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# Impact of acceptance and commitmentbased therapy on emotional adjustment and cognitive flexibility

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# Abstract

This study aimed at determining the impact of acceptance and commitment-based therapy (ACT) on emotional adjustment and cognitive flexibility in middle-aged depressed women. Quasi experiment method of pretest and posttest with control group was used in this research. Findings obtained from this research showed that ACT had impact on emotional adjustment and cognitive flexibility in middle-aged depressed women (P<0.05). In conclusion, acceptance in ACT does not mean accepting annoying emotions and experiences or bearing them or resisting against them, but it is defined as a tendency to experience unpleasant events.

**Keywords:** ACT, Emotional Adjustment, Cognitive Flexibility.

# Impacto de la aceptación y la terapia basada en el compromiso en el ajuste emocional y la flexibilidad cognitiva

#### Resumen

Este estudio tuvo como objetivo determinar el impacto de la aceptación y la terapia basada en el compromiso (TCA) en el ajuste emocional y la flexibilidad cognitiva en mujeres deprimidas de mediana edad. En esta investigación se utilizó el método de cuasi experimento de prueba previa y prueba posterior con el grupo de control. Los hallazgos obtenidos de esta investigación mostraron que el ACT tuvo un impacto en el ajuste emocional y la flexibilidad cognitiva en mujeres deprimidas de mediana edad (P <0.05). En conclusión, la aceptación en ACT no significa aceptar emociones y experiencias molestas, soportarlas o resistirlas, sino que se define como una tendencia a experimentar eventos desagradables.

Palabras clave: ACT, ajuste emocional, flexibilidad cognitiva.

#### **1. INTRODUCTION**

Depression is the most prevalent mental disorder; according to the last statistics published by WHO, depression has influenced 350 million people all around the world. Depression is an emotional disorder diagnosing with mood and emotion changes. This disorder is a chronic, relapsing and potential life-threating disease with some symptoms including dissatisfaction with life, losing previous interests and energy, low self-confidence, sense of grief and guilt, changing eating and sleep pattern. Prevalence of this disease in women is two times greater than its prevalence in men so that it has the highest lifetime outbreak among psychological disorders (about 17%) (Sadok, 2015). According to WHO, depression has obtained the fifth rank in terms of cost consuming. It is estimated that depression will be the second diseases after cardiovascular diseases by 2020 threating health and life of humans all around the world. This disorder causes personal and familial harms, job and interpersonal communications deterioration, and heavy social costs (Sadok, 2015; Abdillah, 2019). On the other hand, the depression rate in women has been higher compared to men in many of conducted studies. However, hormonal disorders are significant since there are more hormonal flows in women causing a higher risk of depression among them (Farjad, 2005).

ACT is the third wave of behavioral therapies with positive implications and consequences in terms of different kinds of mood and anxiety disorders (Hayes & Stroshal, 2004). Adjustment is organism tendency to change its activity in order to be matched with environment that is in fact a response to changes in surrounding environment (Shahsavari, 2003). Flexibility is defined as the successful dealing with stressful conditions within two emotional and behavioral dimensions. Depression disorder occurs without any background in manic episode, mix or hypomanic. It takes 2 weeks at least and those patients who have experienced at least 4 symptoms of a symptom series of change in sleep and appetite, change in sleep pattern and activities done in awake time, lack of energy and so on are patients who suffer from this episode (Sadok, 2015). Middle age period is a period of life followed by youth and before old age. This period occurs during 40-65 that is defined in different ways. ACT is a solution that can reduce adjustment and acceptance of conditions decreasing mental diseases (anxiety, disappointment, depression, etc.).

