As yet, this method has been used for depression in children and adults (12,13), substance abuse disorders (14,15) and comorbidity of anxiety and depression (16,17) that concluded to positive effects.

Regarding to the effects of this treatment in reducing anxiety and enhancement of persons interaction with the environment this study aimed to assess the effect of this method in social anxiety disorder according to its cost-effectiveness and efficacy of this method.

*Corresponding Author: Tehran Psychiatric Institute, Iran University of Medical Sciences, Tehran, Iran
elhamtaheri85@gmail.com
Received: Feb. 13, 2017
Accepted: Jun. 24, 2017

Materials and Methods

The statistical community of this research included individuals who referred to consultancy centers of Mashhad. Sample as 30 cases were selected via convenient method and they divided randomly into two groups of experimental (n=15) and control (n=15). At first, the social anxiety inventory was used as screening instrument. The cases who received the scores higher than 21 were selected and they assessed for other inclusion and exclusion criteria. Inclusion criteria concluded diagnosis of social anxiety based on the questionnaire while exclusion criteria concluded having other disorder in axes I and II based on DSM-IV, disabling physical illness and lack of tendency to participate in this research.

The experimental group participated in group therapy (8 two-hour sessions). Both groups were controlled about receiving the other treatments. After ending sessions, all participants fulfilled research instruments again. Finally data were analyzed.

Research instrument

- *Behavioral activation*: At first, in this treatment, introduction of members, expressing group rules and introduction of BA and its roles in depression and anxiety, specific functional dimensions in life and grading them to improve these dimensions were conducted. The members aware about the roles of avoiding behaviors to achieve social and psychological aims through recorded daily activities and level of enjoy and master in these activities. They trained the functional analysis, ACTION, TRAP, TRAC techniques and problem solving focused on contact to the social situations to combat with the social avoidant patterns in maintenance of social anxiety and behavioral encounter. The members were helped to identify the barriers and resolve them through problem solving technique.

- *Social Anxiety Disorder*: This scale provided by Connor et al. (2000) to evaluate social anxiety. This is a self-reporting which has 17 items and it has three subscales of fear (6 components), avoidance (7 components) and physiological distress (4 components). The internal consistency reported as 0.82-0.94. Also, correlation between halves calculated as 0.84. The total alpha coefficient reported as: fear 0.74, avoidance 0.75 and physiological distress 0.75 (18).

- *Cognitive-behavioral avoidance scale*: This scale has 31 items which scored in Lickert system (1-5)

and the total score varies from 31 to 155 so the higher score indicates higher cognitive-behavioral avoidance. This scale has four components of avoidance of social behavior, avoidance of personal cognition, avoidance of social cognition and avoidance of personal behavior. There is medium internal correlation (0.39-0.57) between subscales. The internal consistency if total scale is 0.91 and internal consistencies related to subscales of non-social cognition, non-social behavior, social behavior and social cognition calculated as 0.80, 0.75, 0.86 and 0.78 (19). In Iran, high correlation between the subscales and the total score is reported (0.78 to 0.80). The alpha coefficients for 1-4 factors are 0.86, 0.80, 0.78 and 0.75 respectively while this coefficient for total score and is 0.91. The reliability coefficient of test-retest for total scale is 0.92 (20).

- *The consequences of negative social events questionnaire*: In this questionnaire 16 negative social events were described, and four subscales: negative self evaluations, negative evaluations by others, short term and long term negative consequences of social events were also included (21). In Iran, Ostovar used the two scale form of this questionnaire and reported its reliability for the negative self-appraisal as 0.89 and the negative appraisal by others as 0.90 by calculating the alpha (22).

In this research, data analyzed through descriptive and ilative statistics.

Results

The sample size of this research concluded 30 cases who divided into two groups randomly. At the first session, one case of each group were not presented. In process of session, 1 of controls referred to psychiatrist and received clonazepam and propranolol so this case excluded from research. Also, based on the 3 sessions of absence criterion, 2 cases were excluded of each group. Finally 12 cases in experimental group and 11 cases in control group remained. Demographic variables of each group as follow: The mean ages of experimental and control groups were 21.42 ± 3.25 years and 22.56 ± 2.79 years respectively. In experimental control groups, there were 7 women (72.7%) and 5 men (27.2%) vs 6 women (60%) and 5 men (40%). None of cases were married. There were not seen significant differences in demographic variables between two groups.

