Effectiveness of Acceptance and Commitment Therapy on depression, anxiety and flexibility of divorced young women

Nilooofar Mikaili1, Vida Sharifi2*

1 Associate Professor Department of Education & psychology University of Mohaghegh Ardabili, Ardabil, Iran.
2 Department of Clinical Psychology, Ardabil Science and Research Branch, Islamic Azad University, Ardabil, Iran

ARTICLE INFO

Article history:
Received 30 Dec 2016
Received in revised form 02 Feb 2017
Accepted 18 Feb 2017

Keywords:
Acceptance and Commitment Therapy,
Depression,
Anxiety,
Flexibility,
Divorced women.

ABSTRACT

Objective: The aim of study was to examine of effectiveness of acceptance and commitment therapy on depression, anxiety and flexibility of divorced young women in Ardabil city. Methodology: The research methodology was experimental and type of study was pre-test and post-test and also control group. Statistical population of study included all divorced women of Ardabil city in first half of 1394. The sampling method of this research was available sampling and 40 people were selected and they were randomly divided to experimental group with 20 people and control group with 20 people. Then the experimental group received 10 sessions of 1.5 hours Acceptance and Commitment Therapy weekly while the control group spent their normal daily schedule. The data were collected from the questionnaires of depression, anxiety and flexibility. The obtained data were analyzed by covariance analysis test and SPSS software. Results: The results showed that Acceptance and Commitment Therapy significantly decreased depression and anxiety and also increased flexibility of divorced women (p<0.01). Conclusion: Based on the results, it can be concluded that Acceptance and Commitment Therapy can be used to reduce depression, anxiety and also increase the flexibility of divorced women.

1. Introduction

Divorce is a process that will start with emotional crisis experience of both couples and it will end by trying to solve the conflict through entry into new situations with new roles and new lifestyles. Divorce literally means separation. Divorce in civil law is the permanent dissolution of the marriage contract during the life of couples by the will of man or demand of woman with certain conditions. Divorce is a social phenomenon and we should pay attention to a way of understanding the causes and social factors, it also is a psychological phenomenon or psychological- sociological phenomenon. Divorce has many negative consequences, including immune system dysfunction, mood disorders, substance abuse, suicide, lifestyle and self-image changes, reduced professional performance, changes in social relationships, anxiety disorders, depression and so on (Vahedi, 2004). The most negative consequences of divorce are mental disorders, especially anxiety and depression. Depression is a syndrome dominated by depressed mood and it is displayed with feelings of sadness, anxiety or arousal mode based on verbal expression or nonverbal expression (Dadestan, 2004). Depression, like other emotions associated with physiological and biological changes. Based on this, it is reported that reduction of the serotonin amount in the brain causes the people’s moral decrease and they have no hope for survival. Thus, it is leading to intensified disease and getting worse of prognosis and it is finally leading to prolongation of treatment and increasing costs and anxiety is a condition that is characterized by a sense of panic. It is associated with physical symptoms that indicate increased activity of autonomous system (such as heart beating, sweating). Anxiety affects cognitive performance and it is leading to cognitive distortion. Distinguishes of that is this: fear is proportional response to a known threat; while the anxiety is a response of the threat that is unknown, ambiguous or conflicting. Anxiety is often created by a new experience and it is possible to be perceived as a threat to one's identity and confidence.

Don Berry in results of his research said that: people experience emotions such as anger, sadness, panic, crying courses, hate, anxiety disorders and depression during divorce, also in addition to anxiety and depression, divorced individuals, especially women had a low flexibility (Hamid et al., 2011).