This therapy is one of the third wave treatments of behavior therapy that was introduced by Steven Hayes and colleagues at early 1980s under the abbreviation of ACT; ACT is rooted in a deep philosophy called functional contextualism that is theoretically based on the theory of mental relations that determines how a human's mind create pain and useless coping method besides alternative context approaches for these scopes. ACT uses 6 main processes including acceptance, cognitive diffusion, contact with the present moment, observing self, values and committed action for psychological flexibility (Hayes et al., 2006). ACT helps to create a meaningful and perfect life by accepting a pain coming in life; it is in fact about the act and committing to act in line with personal goals and values. There are various studies in this field: effectiveness of ACT in psychological flexibility and rumination among methadone-treated addicts (Jahangiri, 2016), Effect of ACT on marital satisfaction in depressed women (Mohammadi et al., 2016), Impact of ACT with spirituality-based treatment on psychological welfare of women with obsessive-compulsive disorder (Imamian & Latifi, 2015), determining effect of ACT with emotion regulation on adjustment of students with math disorder (Narimani & Abbasi, 2013), comparing effectiveness of ACT and emotion-centered group therapy in attachment harm and cognitive flexibility in infertile women (Etehadieh, 2016). There have been useful studies conducted in the field of the effect of ACT on depression disorders, adjustment variables and mental flexibility in Iran and world while there is not any study on the impact of ACT on emotional adjustment and flexibility in middle-aged depressed women. Hence, this study was carried out to find if ACT could affect the improvement of mental adjustment and cognitive flexibility in middle-aged depressed women.

## 2. METHODOLOGY

#### 2.1. Statistical Population, Sample, and Sampling Method

Statistical population of this study consisted of all of the middle-aged women (more than 420 members) living in Tehranpars, Iran; these members were selected using purposeful sampling method. In this research, all of the members of statistical society were tested using the Beck depression test then individuals who obtained scores above 14 (up to 63 as the highest score of severe depression) were chosen (167 members); of them, 60

members were selected as sample size (n=60) assigned to two tests (n=30) and control (n=30) groups. Members of sample size were selected based on a convenient method to make sure of their cooperation with the researcher during one and half month intervention and one-month follow-up. Inferential statistics like ANOVA was used in this research (Berk, 2007).

#### **3. RESEARCH INSTRUMENT**

#### 3.1. Beck Depression Inventory (BDI)

BDI was introduced for first time in 1961 by Beck et al. Since BDI covered just 6 criteria out of 9 depression criteria, it was revised in 1996 for more adjustment (DSM-TV). Primitive version of this questionnaire had 21 items. Each item had 4 options that one of them should be selected by respondent. Each person could be assigned to one of depression categories based on the obtained score. This questionnaire measures severity of depression symptoms. Each option (disease symptom) has divided to four degrees based on its severity scoring at range of 0-3. Score 0 indicates lower rate and score 3 indicates the higher rate of depression symptom. Sum of scores of each questionnaire was at Impact of acceptance and commitment-based therapy on emotional adjustment and cognitive flexibility

interval of 0-63. This questionnaire is used to evaluate depression severity in participants older than 13 so examiner could present test instruction to patient verbally or in written. These items are related to sadness, pessimism, sense of inability and failure, sense of guilty, sleep disorder, eating disorder, self-hatred, etc. In this regard, 2 items are assigned to emotion, 11 items to cognition, 2 items to obvious behaviors, 5 items to physical symptoms, and I item to interpersonal typology (Murnat, 2007).

#### 3.2. Bell Emotional Adjustment Inventory (BAI)

BAI was designed in 1961 by Bell. He designed two questionnaires in the field of adjustment; one of them is related to students and another one is designed for adults. Adults' version is applied for both men and women. This test was implemented for 200 members randomly after translating and editing it. Reliability of Bell Inventory was measured using Cronbach's alpha and this coefficient obtained to 0.89. The validity of test-retest of this inventory was reported to 0.70-0.93 and its internal consistency obtained to 0.74-0.93. Bell reported reliability coefficients for subscales of adjustment in the home, health adjustment, social adjustment, emotional adjustment, job adjustment, and whole test equal to 0.91, 0.81, 0.88, 0.91, 0.85, and 0.91, respectively. Moreover, this test had a high validity in distinguishing normal groups from neurotic ones as well as the correlation of Eysenck Personality Tests (Fathi, 2009).

