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# Evaluating the Effectiveness of Positive Psychotherapy and MBCT Method on Increasing Life Expectancy and Reducing Depression in Patients with Huntington's Chorea Disease


## Abstract

The present study aimed to evaluate the effectiveness of positive psychotherapy and the MBCT method on increasing life expectancy and reducing depression in patients with Huntington's chorea disease. The present study was applied with an experimental design and pre-test, post-test, and follow-up with a comparison group. The present study's statistical population consisted of 30 people with Huntington's chorea disease referred to Rasoul Akram Hospital in Tehran in 2020. Due to the possibility of dropout in samples, all patients with Huntington's chorea disease were chosen to take part in the research. Next, the patients were randomly divided into positive psychotherapy (n = 10), mindfulness-based cognitive therapy (MBCT) (n = 10) and control (n = 10) groups. Schneider's life expectancy scale (Schneider et al. (1991) and the Hospital Anxiety and Depression Scale (HADS) were used to collect data. Also, MANCOVA and LSD post hoc tests and SPSS-24 software were utilized for analyzing the data at a significance level of = 0.05. The findings indicated that positive psychotherapy effectively affects life expectancy and depression in patients with Huntington's chorea disease and reduces depression and a significant enhancement (P <0.05) in life expectancy in these patients. Mindfulness-based cognitive therapy (MBCT) effectively reduces the life expectancy and depression of patients with Huntington's chorea disease. It reduces depression and a significant enhancement (P <0.05) in life expectancy in Huntington's chorea disease patients.


**Keywords:** *Huntington's chorea disease, Positive psychotherapy, Mindfulness-based cognitive therapy, Life expectancy, Depression*


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## 1. Introduction

Huntington's chorea disease is a disorder of nerve cell metabolism passed down from one generation to another in families and is characterized by involuntary jerking or writhing movements and behavioral and mental disorders, and dementia at the onset of middle age. The disease's name is derived from one type of patient movement known as chorea (Rodrigues & Wild, 2018). The classic symptom of this disease is dance-like movements that gradually spread to all the muscles and severely weaken all the mental processes. The patient shows cognitive decline and psychological symptoms (Harding & Tong, 2018). Life expectancy is one variable that seems to be effective in patients with Huntington's chorea disease (Griffioen, Mattson, & Okun, 2018). Life expectancy is a statistical indicator representing the average life expectancy in a community; i.e., it indicates the number of years each individual of that community expects to live (Mackenbach, Hu, & Looman, 2013).

Claif (1984) and Rick (1967) state that hopelessness in the area of goals becomes problematic and makes it difficult to achieve goals. Sometimes hope is formed in interpersonal relationships (Eslami Nasab, 1994). Robinson (1983, quoting Eslami Nasab, 1994) believes that hope is one of the fundamental bases of mental strength and power determining life's achievements. In addition, one of the most prevalent disorders in patients with Huntington's chorea disease is depression (Gubert, Renoir, & Hannan, 2020). Depression disorder is associated with emotional, motivational, cognitive, behavioral, and biological symptoms. Depressed people have negative emotional experiences and are usually sad, frustrated, disturbed, restless, and discouraged.

Depression is a state of sadness that affects daily life, effort, self-evaluation, judgment, and early actions such as sleep, appetite, and nutrition. These people cry early, and their crying cycles are close and frequent (Aldaz et al., 2019). They rarely smile or experience positive and pleasant excitement. They are usually unmotivated. They lose interest in activities that they enjoyed doing before their depression. Some thoughts and ideas are strongly associated with depression disorder: pessimistic beliefs about one's abilities, the world, and the future, thoughts of death and suicide, inability to concentrate and make decisions, misconceptions, and irrational beliefs that lead to bad decisions. Depressed people have slow speech and behavior, respond to others with short sentences, are physically inactive, and complain of fatigue and lethargy. The content and amount of their utterances and statements are small. Biological

symptoms of the major depressive disorder include appetite and weight alterations, constipation, sleep disturbances, and reduced sexual arousal (Ganji, 2018).

