

# The Effect of Acceptance and Commitment Therapy (ACT) on Body Image in Women between the Ages of Thirty and Forty after Beauty Surgeries

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## Abstract

**Background:** In the 20th century, especially over the last decades, there have been new interpretations of beauty; and beauty is defined to include a set of components such as fitness, using cosmetics, clothing, attractiveness, and physical perfection.

**Objectives:** The present study was aimed to examine the effect of acceptance-based and commitment-based therapy on body image in women between the ages of thirty and forty after beauty surgeries.

**Methods:** This research was semi-experimental, using a pre-test post-test design, with a control group. The statistical population consisted of all individuals who visited Sepita Skin and Health Care Clinic, from whom 15 women were considered for a control group and 15 women were considered for an experiment group. Data collection tools included a body image questionnaire. Data were analyzed using a single-variable covariance analysis method.

**Results:** The results of body image covariance analysis (ANCOVA) show that there is a significant difference between body image mean values in control and experiment groups, in terms of post-test scores. The women of the experiment group had a better condition than the women of the control group in terms of body image.

**Conclusions:** Based on findings, it can be stated that commitment-based and acceptance-based therapy affects body image in women between the ages of thirty and forty after beauty surgeries.

**Keywords:** Acceptance and Commitment-Based Therapy, Body Image, Beauty Surgery

## 1. Background

Humans are interested in beauty; and beauty has been seen as an important factor in their lives (1). A favorable face helps individuals to have better perceptions of themselves, giving them confidence, which lead to do social activities in an acceptable level (2). Appearance is an important part of people's identity, and it surfaces in social situations when interacting with others. Therefore, the importance of this personality construct is high (3). Physical shape is an important part of body image, because it is the first source of information that people use in order to have social interactions (4). Individual's perception of their own body is a vital part of their self-concept. Body is the most visible part of self and self-awareness (5).

Body image is an internal visualization of the external appearance. This representation comprises physical, cognitive, and perceptual dimensions (6, 7). The main dimensions of this attitude include components such as evaluation and investments when facing appearance and emotion schemas, which represent the importance of in-

ternalized appearance (8).

In the 20th century, especially over the last decades, there have been new interpretations of beauty; and beauty is defined to include a set of components such as fitness, using cosmetics, clothing, attractiveness, and physical perfection (9). Combination of beauty with industrial and medical accomplishments has caused beauty to be not only a natural and biological characteristic but also an adventitious feature (10). Today, beauty surgery is considered as one of the most common types of surgery throughout the world, which is increasingly used. When humans find that their physical traits do not match norms, they might feel annoyed and look for surgery as a final solution. Studies which have focused more on psychological status than on beauty surgery, or use clinical interviews, or use psychological scales in order to evaluate mental pathology have reported a serious mental pathology for patients experiencing beauty surgeries (11).

Green et al, 2003 stated in their study that dissatisfaction with the body and obsession about changing it are seen more among adolescents who experienced beauty

surgeries (12). The Conclusion of a study about the relation between beauty surgery and body image as well as men and women's attitudes declared that those who are interested in a beauty surgery have a weaker body image than the others.

In addition, overweight people showed more interest in liposuction, having a weaker body image compared to other individuals.

Sarwer et al. 2005 examined the level of depression, anxiety, and body image in people applying for beauty surgery. Results showed that there is not a significant difference between female beauty-surgery applicants and non-applying women in Pennsylvania University in terms of depression and anxiety. In his study, Sarwer et al. 2005 concluded that people reported better body images after beauty surgery (13).

On the other hand, the second generation of psychological therapies including acceptance-based models such as cognitive therapy based on mindfulness, meta-cognitive and commitment-acceptance-based therapy (ACT) try to increase the psychological relationship between individuals and their thoughts and feelings, instead of changing cognitions. ACT as a therapy which is based on acceptance and commitment, is a third-wave treatment behavior which clearly accepts changes in the mechanism of thoughts and feelings, instead of changing their shapes, contents, and frequencies (14). ACT is rooted in a philosophical theory called "functional contextualism", and it is based on a research plan connected to language and cognition, which is called "Intellectual Relationships Framework Theory". ACT comprises six central processes which lead to psychological flexibility. These six processes include: 1) acceptance, 2) fusion, 3) self as a context, 4) relationship with the present, 5) values and 6) commitment (14). Acceptance and commitment are important substitutes which help to reach avoidance based on experiences. These substitutes include active and conscious acceptance of personal experiences; which are related to people's lives as well as lack of efforts to reduce or change events (15). In committed activities, individuals are encouraged to make efforts in order to achieve their goals (16). Therapy-related acceptance and commitment refer to the effective relationship with the present, and they teach visitors to describe what they are without making judgments or doing evaluations (17). Mindful individuals understand their internal and external realities freely and without garbling their perceptions; and they are very capable of coping with a broad range of thoughts, emotions, and experiences (whether pleasant or unpleasant) (18). Additionally, certain studies related to the effect of acceptance-commitment-based therapy on body image were conducted by Vallis et al. (2003)(18-20).