# 3.3. Dennis & Vander Wal's (2010) Cognitive Flexibility Inventory (CFI)

This inventory was designed and used in 2010 by Dennis and Vader Wal. This questionnaire consists of 20 items to assess a kind of cognitive flexibility requiring for success of person for challenging and replacing dysfunctional thoughts with functional ones. In other words, this inventory is used to evaluate person's progress in clinical and non-clinical actions also to assess person's success in creating flexible though within cognitive treatment, depressive behavior and other mental diseases. Simultaneous validity of this inventory with BDI obtained to -0.039 and convergent validity of it with Martin & Robin's Cognitive Flexibility Scale obtained to 0.75 (Poorkazem et al., 2018). In Iran, Shareh reported retest coefficient of whole scale to 0.71 and Cronbach's alpha of coefficient to 0.90. Moreover, content validity of this inventory reported at optimal level in study carried out by Fazeli et al. (2014) and reliability of this questionnaire calculated to 0.75 using Cronbach's alpha coefficient.

## 3.4. Implementation Method

Acceptance and commitment-based training-therapeutic package for depression is adopted from R.O.B ZTL Depression Guidebook.

Session 1: achieving main goals of patient, acquisition and familiarity with previous attempts of the patient to achieve goals, pit metaphor, introducing dysfunction system in past, selecting the option and moving toward control as a problem.

Session 2: control as problem/ controlling inner events, polygamy metaphor, jelly sweet metaphor, the metaphor of fighting against the monster, the logic of behavioral activation, setting an initial behavioral goal, selecting tendency/acceptance.

Session 3: apparent success degree in the international control of feelings, programing inner events, the metaphor of two scales, costs of lack of tendency: impure inconvenience/review, the metaphor of the box full of problems, simple diagnosis of the goal of behavior that requires tendency.

Session 4: the practice of your mind is not your friend, the practice of milk, milk, milk, passengers in the bus, leaves inflowing stream, identification of simple goal of the behavior that requires tendency and delusion.

Session 5: challenging or weakening (reasoning as reasons), the practice of ice-cream cup, using the word (w) against (but), I have such thoughts, re-practice of mindfulness, identifying the goal of behavior that requires defusion and tendency.

Session 6: the practice of mental polarization, chess chart scale, observer practice, identifying the simple behavioral goal.

Session 7: introducing values, the practice of socks, selecting values, the practice of funeral/practice of tombstone, identifying value-centered behavior.

Session 8: introducing the relationship between goals and values, skiing metaphor, identifying values-based action.

Session 9: identifying values, gardening metaphor, the metaphor of a bubble on the road, identifying a value action.

Session 10: uninvited guests (popular metaphor of lazy person), nature of the all or nothing: the practice of jumping.

Session 11: being ready for the final step, identifying barriers to FEAR algorithms, committed action based on ACT algorithm.

Session 12: the metaphor of two mountains, discussion, and correcting the post-treatment program.

#### 4. FINDINGS

Table 1 demonstrates descriptive specifications of sample size including dispersion indices (standard deviation, variance) and central indicators (mean).

|          | Research<br>variable     |           | Cont      | rol group   |             | Test group |           |              |             |
|----------|--------------------------|-----------|-----------|-------------|-------------|------------|-----------|--------------|-------------|
|          |                          | Ma        | Min       | Sd          | Mean        | Max        | Min       | Sd           | Mean        |
|          |                          | X         |           |             |             |            |           |              |             |
| Posttest | Cognitive<br>flexibility | 95.0<br>0 | 54.0<br>0 | 9.6942<br>3 | 80.233<br>3 | 101.0<br>0 | 58.0<br>0 | 12.406<br>71 | 77.266<br>7 |
|          | Career<br>adjustme<br>nt | 27.0<br>0 | .00       | 8.6292<br>7 | 6.1333      | 23.00      | .00       | 7.6188<br>7  | 7.7667      |
| d        | Social<br>adjustme<br>nt | 29.0<br>0 | 6.00      | 5.4118<br>9 | 15.566<br>7 | 27.00      | 8.00      | 4.6546<br>2  | 17.700<br>0 |