No definitive cure has been identified for Huntington's chorea disease so far. Nowadays, physicians and therapists try to control and reduce the abnormal movements of people with sedatives and non-pharmacological therapies. Still, the use of these drugs increases the secretion of dopamine in the brain, and this can cause depression and mood swings caused by Huntington's disease. It has far more devastating effects on the patient and their family than abnormal movements. It can cause depression, and the psychological changes caused by Huntington's chorea disease have far more devastating effects on the patient and their family than abnormal movements. Positive psychotherapy treats group or intentional group activities that cultivate positive emotions, behaviors, or cognitions (Taghvinia & Alamdari, 2016). Positive psychotherapy treatments are therapeutic methods or intentional activities that cultivate positive emotions, behaviors, or cognitions (Taghavinia & Alamdari, 2020).

Studies have shown that positive psychotherapy reduces patients' psychological symptoms such as depression and anger and increases life expectancy. People influenced by group positive interventions cope better with psychological stress, generally adapt better to the situation, build better social support networks, and perform their therapeutic orders better (Rezaei, Tavakoli, & Menatjuyan, 2019). Unlike traditional psychotherapies, positive psychotherapy has a positive view of humans and focuses more on strengthening their strengths. Past studies (Ruini et al., 2006; Kordmirza Nikoozadeh, 2011; Senf & Liau, 2012) have also shown that positive psychotherapy interventions effectively reduce depression symptoms because they focus on their strengths and capacities. Also, mindfulness-based cognitive therapy is a non-pharmacological treatment that seems to affect Huntington's chorea patients (Parsons, Crane, Parsons, Fjorback, & Kuyken, 2017). It refers to thoughts, emotions, physical sensations, and the environment around the person. Based on Kabat Zain, mindfulness deals with experience in the present moment through purposeful attention at the present moment and without judging (Alsubaie, Abbott, Dunn, Dickens, & Keil, 2017). Results of studies conducted on mindfulness-based cognitive therapy (MBCT) have shown that it can simultaneously reduce depression, anger, and difficulty in regulating emotions as a short-term treatment. Given the stated above, the present study aimed to evaluate the efficiency of positive psychotherapy and the MBCT method in increasing life expectancy and reducing depression in patients with Huntington's chorea disease.

## 2. Methodology

The present study was an applied research with an experimental design: pre-test, post-test, and follow-up with a comparison group. The present study's statistical population consisted of all patients with Huntington's chorea disease referred to Rasoul Akram Hospital in Tehran in 2020. The sampling method in the present study was based on population. According to Cochran's sampling method, the total population was 30 Huntington's chorea patients, and 28 of them should be considered as a sample. All 30 Huntington's chorea patients were chosen to take part in the present study, given the possibility of dropout in samples. After coordination with the officials of the centers and patients, research questionnaires were distributed among all patients. Then, 30 patients were randomly divided into positive psychotherapy (n = 10), Mindfulness-Based Cognitive Therapy (MBCT) (n = 10) and control (n = 10) groups. All groups underwent pre-tests. The positive psychotherapy group received positive psychotherapy in 6 sessions of 90 minutes. The mindfulness-based cognitive therapy (MBCT) group received mindfulness-based cognitive therapy in 9 sessions of 90 minutes online once a week. No treatment was given to the control group. Then, a post-test was performed on all subjects in the three groups, and after one month, the tests were repeated to determine the persistence of the treatments, and the follow-up step was performed.

### 2.1 Measurement Tools

#### 2.1.1 Snyder Hope Scale

The Schneider hope scale was developed by Schneider et al. (1991) and had 12 questions that assess the life expectancy of individuals. Out of 12 items, 4 items measure agent thinking, 4 items measure strategic thinking, and 4 items measure deviant thinking. Thus, this questionnaire evaluates two subscales of strategy and agency. It is scored on the Likert scale from 1 (completely true) to 4 (completely false). This questionnaire is designed for people 15 years and older. Golzari (2007) conducted research on 660 female students in Tehran in which the reliability of the Schneider hope scale was investigated by the internal consistency method and Cronbach's alpha coefficient (0.89). In a study, Zahed Babalan, Ghasempour, and Hassanzadeh (2011) calculated its Cronbach's alpha coefficient at 0.79. In this research, to examine the internal consistency of the hope scale, Cronbach's alpha coefficient was used. Total questions' Cronbach's alpha coefficient was obtained at 0.82.