On the other hand, considering the fact that seventy percent of individuals with beauty surgery experience are not happy with final results and considering the fact that this intensely affects their mental health.

## 2. Objectives

The present study was aimed to examine the effect of acceptance-based and commitment-based therapy on body image in women between the ages of thirty and forty after beauty surgeries.

## 3. Methods

Considering the objective of the present research, we used semi-experimental designs of the pre-test, post-test design with a control group, in order to examine the effect of acceptance-commitment-based therapy on body image in women between the ages of thirty and forty after beauty surgery (one year after surgery).

Statistical population and case study: the statistical population of the present study consisted of Tehran's women between the ages of thirty and forty, who have had at least on beauty surgery in sepita skin and health care clinic (located in Tehran) over the last year. After examination of available cases, the population of these women was reported to be 300, from whom 30 individuals were selected randomly as volunteers for the research. In the next stage, individuals were divided into two groups: control group (15 individuals) and experiment group (15 individuals)(21).

Research Implementation Method: First, people who visit sepita skin and health care clinic were identified, from whom 30 individuals were selected as volunteers for the research, who have had a surgery over the last year. Then, all individuals received simple, understandable explanations connected to research objective, research implementation method, and research-related advantages. Individuals were selected for the study, and after getting their consent, they received demographic and clinical data questionnaires. They were randomly divided into two groups of 15; hence, a body image (BICI) questionnaire was used (22).

Body image questionnaire (BICI): this questionnaire was provided in order to evaluate the level of individuals' obsession about their shape (23). To do evaluations, Lilton et al. handed the questionnaire to 1403 volunteers. Cronbach's alpha coefficient was calculated to be 93%; and internal reliability coefficient was calculated using Cronbach's alpha method to be 92%, which shows high correlation with other measurement scales in this field. For example, the correlation of the present study was measured

by body shape disorder questionnaire to be 83% ( $R = 83\%$ ) in 0.001 confidence level, which shows that the validity of the scale is high. In a study conducted by Basak Nejad on male and female university students in Iran, the reliability of body image anxiety questionnaire was calculated using Cronbach's alpha method to be 93%, 95%, and 95%, respectively. This questionnaire is a self-assessment scale with 46 items, which was proposed by Cash et al (24) in order to evaluate body image. In the present research, the final form of the mentioned scale (1997) will be used. This questionnaire includes a number of sentences related to thoughts, feelings, or behaviors. This tool possesses 6 subscales: appearance evaluation, appearance orientation, fitness evaluation, fitness orientation, obsession about being overweight or mental weight and satisfaction with body parts (25). Data analysis was done using descriptive statistics (mean, standard deviation, tables, graphs); and in order to test hypotheses, inferential statistics were used, including single-variable and multivariate covariance analysis. It must be noted that collected data were analyzed using SPSS software.

The summary of the ACT sessions listed as follows (Table 1).

**Table 1.** The Summary Content of Acceptance and Commitment Therapy

Session	
1.	Familiarizing in the group dating and relationship for the therapy; familiarizing people with the subject of the research, examining of the disease and treatment and cosmetic surgery in each member of the group.
2.	Checking the internal and external in the ACT; create a desire to leave the ineffective program, And explained that the issue is the control, not the solution; and introducing alternative to the control means tendency.
3.	Identifying people values, clarifying the values, clarifying the objectives, clarifying the actions and clarifying the obstacles.
4.	Examining the value of each person in order to deliberate the previous concepts.
5.	Understanding the fusion and defusion and doing exercises for this defusion
6.	Understanding the fusion to observe the self and learning how the defusion
7.	Mindfulness and connection with the present moment
8.	Committed action

#### 4. Results

The present study includes two sections: inferential and descriptive. In the first section, descriptive statistics were used in order to describe research variables. In the inferential section, by analyzing collected data through

questionnaires, we test research hypothesis, which is of great importance in research conclusion. Descriptive data of the research variable have been presented in Table 2.