Table 1. The mean and standard deviations of dependent variables in experimental and control groups

Variable	Behavioral activation	Control
----------	-----------------------	---------

	Pre-test Mean (SD)	Post-test Mean (SD)	Pre-test Mean (SD)	Post-test Mean (SD)
Social anxiety	39.58 (5.25)	18.42 (5.35)	37.27 (5.43)	38.73 (4.15)
Avoidance	66.44 (3.26)	46.24 (4.55)	68.24 (3.82)	63.63 (5.08)
Negative self-evaluation	54.41 (6.70)	26.32 (4.55)	54.37 (7.63)	49.77 (3.68)
Perception of others evaluation	62.56 (6.55)	37.81 (5.35)	64.32 (8.43)	67.21 (5.31)

Table 2. The variance analysis of pre-test scores of dependent variables

Variable	Homogeneity of variances	F(1, 21)
Social anxiety	0.51	0.29
Avoidance	0.37	1.03
Negative self-evaluation	0.30	0.34
Perception of others evaluation	0.39	0.21

*All statistics of F are not significant ($P>0.05$).

The covariance analysis conducted to compare behavioral activation and control in reducing social anxiety symptoms. The pre-test scores of social anxiety entered as diffracton variable. Through controlling of pre-test effect ($F(1,21)=1.48$, $P>0.05$), covariance analysis indicated that there is significant difference in reducing social anxiety symptoms between behavioral activation and control groups ($F(1,21)=2.46$, $P<0.05$). In addition, the effect size of behavioral activation compared to controls was 0.88 which is concerned as a great effect size.

Through controlling of pre-test effect ($F(1,21)=7.21$, $P<0.05$), the covariance analysis indicated that there is significant difference between two groups in reducing avoidance ($F(1,21)=8.12$, $P<0.05$) that concerning the means of post-test of avoidance scores indicates that group behavioral activation can decrease avoidance significantly. In addition, the effect size of group behavioral activation compared to the controls calculated as -0.86 which is concerned as a great effect size.

Through controlling of pre-test effect ($F(1,21)=12.53$, $P<0.001$), the covariance analysis indicated that there is significant difference between two groups in reducing negative self-evaluation ($F(1,21)=8.73$, $P<0.001$) that concerning the means of post-test of negative self-evaluation scores indicates that group behavioral activation can decrease negative self-evaluation significantly. In addition, the effect size of group behavioral activation compared to the controls calculated as 0.89.

Also, through controlling of pre-test effect ($F(1,21)=2.21$, $P<0.05$), the covariance analysis indicated that there is significant difference between two groups in reducing perception of negative others evaluation ($F(1,21)=6.13$, $P<0.001$) that concerning the means of two groups indicates that group behavioral activation can decrease perception

of negative others evaluation significantly. In addition, the effect size of group behavioral activation compared to the controls calculated as 0.89.

Discussion

As summary, the results indicated that group behavioral activation can decrease social anxiety symptoms, cognitive-behavioral avoidance and negative evaluations.

The efficacy of group behavioral activation on reducing symptoms of social anxiety is concordant with the results of recent researches which assessed the effect of behavioral activation on anxiety disorders (23).

In a study, the effect of this treatment on social anxiety disorder with depression in a 46-years old patient assessed. The results after 9 sessions indicated that the symptoms of depression and anxiety decreased significantly (24).

In another study, 23 students with social anxiety disorder treated by 8 sessions of cognitive-behavioral treatment or behavioral activation. The results indicated that both of treatments had positive effects but behavioral activation had greater effect in reducing depression and the scores of outcomes of social negative events while there were not significant differences between two groups in reducing anxiety and dysfunction. These results are concordant with the present study (25).

Although, Soleimani et al. study conducted on 27 Iranian college students by 8 sessions of cognitive-behavioral treatment (13 cases) or behavioral activation (14 cases). The results based on depression, anxiety and stress scale indicated that symptoms of depression were lower significantly in behavioral activation group but there were not significant differences between two groups in reducing anxiety and stress (26).

This is a pilot study which has various limitations. The samples of this research were college students with social anxiety disorder that they concerned as special population with special psychological symptoms. This issue limited the generalization to other populations. Also, the structure of treatment was brief compared to the original format which may impact on the long-time efficacy. The lack of followup is another limitation especially for long-

time effects.

decrease social anxiety symptoms, cognitive-behavioral avoidance and negative evaluations among patients with social anxiety.