#### 2.1.2 Hospital Anxiety and Depression Scale (HADS)

Measuring depression in patients with physical symptoms is very special since questionnaires usually concentrate on physical symptoms. For solving this problem, Zigmund and Snaith 1983 designed the "Hospital Anxiety and Depression Scale (HADS)" as a desirable and practical self-report material to evaluate depression and anxiety in patients with mental and physical problems. This questionnaire includes 14 questions

and has two parts, 7 of which evaluate anxiety, and the other seven questions measure depression. Each question includes 4 options, and the participant selects one of them according to the type of their feeling. Each option is assigned a weight between 3-0. Scoring weights for items indicating the presence of depression or anxiety are such that a score of 3 shows depression or high anxiety, and a score of zero represents a minimum depression or anxiety. The items that indicate a lack of depression or anxiety are weighted inversely, and they include items 2-4, 7-9, and 12-14.

The total score of each of the two anxiety or depression scales ranges between 0 and 21. Scores of 11-21 on each of the two scales are considered clinically suspected of having a disorder, scores of 8 to 10 are abnormal and intermediate, and scores of 0 to 7 are regarded as healthy. This scale was standardized in Iran by Kaviani, Seifourian, Sharifi, and Ebrahim Khani (2009) on 261 depressed and anxious individuals. To evaluate the reliability of internal consistency, Cronbach's alpha formula was used, and it was calculated to be equal to or above 0.70. They also tested its validity by calculating and comparing the convergence of the groups and confirmed the test validity. This study applied Cronbach's alpha coefficient to evaluate the internal consistency of the hospital anxiety and depression scale. The Cronbach's alpha coefficient of total questions was 0.85 and 0.83, respectively.

Positive psychotherapy was presented based on Seligman, Rashid, and Park (2006). This treatment was held in 6 sessions for 6 weeks, 1 session per week, and 60 minutes per session. MBCT also teaches skills through which individuals can give up their irrational thoughts, beliefs, and values about depression, which occur constantly and frequently (Ganji, 2016). For data analysis in this study, descriptive statistical methods including mean, standard deviation, and inferential statistics, including multivariate analysis of covariance or MANCOVA and its presumptions and LSD post hoc test were applied. SPSS-24 software was applied for research data analysis. Also, the level of significance in this study was considered at $\alpha$=0.05

## 3. Results

The results revealed that 4 and 6 subjects in the positive psychotherapy group were male and female, respectively. It was observed that the male and female subjects in the mindfulness-based cognitive therapy (MBSR) group had a frequency of 3 and 7, respectively. Also, male and female subjects in the control group had a frequency of 4 and 6, respectively.

Table 1 presents the standard deviation and means of life expectancy and depression in patients with Huntington's chorea disease in control and experimental groups in the pre-test, post-test, and follow-up stages.

Table 1 presents the standard deviation and means in the positive psychotherapy, mindfulness-based cognitive therapy, and control groups. The post-test and follow-up stage scores have changed significantly from the pre-test stage based on the results.

Based on Table 2, the information collected in the present study has a significance level higher than $p < 0.05$, so the variances are equal, and the use of analysis of variance is allowed.

As seen in Table 3, the Box' M test for equality of covariances of the variables of life expectancy and depression scores has a significance level higher than 0.05, so the equality of covariances is fulfilled.

Based on Table 4, the results of group F ×pre-test of life expectancy show that the regression slopes of pre-test, post-test, and follow-up of life expectancy are not significant in the control and experimental groups ($F = 0.252$ and $p > 0.05$). The findings of group F ×pre-test of depression show that the regression slopes of pre-test, post-test, and follow-up of depression are insignificant in the control and experimental groups ($F = 2.178$ and $p > 0.05$). Therefore, the interaction of regression slopes of life expectancy and depression variables with the group is insignificant, and the regression homogeneity assumption of slopes is confirmed.

As seen in Table 5, by controlling the impact of pre-test scores for research variables, the difference between the adjusted means of the 3 groups in both post-test and follow-up stages is statistically significant for all research variables (group membership is significant). Also, the effect of group membership on the life expectancy variable is 0.396 in the post-test stage and 0.490 in the follow-up stage, indicating that group membership explains 0.396 of the changes in scores in the post-test stage and 0.490 of the changes in scores in the follow-up stage. In other words, treatment methods improve 0.396 life expectancy in the post-test stage and 0.490 life expectancy in the follow-up stage. The statistical power of 1.00 indicates excellent statistical accuracy and adequacy of sample size for evaluation.

