

Effectiveness of Acceptance & Commitment Group Therapy on Anxiety reduction of students

Ebrahim Rahmani¹ and Masoud Rahmani²

¹Master of counselling, Razi University of Kermanshah,

²Bachelor of Psychology, Payame noor University of Piranshahr

Received: May 14, 2015

Accepted: August 27, 2015

ABSTRACT

This study aims to evaluate the effectiveness of Acceptance & Commitment Group Therapy on Anxiety reduction of Payam-e Noor students in Piranshahr. To conduct this research, a semi-experimental method was used having a pretest and posttest design with control group. 20 qualified students based on Beck Anxiety Disorder (BAI) were selected, and were distributed randomly between the experimental group (70%=female, mean age=24) and control group (60% female, mean age=24.5). The experimental group were treated in ten 1.5 hour weekly sessions and no intervention was done on the control group. Covariance analysis and paired-t were used to analyze the data. Results showed that in posttest level, there was a significant difference between means of two groups ($p<0/05$). The data analysis proved that acceptance and commitment group therapy had a significant effect on reducing anxiety among students.

KEYWORDS: acceptance and commitment therapy, anxiety, students

1. INTRODUCTION

Anxiety disorders include disorders with shared characteristics of phobia, anxiety, and distressed behaviors (DSM-5) [1]. The apparent model in the frequency data during lifetime is that anxiety disorder as a group has always been the most common type of psychological disorders (Kessler, et al., 2010) [2] with approximate frequency of 0.9 to 28.3 percent (Baxter et al., 2013) [3]. The meta-analysis on cognitive-behavior therapy (CBT) in connection with anxiety disorders indicate the major effects of most studies on those disorders. Based on this assumption, the recent studies that have summarized the results of several metacognitive studies reveal the high impact of CBT (Otte et al., 2011) [4].

Nevertheless, not all clients accept these interventions or respond to it, showing that we need more treatment innovations to increase the useful impacts of social interventions (Orsillo & Roemer, 2005) [5]. Even in clients who respond to the treatment, they actually never reach the mental level of non-clinical individuals and will experience intensive post-treatment symptoms (Dalrymple & Herbert, 2007) [6]. On one hand, many modern psychologists believe that traditional behavior therapy does not respond and better methods are required in dealing with thoughts and emotions; on the other hand, the main concept of cognitive-behavioral treatment which claims direct cognitive changes are needed for clinical improvement have not been verified fairly well (Hayes et al., 2006) [7].

For the purpose of development, improvement and providing stronger theoretical alternatives in cognitive-behavior treatments (cognitive-centered treatments), clinical researchers have shown increasingly interests in mindfulness and acceptance-based treatments in psychological pathology (Arch et al., 2012) [8]. The Acceptance and commitment therapy (ACT) is a kind of psychotherapy based on mindfulness, acceptance and value which is founded on the pillar of the traditional cognitive-behavioral treatment (Hayes et al., 2003) [9]. ACT is not against traditional cognitive-behavior treatment, nor is it based on its weaknesses (Hayes et al., 2013) [10]. ACT has been found effective in treating anxiety among clinical and non-clinical population and has proved effective in both individual and group therapy (Swain et al., 2013) [11].

From ACT viewpoint, anxiety disorders develop when the individual becomes engaged in cognitive approaches to reduce or delete his inner experiences related to anxiety (Orsillo, Roemer, & Holowka, 2005) [12]. The assumption of mental pathology in ACT is avoidance of experiencing the inner emotions (such as thoughts, memories and sensations). These internal events are prevented, surpassed, and refrained; and this inability to give way to experiences leads to the emergence of psychological vulnerabilities such as anxiety disorders (Mennin, 2005) [13]. Focusing on ACT as an anxiety disorders treatment does not aim at lowering the clients' anxiety; it is rather an

approach to assist the clients to live in line with values without considering anxiety. This task is fulfilled through the six major ACT processes of acceptance, defusion, self as a context, contact with the present moment, values, and behavioral committed exercise (Twohig et al., 2005) [14]. As these skills are acquired, the person's conception appears to be highly flexible, focused and willful, which in turn enable the individual to show a better view to himself and others as an integrated world (Hayes, Strosahl, & Wilson, 2011) [15].

