

Effectiveness of Treatment Based on Acceptance and Commitment on Emotional Impairment and Cognitive Avoidance in Students with Generalized Anxiety Disorder

1. Sara Karimi*, 2. Zahra Aqamirmohammadali, 3. Soheila Abubakri Makui, 4. Mahbobeh Vahdifard, 5. Mrzieh Habibi, 6. Marjan Amoo Khalili

1. Corresponding Author: M. A. of Family Counseling, Allameh Tabatabai University, Tehran, Iran. sarakarimi6990@gmail.com

2. M. A. of Clinical Psychology, Islamic Azad University, Qom Branch, Qom, Iran. z.aqamir@gmail.com

3. M. A. of Clinical Psychology, Islamic Azad University, Torbat-e Jam Branch. soheila.abobakri@gmail.com

4. M. A. of General Psychology, Islamic Azad University, Meybod Branch, Yazd, Iran. mvf1397@gmail.com

5. M. A. of Educational Psychology, Allameh Tabatabai University, Tehran, Iran. m.habibi008@gmail.com

6. Assistant Professor, Department of Islamic Studies, Roodehen Branch, Islamic Azad University, Roodehen, Tehran, Iran. m.khalili@riau.ac.ir

Abstract

The purpose of this study was to investigate the effectiveness of treatment based on the acceptance and commitment on emotional impairment and cognitive avoidance in students with generalized anxiety disorder. The statistical population of this study consisted of all female students of second stage high school in Taybad. After initial assessment using GAD scale, a total of 30 students were selected using purposeful sampling and randomly assigned into an experimental and a control groups with each of 15 students. Alexithymia Scale Bagby, Taylor & Parker and Cognitive Avoidance Questionnaire Sexton & Dugas, were used. The experimental group received eight 90-minute sessions of ACT program. Data were analyzed by MANCOVA test. Findings from this research showed a significant difference between the mean posttest scores of the experimental and control groups in emotional impairment and its components and the cognitive avoidance and its components.

Keywords: Acceptance and commitment, cognitive avoidance, emotional impairment, generalized anxiety disorder

Introduction

One of the most common anxiety disorders in children and adolescents is general anxiety disorder (GAD) (Peter, et al., 2019). Empirical evidence has shown that cognitive avoidance is one of the meta-diagnostic factors that can play an important role in the formation and persistence of many mental disorders (Levin, et al., 2018). This process includes; extreme negative assessments of feelings, emotions, unwanted private thoughts, lack of desire to experience these private events, and deliberate attempts to control or escape from them (Bardin, et al., 2016).

Previous studies confirmed that emotion regulation was lower in people with anxiety than normal people (Besharat, et al., 2017). Emotional insufficiency is the difficulty in regulating emotional self-regulation, in other words, the inability to cognitively process emotional information and regulate emotions (Gillespie, et al., 2018). Research evidence suggests that emotional dimensions include:

difficulties in identifying feeling, difficulties in describing feeling and externally oriented thinking are effective in affecting anxiety disorders (Papkiro, et al., 2018).

Paying attention to variables such as emotional impairment and cognitive avoidance can be effective in preventing, diagnosing and treating anxiety symptoms. Therefore, addressing effective and economical treatments such as Acceptance and Commitment Therapy (ACT) is essential for this disorder.

ACT treatment plays an important role in regulating positive health-related behaviors in individuals by modifying negative behavioral patterns (Levin, et al., 2012), it is essential to understand the important aspects of its mechanism of action. So, the purpose of this study was to investigate the effectiveness of ACT on emotional impairment and cognitive avoidance in students with generalized anxiety disorder.