Also, the effect of group membership on the depression variable is 0.612 in the post-test stage and 0.6391 in the follow-up stage, indicating that group membership explains 0.612 of the changes in scores in the post-test stage and 0.391 of the changes in scores in the follow-up stage. In other words, treatment methods improve 0.612 depression in the post-test stage and 0.391 depression in the follow-up stage. The statistical power of 1.00 indicates excellent statistical accuracy and adequacy of sample size for evaluation.

Table 6 shows that the differences in the scores adjusted means of the variables studied in the present study between the groups of positive psychotherapy and MBSR and the control group are significant. It means that both treatments significantly affect

research variables, and their effect compared to the control group is significant.

**4. Discussion**

The results of MANCOVA multivariate analysis showed that positive psychotherapy is effective in the life expectancy of patients with Huntington's chorea disease and leads to a significant increase (P <0.05) in the life expectancy of these patients. In explaining these results, it should be noted that positive psychotherapy is a therapeutic approach that helps people have a more positive view of themselves, the world around them, and their abilities and helps people have more life expectancy in the future. This approach seeks to help people develop their abilities and competencies. For this reason, it teaches people that strengths are as important as weaknesses and that flexibility is as important as vulnerability (Kim, Doiron, Warren, & Donaldson, 2018).

Thus, when these patients are treated with positive psychotherapy, they regain their hope and try to experience a more meaningful and enjoyable life and make more efforts to improve and enjoy life. This treatment helps them experience more life expectancy, expect more survival, and not wait for death soon. Hence, it helps these patients to have a more positive outlook on the future of their lives with their teachings, such as recognizing their abilities and appreciating themselves instead of blaming and feeling guilty. A review of the research background and literature suggests that the present study is related to the studies conducted. The findings of this research are consistent with those of studies conducted by Khalili (2018), Mazloumi et al. (2019), Mohammadi (2019), Behrad (1397), Zaroutti, Flexure, and Simpson (2019), Gillen et al. (2019), and Bullir et al. (2014).

The results of MANCOVA multivariate analysis showed that positive psychotherapy is effective on depression in Huntington's chorea patients and leads to a significant reduction (P <0.05) in depression in these patients. Huntington's chorea disease is a chronic, acute, and progressive disease that gradually changes the person's appearance and disability. Studies have shown that exposure to various factors makes these patients more vulnerable and leads to psychological problems such as depression, anxiety, and hopelessness. Positive psychotherapy involves using interventions to cope with depression by enhancing positive emotions, increasing the extent of positive engagement in life, and enhancing meaning in life rather than directly targeting depression signs. Seligman (2008) tested the correlation between lack of positive emotions, lack of meaning, and commitment in depressed people. Subsequent results of testing this hypothesis in group therapy by these researchers have confirmed the above hypothesis.

In a research conducted by Rashid (2008), positive psychotherapy was used to enhance competencies. The results revealed that positive psychotherapy techniques in the experimental group had a significant change in 17 positive competencies out of 24 competencies. Using positive psychotherapy helps these patients experience more positive emotions and have more hope and motivation to strive for life. Since Huntington's chorea patients with depression experience high levels of negative emotion, these negative emotions lead to hopelessness, lack of effort to seek treatment and recovery, exacerbated disease, and difficulty in social and family communication. In light of positive psychotherapy, people recognize their positive abilities and use them to improve their condition and help treat their disease. This process results in the formation of positive emotions in their depression and hope for future improvement in this group of patients. A review of the research background and literature suggests that the present study is related to the studies conducted in this regard. It should be noted that the findings of this study are consistent with those of studies conducted by Mir Mehdi (2018), Dalvand (2018), Emad, Hadianfard (2017), and Seyedi Asl (2017).

The results of the MANCOVA multivariate analysis showed that mindfulness-based cognitive therapy (MBCT) is effective in the life expectancy of Huntington's chorea patients and results in a significant increase (P <0.05) in the life expectancy of patients with Huntington's chorea. Snyder et al. (1991) defined it as a positive motivational state based on successful sensory coordination and ways of achieving a goal (mapping to achieve a goal) (Snyder, Irving, & Anderson, 1991). Life expectancy is also a statistical index that indicates the average life expectancy in society; i.e., it indicates the number of years each member of that society expects to live (Jamasian Mobarakeh, & Dukaneei Fard, 2017). Mindfulness is a way of paying attention that originated from Eastern meditation and has been described as full attention to the experiences of the present in the form of moment by moment (Habibi & Hanasab Zadeh, 2014). Mindfulness is not just a good idea, but it is a way of life. This method creates more presence and less judgment in people by inviting them to be in the present moment.