Conclusion

It seems that group behavioral activation can

References

1. Aderka IM. Functional impairment in social anxiety disorder. *J Anxiety Disord* 2012; 26: 393-400.
2. Moitra E, Beard C, Weisberg RB, Keller MB. Occupational impairment and social anxiety disorder in a sample of primary care patients. *J Affect Disord* 2011; 130: 209-12.
3. Kessler RC, Chiu WT, Demler O, Merikangas KR, Walters EE. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry* 2005; 62: 617-27.
4. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Washington, DC: American Psychiatric Publishing; 2013.
5. Kessler RC. The impairments caused by social phobia in the general population: Implications for intervention. *Acta Psychiatr Scand* 2003; 108: 19-27.
6. Schneier FR. Social phobia: Comorbidity and morbidity in an epidemiologic sample. *Arch Gen Psychiatry* 1992; 49: 282-8.
7. Steinert C, Hofmann M, Leichsenring F, Kruse J. What do we know today about the prospective long-term course of social anxiety disorder? A systematic literature review. *J Anxiety Disord* 2013; 27: 692-702.
8. Turk CL, Heimberg RG, Hope DA. Social anxiety disorder. In: Barlow HD. (editor). *Clinical handbook of psychological disorders; A step-by-step treatment*. 3rd ed. New York: Guilford; 2001: 114-53.
9. Rowa K, Antony MM. Psychological Treatments for Social Phobia. *Can J Psychiatry* 2005; 50: 308-16.
10. Dimidjian S, Hollon SD, Dobson KS, Schmaling KB, Kohlenberg RJ, Addis ME, et al. Randomized trial of behavioral activation, cognitive therapy, and antidepressant medication in the acute treatment of adults with major depression. *J Cons Clin Psychol* 2006; 74: 658-70.
11. Hopko DR, Lejuez CW, Ruggiero KJ, Eifert GH. Behavioral activation treatments for depression: Procedures, principles, and progress. *Clin Psychol Rev* 2003; 23: 699-717.
12. Ataie Moghanloo V, Ataie Moghanloo R. The effect of behavioral activation therapy based on changing lifestyle on depression, psychological well-being and feeling of guilt in children between 7-15 years old with diabetes. *Journal of Rafsanjan University Medical Sciences* 2015; 14(4): 325-38. (Persian)
13. Shareh H. Effectiveness of behavioral activation group therapy on attributional styles, depression, and quality of life in women with breast cancer. *Journal of fundamentals of mental health*. 18(4): 179-88.
14. Amiri M, Yekke Yazdandoost R, Tabatabaei SM. [Efficacy of group behavioral activation in reducing depression and increasing general health and quality of life among clients of treatment based center]. *Research in addiction* 2009; 9(3): 91-103. (Persian)
15. Goudarzi N. [Efficacy of behavioral activation and group contract in substance abuse disorders]. Ph.D. Dissertation. Tehran University: Faculty of psychology and educational sciences, 2002. (Persian)
16. Hopko DR, Lejuez CW, Hopko SD. Behavioral activation as an intervention for coexistent depressive and anxiety symptoms. *Clin Case Stud* 2004; 3: 37-48.
17. Zemestani M, Davoudi I, Mehrabizadeh-Honarmand M, Zargar Y. Effectiveness of group behavioral activation on depression, anxiety and rumination in patients with depression and anxiety. *J Clin Psychol* 2014; 5(4): 20.
18. Connor KM, Davidson JRT, Churchill LE, Sherwood A, Foa EB, Weisler RH. Psychometric properties of the social phobia inventory (SPIN): A new self rating scale. *Br J Psychiatry* 2000; 176: 379-86.
19. Ottenbreit ND, Dobson KS. Avoidance and depression: The construction of the cognitive-behavioral avoidance scale. *Behav Res Ther* 2004; 42(3): 293-313.
20. Ataie S. [A comparison of rumination and avoidance in unipolar mood disorder, social anxiety disorder and nonclinical sample and relationship between them]. Dissertation. Tehran: Tehran University of Medical Sciences, 2013: 198. (Persian)
21. Wilson JK, Rapee RM. The interpretation of negative social events in social phobia: Changes during treatment and relationship to outcome. *Behav Res Ther* 2005; 43: 373-89.
22. Ostovar S. [Explanation of the mediating role of self-focused attention and social self-efficacy on the relationship between social phobia and cognitive bias]. Ph.D. Dissertation. Shiraz University, Faculty of psychology and educational sciences, 2008. (Persian)
23. Hopko DR, Robertson S, Lejuez CW. Behavioral activation for anxiety disorders. *Behav Analyst Today* 2006; 7(2): 212-32.
24. Staley CS, Lawyer SR. Behavioral activation and CBT as an intervention for coexistent major depression and social phobia for a biracial client with diabetes. *Clin Case Stud* 2010; 9(1): 63-73.
25. Taheri E, Amiri M, Birashk B, Gharrayi B. Cognitive therapy versus behavioral activation therapy in the treatment of social anxiety disorder. *Journal of fundamentals of mental health* 2016; 18(5): 294-9.

26. Soleimani M, Mohammadkhani P, Dolatshahi B, Alizadeh H, Overmann KA, Coolidge FL. A comparative study of group behavioral activation and cognitive therapy in reducing subsyndromal anxiety and depressive symptoms. *Iran J Psychiatry* 2015; 10(2): 71-8.