Both in ACT and other approaches based on acceptance and mindfulness, the clients learn to fully experience their emotions and physical sensations without withdrawal and focus more on behavior changes in line with the values than adjusting their thoughts and feelings (Levitt & Karekla, 2005) [16]. ACT has been used for treating different psychopathological disorders, including anxiety disorders such as: anxiety symptoms (Muto, Hayes, & Jeffcoat, 2011) [17], Generalized Anxiety Disorder (Wetherell et al., 2011) [18], Mixed Anxiety Disorders (Arch et al., 2012; Codd et al., 2011) [8,19], Obsessive-Compulsive Disorder (Yardley, 2012) [20], Panic Disorder (Karekla, 2004) [21], Post-Traumatic Stress Disorder (Twohig, 2009) [22], Social Anxiety Disorder (England, 2010; Yuen et al., 2010) [23,24], Test Anxiety (Brown et al., 2011) [25].

The goal of ACT is to reduce the engagement with anxiety related thoughts through cognitive defusion, by keeping a flexible distance from the verbal meaning of cognitive in a way that cognitions would not impose behavior. More acceptance for the purpose of more proximity to anxiety bearing thoughts, feelings and physical sensations than refraining from them (Arch et al., 2012) [8].

2. MATERIALS AND METHODS

This research has used a semi-experimental plan in which, by random placement of subjects into test and control groups, it would be possible to measure the changes caused by intervention, and at the same time, to enable the possibility of controlling natural changes or changes emerged from the unpredictability nature of the disorder. The independent variable was acceptance and commitment therapy and the dependent variable was the anxiety score of students who participated in the research. The criteria for entering into this research was to be student of Payam-e Noor University and having 15-36 scores of Beck Anxiety Inventory (BAI); being under other psychological treatments served as the criteria of exclusion.

2.1. Sampling method:

As in the first semester of academic year 2013-2014, there were 2100 students, based on Morgan table, 327 questionnaires were distributed among students at random and 40 of the students who possessed the criteria of being included in the research were selected. Of this group, 20 students who intended to participate in the research were selected and divided into two groups at random, each consisting of 10 students. The treatment was allocated to one group at random and the other group served as control group. All subjects were students of bachelor's degree and the average age of the experiment group was 24, the oldest was 40 and the youngest was 21 years old. The individuals with anxiety were detected through questionnaire; however, as the type of their anxiety was not known, it is considered as mixed anxiety.

2.2. Tools

In this research, Beck Anxiety Inventory (BAI) was used to diagnose the anxiety. BAI which was introduced in 1988 contains 21 questions. In all those questions, option one has zero score, option two, one, option three 2 and option four has three scores. If the subject's score is between 0 to 7, it means no anxiety, 8-14 shows slight anxiety, 16-25, moderate anxiety and 26-63 is perceived as severe anxiety. In Iran, this test has 72% validity and 83% reliability, which is obtained by Kaviani and Mousavi (2008) [26].

The treatment protocol which is employed was introduced by Boon and Canicci (2012) [27] and due to its similarity with the present research, it was used. This research was performed at Cornell University Counseling Center on the anxiety of 18 students and with respect to the place, being a counseling center, the group consisted individuals with various types of anxiety disorders. The SPSS 20 software was used to analyze the research data and the data was analyzed by using co-variance method.

In this research, patients were allowed to withdraw from research in case of any distress by informing the researcher. The information obtained from psychological tests are kept confidential with the researcher and is kept at his work office and in this respect, the researcher requires himself to perform the intervention programs on control group to implement it, even in a intensive form, in the first opportunity.

2.3. Treatment:

The treatment was carried out in ten weekly sessions, each session lasting one hour and a half. In the first session, the topic was "*control is the problem, not solution*" and to help more understanding of the concept, the "*creative helplessness*" and the "*man inside the hole*", "*Polygraph*" and "*Tug of War with Monster*" metaphors were used. At the end of the session, the clients were asked to find their controls and identify the so-called their shovels. The important point in this meeting was clients' interaction with this treatment and their astonishment of the type of treatment; as it was completely different from their mental image of psychological treatment. "Defusion" was the

topic of the second session which was discussed by using the “*Soldiers in parade*” and “*milk, milk, milk*” metaphors. The third session discussed the topic “acceptance” and “willingness” by using the concept of “clean and dirty feelings” and “*unwanted visitor*” metaphor. In the opening of the fourth session, the clients talked about how the treatment had created major changes in their life’s and the session continued on discussing the topic of “values” which used the “*tombstone*” metaphor. The difference between values with goal was specified. The fifth session was on the topic of “Self observation” by using “*chessboard*” metaphor. The sixth session was about “committed behavior” according to the values by using the “*Passengers on the Bus*” metaphor. In seven to ten sessions, the previous session were reviewed and clients talked about their experience. In another word, the whole process of treatment with focusing on making a better model for performing a committed performance in line with values was the topic of the closing treatment session.

3. RESULTS

In terms of education, the two groups were students of Bachelor’s program in Payam-e Noor University and there were no differences between them. The mean age of control group was 24.5 and the mean age of testing group was 24 years; showing no significant difference between them. The independence of the two subject groups was studied and approved by using T-test. The pre-assumption of normality of the variable subject of study was studied by Kolmogorov- Smirnov as well as Shapiro-Wilk tests. Those tests verified the assumption of scores formalities in all variables. No significant difference was found between the anxiety score of control group (19.8) and the experiment group (19) in the pre-test stage; showing that randomization is performed fairly well. In the post-test stage, the control group score (mean=18.6) and experiment group score (mean=11.1) showed significant difference. In another word, no significant difference was found between the pre and post test scores of the control group; however, the difference between the pre- and post-test scores of the experiment group was significant (figure number 1). In the co-variance analysis, the value of F was equal to 8/976 and the significance level of 0/008 was found; therefore, the difference between the adjusted means after controlling the control variable in the test and control group in post-test stage was significant ($P < 0.008$), indicating the effectiveness of this treatment on reducing the anxiety.

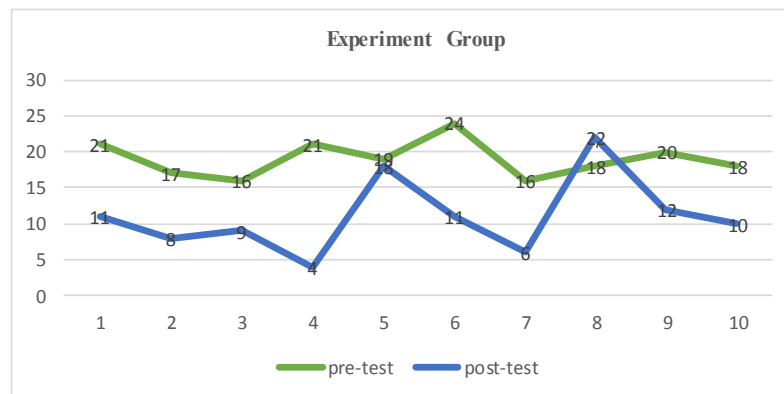


Figure No.1: Scores of Experiment Group

4. Conclusion

Due to its high frequency in the society and its impacts on individuals’ function, anxiety has always been an interesting topic in psychology and a vast range of studies are allocated to it. On one hand, the continuation of this order is somehow an indication of the inefficiency of the treatments common in Iran and on the other hand, clients with anxiety disorder usually seek treatment to find a tool for controlling their anxiety (Twohig et al., 2005) [14]. Act uses the clients’ experiences to show the contradiction, which is subject control. In fact, one of the goals of this approach in treatment is to encourage a fundamental change from the position of judgment and control of internal experiences into the position of acceptance and defusion (Orsillo, Roemer, & Holowka, 2005) [12]. By discussing this principle in the process of treatment and the matter that the individuals’ efforts to overcome the anxiety have proved ineffective, the wrongness of the approach becomes evident; so by adopting new approaches towards anxiety, new results would be achieved.

People do the acts in the template of definition of the framework of life; however, the problem appears that ability to see and seek this framework might disappear by fusion and defusion (Hayes et al., 1999) [28]. For this reason, the ACT treatment method is summarized in two principles: 1- To increase the clarity of values and performing acts in line with those values and 2- increase in defusion for becoming engaged in the values that while the horrifying internal events are present- though they might show reduce their symptoms and cognitive changes

alongside with ACT treatment, still they are not the primary goal of ACT (Luciano et al., 2011) [29]. It could be then said that the underlying reason of anxiety in people is missing their values. What they want to achieve in life as if those frameworks are clarified once again, many other thoughts and emotions would lose their importance. Ultimately, this treatment changes the context of those thoughts and feelings by using metaphors so those thoughts and feelings would not reduce his function and the individual could carry out with his commitments in line with his values.

REFERENCES

1. American Psychiatric Association. (2013). *DSM 5*. American Psychiatric Association.
2. Kessler, R. C., Ruscio, A. M., Shear, K., & Wittchen, H. U. (2010). Epidemiology of anxiety disorders. In *Behavioral neurobiology of anxiety and its treatment* (pp. 21-35). Springer Berlin Heidelberg.
3. Baxter, A. J., Scott, K. M., Vos, T., & Whiteford, H. A. (2013). Global prevalence of anxiety disorders: a systematic review and meta-regression. *Psychological medicine*, 43(05), 897-910.
4. Otte, C. (2011). Cognitive behavioral therapy in anxiety disorders: current state of the evidence. *Dialogues Clin Neurosci*, 13(4), 413-421.
5. Orsillo, S. M., & Roemer, L. (2005). *Acceptance-and Mindfulness-Based Approaches to Anxiety*. Springer Science+ Business Media, LLC.
6. Dalrymple, K. L., & Herbert, J. D. (2007). Acceptance and commitment therapy for generalized social anxiety disorder a pilot study. *Behavior modification*, 31(5), 543-568.
7. Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: Model, processes and outcomes. *Behaviour research and therapy*, 44(1), 1-25.
8. Arch, J. J., Eifert, G. H., Davies, C., Vilardaga, J. C. P., Rose, R. D., & Craske, M. G. (2012). Randomized clinical trial of cognitive behavioral therapy (CBT) versus acceptance and commitment therapy (ACT) for mixed anxiety disorders. *Journal of consulting and clinical psychology*, 80(5), 750.
9. Hayes, S. C., Masuda, A., & De Mey, H. (2003). Acceptance and commitment therapy and the third wave of behavior therapy. *Gedragstherapie*, 36(2), 69-96.
10. Hayes, S. C., Levin, M. E., Plumb-Villardaga, J., Villatte, J. L., & Pistorello, J. (2013). Acceptance and commitment therapy and contextual behavioral science: Examining the progress of a distinctive model of behavioral and cognitive therapy. *Behavior Therapy*, 44(2), 180-198.
11. Swain, J., Hancock, K., Hainsworth, C., & Bowman, J. (2013). Acceptance and Commitment Therapy in the treatment of anxiety: A systematic review. *Clinical psychology review*, 33(8), 965-978.
12. Orsillo, S. M., Roemer, L., & Holowka, D. W. (2005). Acceptance-based behavioral therapies for anxiety. In *Acceptance and mindfulness-based approaches to anxiety* (pp. 3-35). Springer US.
13. Mennin, D. S. (2005). Emotion and the acceptance-based approaches to the anxiety disorders. In *Acceptance and Mindfulness-Based Approaches to Anxiety* (pp. 37-68). Springer US.
14. Twohig, M. P., Masuda, A., Varra, A. A., & Hayes, S. C. (2005). Acceptance and commitment therapy as a treatment for anxiety disorders. In *Acceptance and mindfulness-based approaches to anxiety* (pp. 101-129). Springer US.
15. Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2011). *Acceptance and commitment therapy: The process and practice of mindful change*. Guilford Press.
16. Levitt, J. T., & Karekla, M. (2005). Integrating acceptance and mindfulness with cognitive behavioral treatment for panic disorder. In *Acceptance and mindfulness-based approaches to anxiety* (pp. 165-188). Springer US.
17. Muto, T., Hayes, S. C., & Jeffcoat, T. (2011). The effectiveness of acceptance and commitment therapy bibliotherapy for enhancing the psychological health of Japanese college students living abroad. *Behavior therapy*, 42(2), 323-335.
18. Wetherell, J. L., Liu, L., Patterson, T. L., Afari, N., Ayers, C. R., Thorp, S. R., ... & Petkus, A. J. (2011). Acceptance and commitment therapy for generalized anxiety disorder in older adults: A preliminary report. *Behavior therapy*, 42(1), 127-134.
20. Codd, R. T., Twohig, M. P., Crosby, J. M., & Enno, A. (2011). Treatment of three anxiety disorder cases with acceptance and commitment therapy in a private practice. *Journal of Cognitive Psychotherapy*, 25(3), 203-217.
21. Yardley, J. (2012). Treatment of Pediatric Obsessive-Compulsive Disorder: Utilizing Parent-Facilitated Acceptance and Commitment Therapy.

22. Karekla, M. (2004). *A comparison between acceptance-enhanced panic control treatment and panic control treatment for panic disorder* (Doctoral dissertation, University at Albany, Department of Psychology).
23. Twohig, M. P. (2009). Acceptance and commitment therapy for treatment-resistant posttraumatic stress disorder: A case study. *Cognitive and Behavioral Practice*, 16(3), 243-252.
24. England, E. L. (2010). *Exposure with Acceptance-Based versus Habituation-Based Rationale* (Doctoral dissertation, Drexel University).
25. Yuen, E. K. (2010). *Acceptance-based behavior therapy for social anxiety disorder using videoconferencing* (Doctoral dissertation, Drexel University).
26. Brown, L. A., Forman, E. M., Herbert, J. D., Hoffman, K. L., Yuen, E. K., & Goetter, E. M. (2011). A randomized controlled trial of acceptance-based behavior therapy and cognitive therapy for test anxiety: A pilot study. *Behavior modification*, 35(1), 31-53.
27. Kaviani, H., & Mousavi, A.S, Psychometric properties of the Persian version of Beck Anxiety Inventory (BAI), *Tehran University Medical Journal*; Vol. 65, No. 2, May 2008: 136-140
28. Boone, M. S., & Canicci, J. (In press). Acceptance and commitment therapy (act) in group. In Pistorello, J. (Ed.). *Mindfulness and Acceptance on the College Campus*. Oakland, CA: New Harbinger.
29. Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and commitment therapy: An experiential approach to behavior change*. Guilford Press.
30. Luciano, C., Ruiz, F. J., Vizcaíno-Torres, R., Sánchez, V., Gutiérrez-Martínez, O., & López-López, J. C. (2011). A relational frame analysis of Defusion interactions in Acceptance and Commitment Therapy. A preliminary and quasi-experimental study with at-risk adolescents. *International Journal of Psychology and Psychological Therapy*, 11(2), 165-182.