* Corresponding author: Vida_Sharifi@webmail.ardabili.ir
DOI: https://doi.org/10.24200/jsshr.vol5ss01pp64-68
Flexibility of people has a very important role in their social function level. In fact, the flexibility is defined as an ability to handle emotional and appropriate behavior to minimize the incidence of mental disorders against of stressful situation. Alaghbandrad et al. (2003) showed that there is a significant relationship between flexibility and symptoms of anxiety and depression. Many psychological treatments have been used to psychological disorders of divorced individuals such as depression, anxiety, stress and so on, with an emphasis on emotions and cognitions (Hamid et al., 2011). But in the third wave of psychotherapy, which is known as a post-modern psychotherapy, it is believed that cognitions and emotions should be considered in the conceptual context of phenomena. One of these therapies is the treatment that is based on acceptance and commitment. The abbreviation of Acceptance and Commitment therapy that is known as ACT, is the third Wave of behavioral therapy. ACT has six central processes that will lead to psychological flexibility. These six processes include: acceptance, faulting, self as background, present relevance, committed value and practice.

In general, acceptance and Commitment Therapy had a significant effect on reducing psychological problems and research findings also support it (Ebrahimi et al., 2013; Izadi et al., 2011). Divorce is a major adulthood crisis in a period in which, some people have tried in one last chance, they got something that they think they have lost it. Researchers believe that divorce is a phenomenon that any children and adults don’t ready to deal with it (Vahedi, 2004). On the other hand, side effects of divorce are very severe for children and young people, as their adaptation to the side effects takes three to five years and in one third of cases, it could lead to a lasting trauma. Divorce and family breakdown while disturbing the mental and emotional balance of family and community, it is leading to many social pathologies such as prostitution, sexual deviation, suicide, running away, theft, drug addiction, begging, loitering and wandering the streets and so on. Thus, according to the damage of the phenomenon of divorce on children, families and communities and so on, such studies will be necessary. Statistics show that about 10 to 30 percent of marriages lead in divorce that unfortunately this tragedy is rising (Milanifar, 2003). It is also one of the importance factor and necessity of this research. According to cases mentioned, the study was done with the aim of examination of effectiveness of acceptance and commitment therapy on depression, anxiety and flexibility of divorced young women.

2. Materials and methods

The study is experimental type based on the objectives and hypotheses (pre-test and post-test and control group). The variables assessed in this study are including Acceptance and Commitment Therapy as the independent variable and depression, anxiety and flexibility of divorced young women as the dependent variable and duration of marriage as a control variable.

2.1 Population, Sample and Sampling method

The study population consisted of all divorced women who referred to counseling centers and the Dispute Resolution Advisory Council, divorced women covered by Department of Social Welfare and Imam Khomeini Relief Committee in Ardabil in the first half of 1394 that were 411 people. The sampling method for this study was available sampling. For this purpose, samples were selected on the basis of the following criteria from the population of the study by convenience sampling: 1. Age between 17 and 30 years, 2. Passing time up to one year from the time of the divorce, 3. Lack of physical defects, 4. Lack of drug consumption, 5. Completing the consent and commitment form to participate in therapy sessions among women who wish to participate in the study. 40 patients were selected and randomly assigned to experimental and control groups that each of them had 20 subjects. At least 15 people are needed for test methods (Delawar, 2006). In this study to increase the external validity, we selected 40 cases (20 patients in each group).

The following tools were used to gather information:

Data collection tool in this study is a questionnaire that included the following cases:

1. Beck Depression Inventory II: Beck Depression Inventory has 21 questions, and subject to any material should choose one of the four options that it shows the severity of their depressive symptoms. The total scores are ranged from zero to 63. Beck Depression Inventory had shown high internal consistency coefficients ranged from 0.89 to 0.94 in different populations. Reliability coefficient of retesting within one week is 0.93. The correlation of this questionnaire with the Beck Depression Inventory (Second Edition) is 0.93. The correlation of this test with Hamilton Rating Scale for Depression is 0.71. The correlation of this test with Beck Hopelessness Scale is 0.68 and finally it’s correlation with Depression Anxiety Stress Scale is 0.88 (Jafarzadeh Dashblagh, 2012).