Descriptive data of body image have been given in Table 2, with pre-test and post-test in control and experimental groups. As it can be seen, mean value of life image has decreased in post-test. In the present research, the effect of acceptance-commitment-based therapy on women's body image has been examined; and research hypothesis has been designed in accordance with research subject, its measurement was done using a multivariate covariance analysis (ANCOVA). In the following, data are presented and explained. Before giving out the results, research pre-hypothesis was examined; and the results of Levene test are not significant in any of the variables. Hence, null hypothesis based on the homogeneity of the variance of variables is approved. We can use a single-variable covariance analysis.

Here, considering the fact that covariance analysis hypotheses hold, we can use this test in order to analyze data. In the next the the result of this analysis will be presented.

As can be seen the research hypothesis explained as acceptance-commitment-based therapy affects body image in women between the ages of thirty and forty after beauty surgery.

According to the results presented in the above table, by deleting the effect of pre-test variable and considering calculated F coefficient ( $F = 74.92$ ,  $P < 0.05$ ), it can be seen that there is a significant difference between the adjusted mean values of respondents' body image scores based on groups (control and experimental). In the post-test stage, there is a significant difference. Therefore, considering the results given in Table 2, null hypothesis is not approved. This means that using acceptance-commitment-based therapy has a greater impact on body image in the experimental group (women between the ages of thirty and forty) than control group one year after beauty surgery (Table 3).

#### 5. Discussion and Conclusions

This research was aimed to examine the effect of acceptance-commitment-based therapy on body image in women between the ages of thirty and forty, one year after beauty surgery. The results of body image covariance analysis (ANCOVA) show that there is a significant difference between body image mean values in control and experimental groups, in terms of post-test scores. The experimental group had a better condition than the control group in terms of body image.

To express research findings, it can be said that one of the factors affecting body image is acceptance-commitment-based therapy. In fact, this type of therapy

**Table 2.** Descriptive Statistics of Body Image for Groups

Statistical Indexes	Group	Test	Number	Mean $\pm$ Standard Deviation	Minimum	Maximum
Body Image	Control	Pre-test	15	114.46 $\pm$ 25.16	98.00	199.00
		Post-test	15	106.20 $\pm$ 16.26	76.00	132.00
	Experiment	Pre-test	15	163.87 $\pm$ 16.41	137.00	198.00
		Post-test	15	105.13 $\pm$ 24.18	66.00	155.00

**Table 3.** Results of Covariance Test for Examining the Effect of Acceptance-Commitment-Based Therapy on Body Image in Women Between the Ages of Thirty and Forty After Beauty Surgery

Variable	Statistical Index	SS	df	MS	F	Significance	Effect Size
Body Image	Group	21536.80	1	21536.80	74.92	0.001	0.50
	Error	7473.87	26	287.45			
	Total	579437.00	30				

tries to increase the psychological relationship between individuals and their thoughts and feelings (19). The main objective is to develop mental flexibility, i.e. develop ACT in the ability to choose a favorable action from different choices, not an action in order to avoid thoughts, feelings, memories, or challenging intentions. In such a therapy, at first it is tried to increase individuals' mental acceptance for intellectual experiences (thoughts, feelings) and decrease ineffective control, lead to the ability to control emotions connected to body image, help to increase hopefulness and confidence for well-being. Hence, the identification of psychological components and factors affecting them, and considering them to be the main principles of improving performance in individuals who have had beauty surgery are effective methods (21). The results of this study were in line with other studies based on mindfulness to improving body image (26). The other study which had the same results explained that mindfulness effects on body comparison and body satisfaction (27).

Some constraints of the present study including that some surgeons and doctors do not cooperate with us while they are in contact with a lot of women visiting clinics. And they cooperate on the condition that we consider them as supervisors or consultants in proposals. For this, it is recommended that we compare factors affecting research variables in different cultures. Additionally, considering the importance of the variables of this research, it is recommended that these and other variables be examined. Based on the findings of this research, it is suggested to prepare educational packages and to hold training workshops in the field of psychosomatic disorders for beauty clinic stakeholders and clients.

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