Table 1. Descriptive specifications of research variables, control and test groups in pretest and posttest

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|         | -           | 20.0 | 0.00 | 6 0 1 1 0 | 15.000 | 22.00 | 10.0 | 0.404.6 | 15 500 |
|---------|-------------|------|------|-----------|--------|-------|------|---------|--------|
|         | Emotiona    | 30.0 | 8.00 | 6.0142    | 17.033 | 23.00 | 10.0 | 3.4316  | 17.500 |
|         | 1           | 0    |      | 6         | 3      |       | 0    | 0       | 0      |
|         | adjustme    |      |      |           |        |       |      |         |        |
|         | nt          |      |      |           |        |       |      |         |        |
|         | Health      | 13.0 | 2.00 | 3.0512    | 7.0000 | 11.00 | 3.00 | 2.5811  | 6.4000 |
|         | adjustme    | 0    |      | 9         |        |       |      | 0       |        |
|         | nt          |      |      |           |        |       |      |         |        |
|         | Adjustme    | 26.0 | 3.00 | 5.6544    | 13.400 | 27.00 | 3.00 | 6.7040  | 13.233 |
|         | nt in       | 0    |      | 2         | 0      |       |      | 0       | 3      |
|         | home        |      |      |           |        |       |      |         |        |
|         | Total       | 85.0 | 36.0 | 12.210    | 59.133 | 85.00 | 46.0 | 9.4708  | 62.600 |
|         | score of    | 0    | 0    | 04        | 3      |       | 0    | 3       | 0      |
|         | adjustme    |      |      |           |        |       |      |         |        |
|         | nt          |      |      |           |        |       |      |         |        |
|         | Beck        | 30.0 | 16.0 | 3.9317    | 23.300 | 41.00 | 15.0 | 5.8333  | 25.200 |
|         | depressio   | 0    | 0    | 5         | 0      |       | 0    | 2       | 0      |
|         | n           |      |      |           |        |       |      |         |        |
|         | Cognitive   | 99.0 | 61.0 | 10.563    | 81.266 | 114.0 | 66.0 | 13.667  | 90.466 |
|         | flexibility | 0    | 0    | 22        | 7      | 0     | 0    | 82      | 7      |
|         | Career      | 27.0 | .00  | 8.6292    | 6.1333 | 18.00 | .00  | 6.0613  | 6.1333 |
|         | adjustme    | 0    |      | 7         |        |       |      | 7       |        |
|         | nt          |      |      |           |        |       |      |         |        |
|         | Social      | 29.0 | 6.00 | 5.8918    | 14.100 | 25.00 | 8.00 | 4.1302  | 16.100 |
|         | adjustme    | 0    |      | 4         | 0      |       |      | 1       | 0      |
|         | nt          |      |      |           |        |       |      |         |        |
| st      | Emotiona    | 30.0 | 8.00 | 6.0111    | 16.933 | 19.00 | 5.00 | 3.4649  | 12.833 |
| Pretest | 1           | 0    |      | 0         | 3      |       |      | 3       | 3      |
| Pr      | adjustme    |      |      |           |        |       |      |         |        |
|         | nt          |      |      |           |        |       |      |         |        |
|         | Health      | 28.0 | 2.00 | 4.9130    | 8.0000 | 9.00  | 3.00 | 1.6750  | 5.4333 |
|         | adjustme    | 0    |      | 4         |        |       |      | 4       |        |
|         | nt          |      |      |           |        |       |      |         |        |
|         | Adjustme    | 60.0 | 4.00 | 10.337    | 15.600 | 18.00 | 3.00 | 5.2653  | 10.000 |
|         | nt in       | 0    |      | 74        | 0      |       |      | 7       | 0      |
|         | home        |      |      |           |        |       |      |         |        |
|         | Total       | 94.0 | 30.0 | 14.399    | 60.766 | 72.00 | 36.0 | 9.0468  | 50.500 |
|         | score of    | 0    | 0    | 91        | 7      |       | 0    | 1       | 0      |
|         | adjustme    |      |      |           |        |       |      |         |        |
|         | nt          |      |      |           |        |       |      |         |        |
|         | IIt         |      |      |           |        |       |      |         |        |

To choose statistical test, normality test of data distribution was used. It was concluded that scores of questionnaire were normal using Kolmogorov-Smirnov test.

Table 2. Normality of data using Kolmogorov-Smirnov test

|         | Research                            | Cont     | rol group |          | Test     | group    |          |
|---------|-------------------------------------|----------|-----------|----------|----------|----------|----------|
|         | variables                           | Sig      | Kolmogor  | Situatio | Sig      | Kolmogor | Situatio |
|         |                                     |          | ov value  | n        |          | ov value | n        |
|         | Beck<br>depressio<br>n              | .65<br>5 | .734      | Normal   | .83<br>3 | .623     | Normal   |
|         | Cognitive<br>flexibility            | .96<br>6 | .497      | Normal   | .36<br>6 | .919     | Normal   |
|         | Career<br>adjustmen<br>t d          | .13<br>6 | .979      | Normal   | .05<br>9 | 1.430    | Normal   |
|         | Social<br>adjustmen<br>t            | .81<br>7 | .634      | Normal   | .56<br>9 | .785     | Normal   |
| Pretest | Emotional<br>adjustmen<br>t         | .66<br>9 | .725      | Normal   | .63<br>9 | .743     | Normal   |
|         | Health<br>adjustmen<br>t            | .70<br>5 | .704      | Normal   | .33<br>1 | .947     | Normal   |
|         | Adjustme<br>nt in<br>home           | .68<br>1 | .718      | Normal   | .74<br>9 | .677     | Normal   |
|         | Total<br>score of<br>adjustmen<br>t | .72<br>6 | .691      | Normal   | .75<br>6 | .673     | Normal   |

According to table 2, all of research data had normal distribution since they are above 0.05 (P>0.05).

In addition, two-way ANOVA was used to compare research variables in pretest ad the obtained results are demonstrated in table 3.

| Resource          | Sum of squares | df | Mean<br>squares | F      | Sig  | Eta<br>coefficient | Statistical power |
|-------------------|----------------|----|-----------------|--------|------|--------------------|-------------------|
| Modified<br>model | 7290.896a      | 2  | 3645.448        | 78.947 | .000 | .735               | 1.000             |

Table 3. Effect of pretest on effectiveness of results

| Intercept           | 216.482           | 1  | 216.482           | 4.688        | .035 | .076 | .567  |
|---------------------|-------------------|----|-------------------|--------------|------|------|-------|
| Cognitive           | 6021.296          | 1  | 6021.296          | 130.399      | .000 | .696 | 1.000 |
| flexibility         | 0021.290          | -  | 0021.290          | 150.577      | .000 | .070 | 1.000 |
| Group               | 2091.115          | 1  | 2091.115          | 45.286       | .000 | .443 | 1.000 |
| Error               | 2632.037          | 57 | 46.176            |              |      |      |       |
| Total               | 452308.000        | 60 |                   |              |      |      |       |
| Modified            | 3175.741a         | 2  | 1587.871          | 1839.895     | .000 | .985 | 1.000 |
| model               |                   |    |                   |              |      |      |       |
| Intercept           | 1.167             | 1  | 1.167             | 1.352        | .250 | .023 | .208  |
| Career              | 3175.741          | 1  | 3175.741          | 3679.789     | .000 | .985 | 1.000 |
| adjustment          |                   |    |                   |              |      |      |       |
| Group               | 32.729            | 1  | 32.729            | 37.924       | .000 | .400 | 1.000 |
| Error               | 49.192            | 57 | .863              |              |      |      |       |
| Total               | 5482.000          | 60 |                   |              |      |      |       |
| Modified            | 1437.035a         | 2  | 718.518           | 193.966      | .000 | .872 | 1.000 |
| model               |                   |    |                   |              |      |      |       |
| Intercept           | 4.824             | 1  | 4.824             | 1.302        | .259 | .022 | .202  |
| Emotional           | 1184.885          | 1  | 1184.885          | 319.863      | .000 | .849 | 1.000 |
| adjustment          |                   |    |                   |              |      |      | 1.000 |
| Group               | 307.199           | 1  | 307.199           | 82.929       | .000 | .593 | 1.000 |
| Error               | 211.148           | 57 | 3.704             |              |      |      |       |
| Total               | 14939.000         | 60 |                   |              |      |      |       |
| Modified            | 343.709a          | 2  | 171.855           | 18.259       | .000 | .390 | 1.000 |
| model               | 20.070            | 1  | 20.070            | 2 1 9 4      | 000  | 052  | 410   |
| Intercept<br>Health | 29.970<br>244.893 | 1  | 29.970<br>244.893 | 3.184 26.020 | .080 | .053 | .419  |
| adjustment          | 244.893           | 1  | 244.893           | 26.020       | .000 | .313 | .999  |
| Group               | 67.294            | 1  | 67.294            | 7.150        | .010 | .111 | .748  |
| Error               | 536.474           | 57 | 9.412             | 7.150        | .010 | .111 | .740  |
| Total               | 3587.000          | 60 | 9.412             |              |      |      |       |
| Modified            | 1256.051a         | 2  | 628.025           | 11.483       | .000 | .287 | .991  |
| model               | 1250.051a         | 2  | 028.025           | 11.465       | .000 | .207 | .991  |
| Intercept           | 249.341           | 1  | 249.341           | 4.559        | .037 | .074 | .555  |
| Adjustment          | 785.651           | 1  | 785.651           | 14.365       | .000 | .201 | .961  |
| at home             | 1001001           | -  | / 001001          | 1 110 00     |      | .201 |       |
| Group               | 453.844           | 1  | 453.844           | 8.298        | .006 | .127 | .808  |
| Error               | 3117.549          | 57 | 54.694            |              |      |      |       |
| Total               | 14204.000         | 60 |                   |              | l    |      |       |
| Modified            | 511.939a          | 2  | 255.970           | 13.903       | .000 | .328 | .998  |
| model               |                   |    |                   |              |      |      |       |
| Intercept           | 170.791           | 1  | 170.791           | 9.276        | .004 | .140 | .849  |
| Social              | 451.939           | 1  | 451.939           | 24.546       | .000 | .301 | .998  |
| adjustment          |                   |    |                   |              |      |      |       |
| Group               | 9.645             | 1  | 9.645             | .524         | .472 | .009 | .110  |
| Error               | 1049.461          | 57 | 18.412            |              |      |      |       |
| Total               | 15242.000         | 60 |                   |              |      |      |       |

Impact of acceptance and commitment-based therapy on emotional adjustment and cognitive flexibility

According to table 3, relevant data to flexibility and adjustment dimensions (health, home, career, and emotional) indicate that training intervention led to significant difference between test and control groups concerning pretest scores as smooth (auxiliary) variable (P<0.001). Table 4 demonstrates results of Levin test to examine equal variances presumption.

|                      |      | 1    |      |       |
|----------------------|------|------|------|-------|
| Variables            | Sig. | df 2 | df 1 | F     |
| Cognitive adjustment | .764 | 58   | 1    | .091  |
| Career adjustment    | .213 | 58   | 1    | 1.588 |
| Social adjustment    | .083 | 58   | 1    | 2.846 |
| Emotional adjustment | .090 | 58   | 1    | 2.461 |
| Health adjustment    | .075 | 58   | 1    | 3.283 |
| Adjustment at home   | .123 | 58   | 1    | 2.450 |

Table 4. Levin test in terms of equal variances

According to table 4, the results of the Levin test for 6 variables obtained above the assessment value of 0.05. In other words, there is not any significant difference between variances of groups; hence, the presumption of the equal variance of dependent variables was observed for multivariate ANOVA. Results obtained from two-way MANOVA are indicated in table 5.