2. Beck Anxiety Inventory: In this study, Beck Anxiety Scale was used to measure anxiety. The test consists of 21 signs and symptoms of anxiety. Subject should answer these items as "never", "mild", "moderate" and "severe" that these options are scored 0, 1, 2, 3 respectively. In this test, scores of zero to 23 were associated with mild anxiety symptoms, scores between 24 to 28 were associated with average anxiety symptoms and scores higher than 29 were associated with morbid anxiety symptoms, Cronbach's alpha coefficient of this test was reported 0.90. The correlation coefficient of this test was obtained 0.89 with physiological components. Cronbach's alpha and ballads were used to determine the reliability of the anxiety questionnaire that they were equal to 0.60 and 0.65 respectively (Jafarzadeh Dashblagh, 2012).

3. Acceptance and action questionnaire (flexibility): This questionnaire was made by Bond et al. (2011). A questionnaire has 12 items of the questionnaire that was built by Hiz. High scores on this scale indicate flexibility. Psychometric Properties of the first is like that the Cronbach's alpha coefficient is equal to 0.84 and reliability of 3 and 12 months are 0.81 and 0.79 respectively. Results showed that the Second Edition questionnaire of acceptance and action can predict a range of mental health outcomes to the rate of absenteeism a simultaneous longitudinal and increasing which is consistent with its underlying theory. It also has demonstrated good reliability (Bond et al., 2011).

2.2 Procedure
Data collection method in this study was like that after obtaining the necessary permissions from the divorced women who referred to counseling centers, the Dispute Resolution Advisory Council, divorced women covered by Department of Social Welfare and Imam Khomeini Relief Committee of the city, initial interviews were conducted with of divorced women. Then purpose of the study was explained to them and after satisfaction of women who wish to participate in the study, 40 individuals were selected by convenience sampling. And then randomly divided into control and experimental groups and Acceptance and Commitment Therapy sessions were held on site of consultation of Welfare Relief Committee that was given to researcher by the Social Welfare. Questionnaires of Beck Depression Inventory-II, Beck Anxiety Inventory and Inventory reception and action (flexibility) were given to both groups to complete them and then the experimental group spent 8 sessions of 1.5 hour about Acceptance and Commitment Therapy and control group spent their daily schedule and at the end of the sessions again the Questionnaires were given to these groups and they were considered as post-test. First, analysis of information is descriptive, which includes the mean, standard deviation and etc. In the second part, multivariate analysis of covariance was used to test the hypothesis and the effect pre-test. SPSS statistical software was used for this purpose.

Summary of Acceptance and Commitment Therapy sessions are as follows:
First session: Meeting and communicating with team members, mental training. Second session: discussing about experiences and evaluate them, making creative helplessness. Third session: introducing internal world and the external world and the laws governing them, stating willingness, determination of the appropriate patterns of values, seventh session: introduction of faulting, training and practices of mindfulness techniques. Eighth session: introduction of self as a background, concluding the treatment and prevention of relapse.

3. Discussion and results

The analysis of data showed that 15 percent of the experimental group was less than 25 years old, 45 percent of them were 26-30-year-old and 30 percent were in the range of 31-35 years old and 10 percent were older than 36 years old. Also, in the control group, 25 percent of them were less than 25 years old, 50 percent of them were between 26-30-year-old and 20 percent of them were between 31-35 years old and 5 percent were older than 36 years old. In the experimental group, 30 percent of them had diploma education and lower than this, 45 percent of them had associate's degrees and 35 percent of them had bachelor's degree and higher than this and in the control group, 25 percent of them had diploma and lower that this, 40 percent of them had associate degree, and 35 percent had a bachelor’s degree.

### Table 1. Mean and standard deviation of scores of anxiety, depression and flexibility

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Experiment</th>
<th>Type of Test</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.D</td>
<td>Mean</td>
<td>S.D</td>
<td>Mean</td>
<td></td>
</tr>
<tr>
<td>4.24</td>
<td>28.57</td>
<td>5.13</td>
<td>29.35</td>
<td>Pre-test Anxiety</td>
</tr>
<tr>
<td>4.29</td>
<td>27.50</td>
<td>4.05</td>
<td>24.40</td>
<td>Post-test</td>
</tr>
<tr>
<td>6.95</td>
<td>29.80</td>
<td>7.64</td>
<td>31.01</td>
<td>Pre-test Depression</td>
</tr>
<tr>
<td>7.95</td>
<td>27.80</td>
<td>7.95</td>
<td>26.90</td>
<td>Post-test</td>
</tr>
<tr>
<td>3.85</td>
<td>30.60</td>
<td>3.01</td>
<td>31.70</td>
<td>Pre-test Flexibility</td>
</tr>
<tr>
<td>3.75</td>
<td>30.35</td>
<td>2.31</td>
<td>35.21</td>
<td>Post-test</td>
</tr>
</tbody>
</table>

