Effectiveness of Acceptance and Commitment Therapy on Psychological Flexibility in Obese Women

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Abstract

Objective: The aim of this study was performed to determine the effectiveness of acceptance and commitment therapy on psychological flexibility in obese women in Isfahan, Iran.

Materials and Methods: This was a quasi-experimental pre-test, post-test trial with follow-up. The study population was all of the obese women in Isfahan in 2014 (BMI≥30).the sample of study was selected by convenience sampling method. They were randomly assigned to two experimental and control groups (15 per group). The Acceptance and Action Questionnaire for Weight-Related Difficulties (Lillis & Hayes, 2008) was the study instrument. The intervention was 8 sessions of 90 minutes. Acceptance and commitment therapy was provided only to the experimental group. Data was analyzed by SPSS.

Results: Results of covariance analysis showed a significant increase in psychological flexibility at post-test and follow-up stage (P<0.05).

Conclusion: Our findings showed that acceptance and commitment therapy has been effective on psychological flexibilityof obese women.

Keywords: Acceptance and Commitment Therapy, Psychological flexibility, Obese women

Introduction

In recent years, a number of behavioral therapies emerged that are not in the category of traditional behavioral therapies. These treatments are named as “the third wave therapy” including: Dialectical behavior therapy (DBT), Functional Analytic Psychotherapy (FAP), Integrative Behavioral Couples Therapy (IBCT), Mindfulness Based Cognitive Therapy (MBCT), Acceptance and Commitment Therapy (ACT) (1,2). These treatments are focused on changing a person's psychological communication with thoughts and feelings through strategies such as mindfulness, acceptance or cognitive defusion, instead of focusing on changing psychological events (3). ACT philosophically rooted in the functional contextualism and theoretically rooted in framework of the relational frame theory (RFT) (4). ACT is used to treat experiential avoidance disorder which is defined as individual intentional effort to evade triggering or avoiding the intra personal events such as feelings, thoughts, memories and physically nagging feelings (5). ACT is

one of the fastest ways to feel better when faced with the unpleasant thoughts and emotions. These efforts are effective in the short term (6). But unfortunately, not beneficial in the long term and leading to increased psychological distress in person (7). Evidences showed that experiential avoidance will be creating a range of mental and physical health problems (8,2,4). Experiential avoidance arises as a preservative agent behavioral problems and makes it difficult to control weight. The concept of obesity based on ACT is a predictive factor for bulimia (9-13). Therefore you can avoid experience be named as a scourge for weight control and obesity (14-16). Thus ACT can lead to weight loss as well as the ability to maintain and weight control in obese individuals and makes the ability to perform flexible actions in accordance with personal goals or individual values (2,10). Psychological flexibility is the ability to perform actions based on values, with the presence of thoughts, feelings and physical desires annoying and unwanted. The ACT seeks to establish healthy behavior, based on individual values which will facilitate mindfulness and acceptance skills education to help it (14). ACT is a treatment approach including six psychological processes: acceptance, defusion, self as context, contact with present moment, values and committed action (19). Recent researches based on ACT effectiveness has provided the satisfactory results and rationales for use of this treatment in clinical practice and especially with patients with obesity. This therapy can help to increase psychological flexibility in obese patients.

The negative impact of avoidance experience on the mental and physical health is obvious, especially obesity. Identify treatments target avoidance experience. Theoretical construct based on ACT is acceptable to increase psychological flexibility to cope with the avoidance experience. The study was performed to review the effectiveness of ACT on the psychological flexibility of obese women in Isfahan.

Materials and Methods

This was a quasi-experimental with one-month follow-up.

The study population was all women with obesity in 2014 in Isfahan, Iran. About 30 obese women (BMI $\geq$ 30) women were selected based on the convenience sampling. The inclusion criteria were: age between 25 and 55 years, at least diploma level of education, absence of mental disorders and no history of eating disorders. They were placed randomly into experimental and control groups.

This instrument was ACT for weight-related difficulties (AAQW) that by Lillis and Hayes (2008). The questionnaire included 22 questions. The scoring was in Likert scale from one (never) to seven (always). Higher scores indicate avoidance experience more weight-related and lower scores indicate more weight-related psychological flexibility. The internal consistency of the questionnaire was (α=0.88). Since the questionnaire was not translated and adapted in Iran, Initially original version of the questionnaire was translated and then back translated. Then deal were performed by three specialists translation of Persian and English dominant to English and behavioral sciences and psychology, and after it was set the literary editor of the final version. In this study, Cronbach's alpha coefficient was obtained 0.82.