Method

In this research, a quasi-experimental research design was employed with pre-test, post-test and a control group. The participants of the study consisted of all second grade female students of the senior high schools of Taybad city in the first semester of the academic year 2018-2019. The randomly sampling method was from three senior girl high schools and 30 students were selected from one of the cities of Taybad, (Taybad city). To measure the amount and severity of general anxiety disorder, GAD scale was performed on the second grade students of these schools. Finally, students who scored higher than the cut-off point (10) in this test, were selected. After initial evaluations based on a semi-structured diagnostic interview on mood disorders, current diagnosis and longevity, 30 female students who met the criteria for the diagnosis of general anxiety disorder were selected by purposive sampling and randomly assigned to experimental (n= 15) and control (n= 15) groups. The experimental group received eight 90-minute sessions of ACT program.

Research tools

The schedule for affective disorders and schizophrenia for school-age children-present and lifetime version: This interview was compiled by Kaufman, et al., (1997), used to assess psychological pathology including GAD in children and adolescents aged 6-17 years.

Generalized Anxiety Disorder Scale- 7 Item: This scale was developed by Spitzer, et al., (2006), which measures the severity of existing anxiety. This scale contains 7 items that are graded on a 4-point Likert scale, from 0 (never) to 3 (very high), ranging from 0 to 21 with a cut-off score of 10.

Toronto Alexithymia Scale-20: The 20-item scale was developed by Bagby, et al., (1994) and assesses emotional dysfunction in three subscales of difficulty in recognizing emotion, difficulty in describing emotion, and extracurricular thinking.

Cognitive Avoidance Questionnaire: This questionnaire was developed by Sexton & Dugas (2004) and has 25 items to measure 5 cognitive strategies namely: Thought substitution, distraction, avoidance of threatening stimuli and transformation of images into thoughts.

Results

The results of the Kolmogorov-Smirnov normality test showed that the distribution was normal ($P > 0.05$). Leven test to examine the equality of variance of groups in the components of dependent variables of the study showed that the obtained significance level was greater than 0.05. Therefore, the experimental and control groups were the same in terms of the dispersion of the scores of these variables and their components in the pre-test phase.

Table 1. Multivariate analysis of covariance to investigate the effect of group on the components of emotional insufficiency and cognitive avoidance

		value	F	DF	DF2	Sig.	Trace size
Emotional Insufficiency	Pillai's Trace	0.61	5.61	3	21	0.001	0.30
	Wilk's Lambda	0.39	7.38	3	21	0.001	0.37
	Hetelling's Trace	1.54	9.25	3	21	0.001	0.43
	Roy's Largest Root	1.53	19.42	3	21	0.001	0.60
Cognitive Avoidance	Pillai's Trace	0.67	6.48	3	21	0.001	0.33
	Wilk's Lambda	0.33	8.84	3	21	0.001	0.41
	Hetelling's Trace	1.90	11.40	3	21	0.001	0.48
	Roy's Largest Root	1.87	23.76	3	21	0.001	0.65

As the results of Table 2, show, by controlling the effect of pre-test, there were significant differences among the mean scores of post-test of the components of difficulty in identifying emotions, difficulty in describing and extroverted thinking ($P < 0.001$). Also, there were significant differences among the mean scores of post-test components of thought suppression, thought substitution, avoidance of threatening stimuli and conversion of imaginations into thoughts ($P < 0.001$).

Table 2. Results of analysis of covariance of the differences among the experimental and control groups in the components of emotional impairment and cognitive avoidance

Variable pre-test	Value	F	DF (hypot hesis)	DF (Error)	Sig.	Effect Rate	Statistical power
Emotional Insufficiency							
Difficulty in Identifying Emotions	0.38	7.31	3	23	0.001	0.61	0.99
Difficulty in Describing Emotions	0.43	5.75	3	23	0.001	0.56	0.98
Extroverted Thinking	0.50	4.49	3	23	0.001	0.50	0.95
Cognitive Avoidance							
Thought Suppression	0.28	1.24	5	26	0.001	0.71	1.00
Thought Substitution	0.15	24.14	5	26	0.001	0.84	1.00
Distraction	0.47	5.06	5	26	0.001	0.53	0.97
Avoidance of Threatening Stimuli	0.31	9.92	5	26	0.001	0.68	1.00
Converting Imaginations into	0.29	10.71	5	26	0.001	0.63	1.00