As Table 1 shows the mean (standard deviation) of pre-test and post-test for testing group of anxiety were obtained 29.35 (5.13) and 24.40 (4.05), respectively. The mean (standard deviation) of pre-test and post-test for testing group of depression were obtained 31.01 (7.64) and 26.90 (7.95), respectively. The mean (standard deviation) of pre-test and post-test for testing group of flexibility were obtained 31.70 (3.01) and 35.21 (2.31), respectively.

Analysis of covariance was used to test the hypothesis. One of the pre – assumptions that should be established for parametric tests is the assumption of homogeneity of variance-covariance. In this study to examine this assumption, we used Levine test that results of it in terms of each variable are in the table below.

### Table 2. Test results Levine to study the homogeneity of variance-covariance of anxiety, depression and flexibility scores

<table>
<thead>
<tr>
<th>Significance level</th>
<th>Degrees of freedom 2</th>
<th>Degrees of freedom 1</th>
<th>F</th>
<th>Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.17</td>
<td>38</td>
<td>1</td>
<td>1.93</td>
<td>Anxiety</td>
</tr>
<tr>
<td>0.73</td>
<td>38</td>
<td>1</td>
<td>3.25</td>
<td>Depression</td>
</tr>
<tr>
<td>0.40</td>
<td>38</td>
<td>1</td>
<td>0.70</td>
<td>Flexibility</td>
</tr>
</tbody>
</table>

Results of Table 2 show that the Levine test is not significant. Based on these default results, homogeneity of variance-covariance of the variables in the study groups was approved. As a result, the use of parametric tests, multivariate analysis of covariance is permitted.
often improve after a while regardless of how unhappy or angry at that moment. But some people do not recover so well. One of the reasons for this is that the subject of this hypothesis was Acceptance and Commitment Therapy has a significant impact on increasing flexibility of divorced young women. The results showed that acceptance and commitment therapy have a significant decrease in anxiety of divorced young women (p<0.05).

Depressed people have low mood and they have cognitive problems. When these people are treated based on the Acceptance and Commitment Therapy, due to its underlying mechanism, such as acceptance, awareness raising, desensitization, the presence in the moment, non-judgmental observation, confront and relaxation in combination with traditional cognitive and behavioral therapy techniques, symptoms of depression can be reduced. People who are severely depressed, they are helpless. And trying to do whatever has little benefit, because they do not expect anything over in favor of them. All of us, when we failed to do anything, we often improve after a while regardless of how unhappy or angry at that moment. But some people do not recover so easily, and depression can continue for a long time. They may generalize fail in an activity to other fields of life and a sense of their own value. As a result, they may come depressed and helpless in all situations and may lose their incentive to work harder (Schultz, 2000, translated by Seyyed Mohammadi, 2005).

For the second hypothesis analysis of covariance was used which the subject of this hypothesis was Acceptance and Commitment Therapy has a significant impact in reducing anxiety of divorced young women. The results showed that the acceptance and commitment therapy have a significant decrease in anxiety of divorced young women (p<0.05). About the impact of acceptance and commitment therapy, much studies have been done that some of these studies have examined the procedure's effectiveness in anxiety that the results of this study are consistent with studies of Hor et al. (2013), Rajabi and Yazdkhasti (2013), Izadi et al. (2011).

Anxiety and Commitment Therapy is a psychotherapeutic intervention based on the evidence that it blends mindfulness and acceptance strategies with commitment and behavior change strategies in different ways. This is done to increase psychological flexibility. Acceptance and commitment therapy are one of mindfulness-based behavior therapies which this method of treatment increases ability to control their emotional states and their anxiety is reduced by offering cognitive and behavioral strategies for the individual and the physiological and psychological changes.