The experimental group received 8 sessions of 90 minutes of ACT. This intervention lasted 2 months. Each sessions included:

First session: Become familiar and communicate with members of the group, mental training. Second session: discussing and evaluate their experiences, creating a creative failure. Third session: the introduction of the internal world and the outer world and the laws that govern them, the expression control as a problem. Fifth Session: Introduction of values, the introduction of value and goal difference, value determine and assessment practice. Sixth Session: Understanding commitment and the desire to determine the suitable patterns of values.

Session VII: Introduction defusion, training and practice mindfulness techniques. The eighth Session: introducing itself as background summary of treatment and prevention of recurrence. The effect of ACT was evaluated at the end of both groups' therapy sessions with a retest again. All the participants were subject to reassessment, after about a month order to measure the reliability of the therapeutic effect. The analysis was performed data from through the analysis covariance and using the software SPSS.18.

Results

The mean and standard deviation (SD) of psychological flexibility score of participants related to weight control and experimental groups, were presented in table 1.

Table 2 indicated, there was a significant difference of psychological flexibility in related to weight between the experimental and control groups at post-test and follow-up.

Discussion

The results showed that ACT induce psychological flexibility in the experimental group than the control group at post-test. Our findings are consistent with Lillis et al, Neimeier et al studies that showed the ACT increases psychological flexibility in obese patients (21,22). The Weineland study declared, ACT increases the psychological flexibility related to weight in obese patients who have done obesity surgery.

Based on the acceptance of obesity concept, avoid experience are the preservative behavioral problems (11).Increase of psychological flexibility is one way to deal with avoidance experience which induces more flexible and more healthy behaviors. (20).

Creating an efficient lifestyle and doing behaviors in accordance with the values of individual choice, are the ultimate aim of ACT (24). Weight reduction is not a value in ACT, the aim is healthy lifestyle.

Unpleasant internal experiences like hunger, fatigue caused by sport, memories of previous failures in weight reduction, etc, may diminish the weight loss goal and the patients eat more to reduce the impact of these unpleasant internal experiences. The Acceptance component helps people to feel their experiences and uncomfortable feelings, without trying to change and control them. Acceptance this enables for persons to have experience unpleasant internal experiences without trying to control them and doing so causes they seems less threatened and will be reduced their impact on life of the individual and the value of his choice. ACT focuses on internal experiences compared with traditional behavioral therapy, and focus helps people to change the type of relationship a person with the internal experience, for ability to follow a life based on values instead of trying to change them. In fact the main processes is teaching participant show abandon avoidance behavior and to be separated from intruder thoughts and feelings and their internal events to accept the

Table 1. Mean and standard deviation of weight-related psychological flexibility in experimental and control groups in the pre-test, post-test and follow-up

Variable	Group	Pre-test	Post-testfollow-up
		M, SD	M, SD, M, SD
Psychological flexibility	Control group	4.17, 0.86	4.18, 0.88, 3.98, 0.75
	Experimental group	4.35, 0.97	3.13, 0.82, 3.01, 0.83

Table 2. Covariance analysis on weight-related psychological flexibility in the post-test and follow-up

Variable	SS	D	MS	F	Sig	Eta S	P
Psychological flexibility post-test	11.69	1	11.69	33.11	0.001	0.65	0.99
Follow-up	8.72	1	8.72	27.12	0.001	0.55	0.99

control condition and to engage their values in the acceptance and commitment therapy. In fact aim of this treatment was increase treasury behavior of participants in the presence of annoying internal events; something that is called the Psychological flexibility (8).This treatment uses acceptance, mindfulness, and values processes to produce psychological flexibility, or the ability for taking the actions based on values in presence of unwanted thoughts, feelings, emotions and bodily sensations. In the context of obesity, ACT seeks to promote healthy behavioral patterns consistent with states values, by the use of teaching mindfulness and acceptance skills to increase behavioral commitment to values-based behaviors (14).

Limitations

These factors could limit the study like, convenience sampling and lack of control of cofounding variables. Therefore, generalization of the results were limited.

Recommendations

It is suggested in future studies be done by both the genders and be compared the effectiveness of acceptance and commitment therapy in the both gender groups. It is recommended to be implemented this study on the other age groups (children and adolescents) who are overweight and obese people or have other health problems (mental and physical) co morbidity, to be monitored capability generalizability of results of this study in this regard. Well as it is recommended therapeutic method in this research be done also on the other psychological variables associated with the obesity.

Conclusion

Our findings showed that acceptance and commitment therapy has been effective on psychological flexibilityof obese women.

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