Although mindfulness is considered a new science, the real-life of this method goes back thousands of years, as it has been referred to as the heart of Buddhist meditation. However, the essence of this method, in the sense of being in the moment consciously, is considered universal teaching (Kabat Zain, 2010). Using this treatment method by patients with Huntington's chorea disease helps them experience more positive emotions by consciously attending to daily activities, being aware of mental rumination, and recognizing fears and worries as functions of the mind. The negative emotions and hopelessness caused by fear and worry about the future and the progression of their disease affect the life expectancy and the number of years they expect to survive and live. Thus, teaching

them that they have a conscious presence at the present moment and consider these worries and fears as the product of a ruminant mind will help them to increase their life expectancy. A review of the research background and literature suggests that the present study is related to the studies conducted in this regard. It should be noted that the findings of this research agree with those of studies conducted by Mazloumi et al. (2019), Mohammadi (2019), Behrad (2018), Zaroutti, Flexure, and Simpson (2019), Gillen et al. (2019), and Bulier et al. (2014).

The results of the MANCOVA multivariate analysis revealed that mindfulness-based cognitive therapy (MBCT) is effective on depression in Huntington's chorea patients and leads to a significant reduction ($P < 0.05$) in the depression of patients with Huntington's chorea. Mindfulness-based cognitive therapy (MBCT) was initially introduced to prevent the recurrence of depression. It combines aspects of cognitive therapy with meditation techniques and aims to teach the control of patients' attention to identify their mood changes and prevent the recurrence of the disorder (Segal et al., 2002). Thus, it seems that the exercise of mindfulness empowers the person to master the skills that are needed to regulate and control attention. The MBCT treatment protocol can reduce patients' cognitive and emotional symptoms of major depression. Results of studies show that mindfulness-based cognitive therapy reduces the intensity and frequency of spontaneous thoughts and reduces dysfunctional attitudes and depression, and anxiety. Owing to the progressive nature of this disease until death and the lack of definitive treatment for this disease, they face a wave of depression and feelings of helplessness. These states even prevent these people from treating themselves and moving in the right direction of their lives and health.

When these patients are taught that future fears and worries are ruminants of the mind and learn to better communicate with their bodies and emotions, they can better overcome this depression and return to their lives and have a more valuable life. A review of the research background and literature suggests that the present study is related to the studies conducted in this regard. It should be noted that the findings of this research agree with those of research conducted by Gillen et al. (2019), Mazloumi et al. (2019), Mohammadi (2019), Behrad (2018), Zarrouti, Flexure, and Simpson (2019), and Buller et al. (2014). It is recommended to conduct a similar study on other samples of this disease and the effect of these treatments in different regions to be compared with each other to generalize the results. Due to the effectiveness of mindfulness-based cognitive-behavioral treatment on life expectancy, and depression in persons with Huntington's chorea disease, it is recommended to use this treatment continuously for people with this disease.

## 5. Conclusion


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## Conflict of interest

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## Ethics statement

None

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## Tables

**Table 1.** Mean and standard deviation of life expectancy and depression in patients with Huntington's chorea disease in experimental groups and control groups in the pre-test, post-test, and follow-up stages.

| Variable | Stage | Positive Psychotherapy | | MBSR | | Control | |
|---|---|---|---|---|---|---|---|
| | | Mean | SD | Mean | SD | Mean | SD |
| life expectancy | Pre-test | 40.13 | 77.3 | 20.14 | 67.3 | 90.13 | 92.2 |
| | Post-test | 90.23 | 138.8 | 70.20 | 06.8 | 10.14 | 96.2 |
| | Follow-up | 60.24 | 617.9 | 40.19 | 84.9 | 90.14 | 17.4 |
| Depression | Pre-test | 20.15 | 22.3 | 60.15 | 95.2 | 80.16 | 20.2 |
| | Post-test | 60.6 | 12.5 | 00.6 | 37.5 | 50.15 | 54.2 |
| | Follow-up | 30.7 | 54.4 | 80.7 | 66.4 | 70.15 | 40.2 |

**Table 2.** Levene's test results for life expectancy and depression scores in experimental and control groups in the pre-test, post-test, and follow-up stages.

| Variable | Positive Psychotherapy | | | | MBSR | | | | Control | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | f | Df1 | Df2 | sig | f | Df1 | Df2 | sig | F | Df1 | Df2 | sig |
| Life expectancy | 05.7 | 1 | 27 | 26.0 | 13.5 | 1 | 27 | 30.0 | 05.3 | 1 | 27 | 74.0 |
| Depression | 12.3 | 1 | 27 | 15.0 | 86.1 | 1 | 27 | 54.0 | 93.1 | 1 | 27 | 71.0 |

**Table 3.** Box' M test for life expectancy and depression scores of control and experimental groups in the pre-test, post-test, and follow-up stages.

| Variable | Box's M | F | Df2 | Df2 | Sig. |
|---|---|---|---|---|---|
| Life expectancy | 213.18 | 411.4 | 3 | 121.10317 | 511.0 |
| Depression | 841.22 | 218.2 | 3 | 121.10317 | 210.0 |

**Table 4.** Homogeneity of regression slopes of pre-tests of life expectancy and depression with their post-tests.

| Statistical indices of variable | Sum of squares | df | Mean of squares | F | Sig. |
|---|---|---|---|---|---|
| group × pre-test life expectancy | 11.368 | 3 | 3.789 | 0.252 | 0.859 |

| | | | | | |
|---|---|---|---|---|---|
| group × pre-test of depression | 98.172 | 3 | 32.724 | 2.178 | 0.128 |

**Table 5.** Results of ANCOVA analysis for life expectancy and depression scores in post-test and follow-up stages by controlling pre-test scores.

| Variable | | Source of change | Sum of squares | df | Mean of squares | F | sig | Effect size | Statistical power |
|---|---|---|---|---|---|---|---|---|---|
| life expectancy | Pre-test | Post-test | 514.14708 | 1 | 514.14708 | 817.18 | 000.0 | 295.0 | 984.0 |
| | | Follow-up | 151.4118 | 1 | 151.4118 | 004.132 | 000.0 | 535.0 | 00.1 |
| | Group membership | Post-test | 111.4286 | 2 | 111.4286 | 103.98 | 000.0 | 396.0 | 00.1 |
| | | Follow-up | 327.3172 | 2 | 327.3172 | 074.131 | 000.0 | 490.0 | 00.1 |
| depression | Pre-test | Post-test | 19.7422 | 1 | 19.7422 | 56.38 | 000.0 | 501.0 | 952.0 |
| | | Follow-up | 888.632 | 1 | 888.632 | 36.45 | 000.0 | 441.0 | 942.0 |
| | Group membership | Post-test | 21.8763 | 2 | 21.8763 | 10.25 | 000.0 | 6120. | 00.1 |
| | | Follow-up | 91.3169 | 2 | 91.3169 | 55.61 | 000.0 | 391.0 | 00.1 |

**Table 6.** Pairwise comparison of the effect of three intervention groups on life expectancy and depression scores.

| Variable | | Base group | Adjusted mean | Compared group | Adjusted mean | Standard error | sig |
|---|---|---|---|---|---|---|---|
| life expectancy | Post-test | Positive psychotherapy | 90.23 | MBSR | 70.20 | 20.3 | 000.0 |
| | | | | Control | | 60.6 | 002.0 |
| | | MBSR | 70.20 | Control | 10.14 | 80.9 | 000.0 |
| | Follow-up | Positive psychotherapy | 60.24 | MBSR | 40.19 | 20.5 | 001.0 |
| | | | | Control | | 50.4 | 000.0 |
| | | MBSR | 40.19 | Control | 90.14 | 7.9 | 000.0 |
| Depression | Post-test | Positive psychotherapy | 60.6 | MBSR | 6 | 60.0 | 31.0 |
| | | | | Control | | 9.-8 | 008.0 |
| | | MBSR | 6 | Control | 50.15 | 5.-9 | 000.0 |
| | Follow-up | Positive psychotherapy | 30.7 | MBSR | 80.7 | 50.-0 | 45.0 |
| | | | | Control | | 50.-8 | 000.0 |
| | | MBSR | 80.7 | Control | 70.15 | 9.-7 | 002.0 |