For the third hypothesis analysis of covariance was used which the subject of this hypothesis was Acceptance and Commitment Therapy has a significant impact in increasing flexibility of divorced young women. The results showed that the acceptance and commitment therapy have a significant increase in flexibility of divorced young women (p<0.05). About the impact of acceptance and commitment therapy, much studies have been done that some of these studies have examined the procedure's effectiveness in flexibility that the results of this study are consistent with studies of Narimani et al. (2014), Kordtamini (2006). Flexibility is defined as a dynamic process that is responsible for creating a positive adaptation, in spite of opposition or traumatic experiences in the life of the individual. New theories look that flexibility as the multi-dimensional construction that it includes fundamental variables such as temperament, personality and special skills such as problem solving and decision-making. These skills allow a person to provide optimal compatibility with traumatic life events. Flexibility is not only the sustainability against damage or situations that threaten but also it is the individual's active and constructive participation on environment and we can say that flexibility is the ability of person in making mental- biological balance in a dangerous. More precisely, the flexibility is a process, ability or outcome of successful adaptation with threatening condition that causes a positive adaptation, despite the existence of traumatic or harmful experiences in person. Acceptance and commitment therapy are a behavioral therapy that uses a skill of mindfulness, acceptance and cognitive faulting to increase the psychological flexibility. In acceptance and commitment therapy, cognitive flexibility is to increase the ability of clients to communicate with their experience in the present, and based on what is possible for them at that moment. So, they act in a manner that is consistent with their values that have been selected. Therefore, training of acceptance and commitment skills cause to

<table>
<thead>
<tr>
<th>Eta coefficient</th>
<th>P</th>
<th>F</th>
<th>MS</th>
<th>Df</th>
<th>SS</th>
<th>The dependent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.64</td>
<td>0.000</td>
<td>67.28</td>
<td>96.10</td>
<td>1</td>
<td>96.10</td>
<td>Anxiety</td>
</tr>
<tr>
<td>0.49</td>
<td>0.000</td>
<td>36.80</td>
<td>41.24</td>
<td>1</td>
<td>41.24</td>
<td>Depression</td>
</tr>
<tr>
<td>0.67</td>
<td>0.000</td>
<td>77.80</td>
<td>136.88</td>
<td>1</td>
<td>136.88</td>
<td>Flexibility</td>
</tr>
</tbody>
</table>

Conclusion

As it is shown in Table 3, we can see the results of analysis of covariance showed that the mean scores of anxiety (F=67.28) and depression (F=36.80) has dropped significantly in the experimental group compared to pre-test to the post-test and the mean scores of flexibility (F=77.80) has increased (p<0.001). Square of Eta showed that 64, 0.49 and 0.67 percent of the variance of changes is resulting from the application of independent variables (intervention of Acceptance and Commitment).
increase the adaptability and flexibility of these people. This study was limited in its path, like the sample were selected by convenience or available sampling, lack of follow-up of results and being limited to the geographical area of Ardabil. In this regard, it is suggested that the impact of acceptance and commitment therapy on other psychological variables of divorced women and other segments of society are investigated. It is suggested that in the future research stability in the results of different post-tests and different time is controlled. It is suggested that in future researches variables that are related to the individual (family variables, cultural variables, etc.) are controlled. In order to use the results of this study suggested that the acceptance and commitment therapy in reducing depression and anxiety and increase the flexibility of divorced women are employed. Finally, we really appreciate all those help us in our study.

REFERENCES

Ebrahimi, A., Rezaeian, M., & Khorvash, M. 2013. The effectiveness of acceptance and commitment therapy on pain acceptance, quality of life and anxiety associated with pain in patients with chronic pain, University of Medical Sciences, Special Issue of the fifth Congress of Psychosomatic.
Kordtmanmi, B. 2006. The role of remarriage on the mental health of spouses and children of martyrs in Tehran and Sistan-Balochistan, master's thesis of psychology, Tehran University, Faculty of Education and Psychology.

How to Cite this Article: