Determining the Effectiveness of Cognitive – Behavioral Group Therapy on the Amount of Weight, Anxiety, Depression and Self – Esteem in Obese Women

Hamid Reza Vatan Khah¹, Somayeh Hashemizadeh², -Fatemeh Omidi³, Elahe Shams Abadi⁴

¹ A member of Scientific Group Psychology Azad University of Tonekabon
²³⁴ MSC of Psychology

ABSTRACT

This study aimed to determine has been the effectiveness of cognitive – behavioral group therapy on the amount of weight, anxiety, depression and self – esteem in obese women. The research design has been experimental and in pretest and post-test type with control group. 30 samples were selected through using available sampling method and were randomly put in two control and experimental groups. Z anxiety test, pack depression test and cooper smith self – esteem test have been conducted. The experimental group participated in 9 of behavioral - cognitive group therapy sessions and the control group received no intervention. After completing the therapeutic period, every 2 groups have been evaluated for weight, anxiety, depression and self – esteem. The data have been analyzed by using multi-variable covariance test. The results show that the behavioral cognitive group therapy has been effective in decreasing weight, anxiety depression and improving self – esteem in overweight women.


INTRODUCTION

The more, we become modern, the more the risk of over weighting increases. Obesity and overweighting are important factors in many physical diseases like Heart – failure, apoplexy, diabetes, high blood pressure, decrease self – esteem, life expectancy etc (Abas Alipoor, 2004). There are many factors affecting on obesity and over weighting. Lack of physical movement, Junk food, genetic, dosage, psychosis, mental disorders, etc are among the factors.

The researches show that people with low self – esteem, depression and social problems, eat more than others. People start to gluthony while facing problems. According to evidences, nervous pressure like anxiety, stress and nervousness can lead to over weighting. These mental disorders can cause gluthony, and made him fat. One of the effects is nervy gluthony bulimia in which the person seems to have the tendency obsessionall of overeating and cannot control his feeding, at all (peak, 2003). It is also one of the most important effects of psychical and social problems

Ruth and Ross (1988; according to Taleghani, 2010) believe that most obese people have social and personal problems. These people usually have wrong and negative believes about weight, eating, imaginer body (picture body), feeling of liberty and self esteem.

The researches show that using a set of cognitive – behavioral techniques like muscle resting, positive mental imaging, sensitivity and logical education by true thinking.

Rational sensitivity and correct thinking leads to increasing weight in 20% of cases, and improving nutrition patterns and in other cases cause, the least satisfaction with the person (Cooper and et al., 1388).

Meaning, Hook and Tannenbum (1994; according to Taleghani, 2010) studied the effect of cognitive – behavioral group therapy in decreasing depression and obesity in patients with psychical disorder. These researchers reported the advantages of this method for the treatment of anxiety and depression in evaluating of therapeutic results, at the end of one year therapy.

The findings in the research of Abbasi (2000) indicates that cognitive – behavioral group therapy is effective in decreasing anxiety, incorrect thinking and improves human interactions. This study shows that cognitive – behavioral group therapy have more improves in human interactions and patients’ cognitive corrections more than medicinal group therapy.

Mack Narma (1989; according to Taleghani, 2010) compares the behavioral and cognitive – behavioral group plans to control the weight in depressed and obese girl students. Her research shows that both methods are effective in weight loosing, removing depression and the fear of negative evaluations, and also social isolation and anexity.

Damm and Kulik (1999), proved that cognitive – behavior therapies are safe and are suitable effective for people with low self – esteem and depression.

Sadeghi, et al (2010) surveyed with the goal of determining of effectiveness of cognitive therapy behavior on obesity ,and it states the significance of cognitive – behavioral therapy in losing weight and caused to changes about satisfaction with body picture, personal beliefs in appearance and weight self sufficient.

*Corresponding Author: Hamid Reza Vatan Khah, A member of Scientific group psychology Azad University of Tonekabon
Along with above mentioned issues, this study by the purpose of determining the effectiveness of group cognitive – behavioral training on the amount of weight, anxiety, depression, self – esteem of women obesity, has been conducted to hypothesize as follows:

**Hypothesis**

Group cognitive – behavior training is effective on the amount of weight, anxiety, depression and self – esteem in obese women.

**THE RESEARCH METHOD**

This study is an experimental design and is performed through pretest and subtest with control group. The research statistical society includes the women referring to nutrition clinics in Amol who suffered from obesity, that thirty ones of them have been put in two experimental and control groups through simple random. Three questionnaires have been used in this research :

1- Becks Depression Invoice ( BDI ) : firstly , this questionnaire has been introduced by Beck , Mandlson , Mock and Arbaf in 1961 , and after some revisions, was provided with 21 questions based on a 4 degree scale ,from 0 to 30. in an over analysis, the coefficient of internal equivalence is between 0/073 to 0/092 with 0/086 mean . ( Marnat , 2005).

2- Zong’s anxiety self measure questionnaire ( S.A.S): This scale was created by Zong in 1970 and introduced as clinical questionnaire related to anxiety. Zong’s criterion included 5 emotional symbols and 15 body and physical symbols and 20 questions that measured the intensity of symbols in which 16 questions emphasized on positive symbols and 4 questions on negative symbols. Coefficient of internal equivalence is 0/84 which states very high validity (Taleghani 2010).

1- Cooper Smith self – esteem test: This scale has 58 options consisting of social self-esteem, family, educational subscales as "yes" and "no". Minimum score of each person is Zero and maximum score is 50. Poohafki reports this questionnaire validity 83% in 1991, an also Masomi found the validity coefficient students group and university students, 80% and 85%, respectively in 2005.

**RESEARCH METHOD**

30 patients have been selected randomly in experimental and control group (15 people in each group) . Firstly, the testees have been evaluated by a pretest. They have been evaluated again after group cognitive – behavioral training.

**Data Analysis Method:**

The collected data have been analyzed by multi variable variance.

**Research Findings:**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Experimental group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td>weight Pretest</td>
<td>x 87.70 sd 8.106</td>
<td>x 88.56 sd 8.594</td>
</tr>
<tr>
<td>weight Post test</td>
<td>x 85.07 sd 7.862</td>
<td>x 89.26 sd 8.125</td>
</tr>
<tr>
<td>anxiety Pretest</td>
<td>x 60.60 sd 6.511</td>
<td>x 61.73 sd 6.912</td>
</tr>
<tr>
<td>Anxiety Post test</td>
<td>x 52.33 sd 5.066</td>
<td>x 62.13 sd 6.957</td>
</tr>
<tr>
<td>depression Pretest</td>
<td>x 11.13 sd 2.099</td>
<td>x 11.66 sd 2.023</td>
</tr>
<tr>
<td>Depression Post test</td>
<td>x 5.60 sd 2.028</td>
<td>x 13.40 sd 1.502</td>
</tr>
<tr>
<td>self esteem Pretest</td>
<td>x 31.80 sd 4.143</td>
<td>x 30.93 sd 3.283</td>
</tr>
<tr>
<td>self esteem Post test</td>
<td>x 38.60 sd 3.224</td>
<td>x 29.46 sd 3.419</td>
</tr>
</tbody>
</table>

Table 2- Box test to study equality matrix of variance and Covariance:

<table>
<thead>
<tr>
<th>Box’s</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>2.26</td>
<td>3</td>
<td>25992</td>
<td>0.08</td>
</tr>
</tbody>
</table>

To study the equality matrix of variance and covariance, box test has been done. According to the results of table (3) as teh calculated F is not significant statistically, so hypothesizing equality matrix of variance and covariance haven’t been questioned.

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<tr>
<th>Variables</th>
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</tr>
</thead>
<tbody>
<tr>
<td>weight post test</td>
<td>x 85.067 sd 2.064</td>
<td>x 89.267 sd 2.064</td>
</tr>
<tr>
<td>anxiety post test</td>
<td>x 52.33 sd 1.571</td>
<td>x 69.13 sd 1.571</td>
</tr>
<tr>
<td>depression post test</td>
<td>x 5.60 sd 0.461</td>
<td>x 13.40 sd 0.461</td>
</tr>
<tr>
<td>self esteem post test</td>
<td>x 38.60 sd 0.857</td>
<td>x 29.46 sd 0.858</td>
</tr>
</tbody>
</table>
The research hypothesis, if feelings like anxiety and eating are along with the findings of Ming, Hook and Tannbam (1994; according to Taleghani, 2012). So it can be said that there is a meaningful difference between post test scores of anxiety between experimental and control groups; and group cognitive behavioral therapy is effective on the amount of anxiety in obese people.

Based on the results of table (5) and calculated F ((df4,21)=304.826, Eta=0.927, sig =0.000) with F , as the level of meaningfulness is lower than measured $\alpha$ measuring excessive root (0.012), so the calculated F is significant statistically. Therefore, there is a meaningful difference between post test scores of anxiety between experimental and control groups; and group cognitive behavioral therapy is effective on the amount of anxiety in obese people.

For depression, calculated F ((df4,21)=78.901, Eta=0.830, sig =0.000) with F, as the level of meaningfulness is lower than measured $\alpha$ measuring excessive root (0.004), so it can be said that there is a meaningful difference between post test scores of depression between experimental and control groups; and group cognitive behavioral therapy is effective on the amount of depression in obese people.

DISCUSSION AND CONCLUSION

Due to the research finding and according to calculated F and as the level of meaningfulness is lower than $\alpha$ measuring excessive root (0.012) so the calculated F is meaningful statistically. So it can be said that group cognitive behavioral therapy is effective on the amount of weight, anxiety, depression and self-esteem in obese people.

Through removing negative feeling, gluttony is decreased and weight is changed. Also, in this method people learn new behaviors to decrease consuming food and increase activity and learn how to decrease the amount of eating and eating eagerly. And this leads to decreasing weight in obsess people. Then, there are many mental stresses on obese people by the society, so losing weight is effective on increasing self-esteem and decreasing anxiety and depression. Totally it can say that in therapy obese women, we must use of cognitive behavioral techniques. This method of therapy can use as effective therapy in losing weight, anxiety, depression and increase of self-esteem nonese women. Its hope for, to recognize this method therapy by more researches and use of them.
REFERENCES