Conclusion & Discussion

Due to the effectiveness of ACT on reducing emotional impairment and cognitive avoidance, it can be said that the main purpose of this treatment is to strengthen the psychological flexibility of clients, and in this way helps people to cope with thoughts, emotions and instead of avoiding unpleasant feelings, choose an action to experience a more enjoyable life (Levin, et al., 2012). In ACT, it tries to experience emotions and feelings as they really are, this allows the person to understand the depth of his feelings, to correctly identify and describe them, and to seek understanding. And their correct and healthy occurrence.

This study, similar other studies, faced limitations; In the present study, the effects of treatment were not followed up. According to the research results, it is suggested that counselors and psychotherapists use ACT to reduce emotional impairment and cognitive avoidance in people with GAD.

Acknowledgements

We would like to express our gratitude to all the female students who helped us in this research as participants.

Conflict of interest

This study has no conflict of interest.

References

- Bagby, R. M., Parker, J. D.A., & Taylor, G.J. (1994). The twenty-item Toronto alexithymia scale- I. Item selection and cross-validation of the factor structure. *Journal of Psychosomatic Research*, 38(1): 23-32.
- Bardeen, J. R., & Fergus, T. A. (2016). The interactive effect of cognitive fusion and experiential avoidance on anxiety, depression, stress and posttraumatic stress symptoms. *Journal of contextual behavioral science*, 5(1): 1-6.
- Besharat, M.A., & Farahman, H. (2017). The mediating role of difficulties in emotion regulation on the relationship between attachment pathologies and symptoms of depression and anxiety. *Iranian Journal of Psychiatry and Clinical Psychology*, 12(44): 7-16. (Text in Persian).
- Gillespie, S. M., Garofalo, C., & Velotti, P. (2018). Emotion regulation, mindfulness, and alexithymia: Specific or general impairments in sexual, violent, and homicide offenders? *Journal of Criminal Justice*, 46(1): 60-71.
- Kaufman, J., Birmaher, B., Brent, D., Rao, U. M. A., Flynn, C., Moreci, P., & Ryan, N. (1997). Schedule for affective disorders and schizophrenia for schoolage children-present and lifetime version (K-SADS-PL): Initial reliability and validity data. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36(7): 980-988.

- Levin, M.E., Krafft, J., Pierce, B., & Potts, S. (2018). When is experiential avoidance harmful in the moment? Examining global experiential avoidance as a moderator. *Journal of Behavior Therapy and Experimental Psychiatry*, 4(61): 158-163
- Levin, M. E., Hildebrandt, M. J., Lillis, J., & Hayes, S. C. (2012). The impact of treatment components suggested by the psychological flexibility model: A meta-analysis of laboratory-based component studies. *Journal of Behavior Therapy*, 43(4): 741-756.
- Peter, J., Lawrence, D, C., Murayama, K., & Creswell, C. (2019). Systematic review and meta-analysis: Anxiety and depressive disorders in offspring of parents with anxiety disorders. *Journal of the American Academy of Child Adolescent Psychiatry's*, 58(1): 46–60.
- Popkirov, S., Flasbeck, V., Schlegel, U., Juckel, G., & Brune, M. (2018). Alexithymia in borderline personality disorder is not associated with deficits in automatic visual processing of negative emotional stimuli. *Journal of Psychiatry Research*, 263(5): 121-124.
- Sexton, K.A., & Dugas, M.J. (2004). An investigation of the factors leading to cognitive avoidance in worry. Poster Presented at the Annual Convention of Association for Advancement of Behavior Therapy, New Orleans, USA.
- Spitzer, R. L. Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: The GAD-7. *Journal of Archives of Internal Medicine*, 166(10): 1092-1097.