Table 5. MANOVA test for different research variables between two test and control groups

|       |                          | Statistical power | Eta<br>coefficient | Sig. | df<br>error | df    | F       | Value |
|-------|--------------------------|-------------------|--------------------|------|-------------|-------|---------|-------|
| Group | Pillai's<br>Trace        | 1.000             | .764               | .000 | 47.000      | 6.000 | 25.338a | .764  |
| Group | Wilks'<br>Lambd<br>a     | 1.000             | .764               | .000 | 47.000      | 6.000 | 25.338a | .236  |
|       | Hotellin<br>g's<br>Trace | 1.000             | .764               | .000 | 47.000      | 6.000 | 25.338a | 3.235 |

|         | Roy's<br>Largest<br>Root | 1.000  | .764 | .000 | 47.000 | 6.000 | 25.338a | 3.235 |
|---------|--------------------------|--------|------|------|--------|-------|---------|-------|
|         | Pillai's<br>Trace        | 12.551 | .211 | .072 | 47.000 | 6.000 | 2.092a  | .211  |
| Pretest | Wilks'<br>Lambd<br>a     | 12.551 | .211 | .072 | 47.000 | 6.000 | 2.092a  | .789  |
|         | Hotellin<br>g's<br>Trace | 12.551 | .211 | .072 | 47.000 | 6.000 | 2.092a  | .267  |
|         | Roy's<br>Largest<br>Root | 12.551 | .211 | .072 | 47.000 | 6.000 | 2.092a  | .267  |

According to table 5, results obtained from the MANOVA test showed a significant difference between two groups considering 6 dependent variables (P<0.05); this difference is about 74%. It means that 74% of variances or personal differences between these 6 variables are related to the difference between the two groups. Statistical power obtained to 100%; it means that the null hypothesis will not be accepted wrongly. In other words, ACT has an impact on emotional adjustment and cognitive flexibility in middle-aged depressed women. According to table 5, the effect of pretest was not significant.

#### **5. DISCUSSION AND CONCLUSION**

The obtained results showed the impact of ACT on emotional adjustment and cognitive flexibility in middle-aged depressed

women MANOVA was used in this research and the results showed a significant difference between the two test and control groups (P<0.05); this difference was about 74%. It means that 74% of variances or differences are related to the training course. Therefore, it can be stated that acceptance and commitment-based therapy had an impact on emotional adjustment and cognitive flexibility in middle-aged depressed women. It can be explained about this finding that since ACT aims at creating a meaningful and perfect life by accepting pains occurring in life in order to teach psychological skills to the person to tolerate painful thoughts and feelings effectively. In this regard, painful feelings have minimal influence and effect due to mindfulness skills. Results obtained from this hypothesis were in line with a study conducted by Mohammadi (2015) who examined the effect of ACT on marital satisfaction, cognitive flexibility, and quality of life of depressed women who had marital conflicts. The mentioned research showed a considerably significant effect of ACT on marital satisfaction, quality of life and cognitive flexibility.

It can be explained about the impact of ACT on emotional adjustment in middle-aged depressed women that housewives and employed women have lower adjustment and flexibility due to numerous concerns, issues and problems rooted in the gap between them and new generation. Moreover, women who are family heads are responsible for the economic conditions of the family besides

other problems. Middle-aged women face a challenge when dealing with life problems matching themselves with the new environment and various demands and expectations of children; such women may deal with environment and children using their own educational, cultural and social attitudes. In this regard, ACT makes the person aware of psychological flexibility. In this therapy, psychological flexibility is an action based on a new method to meet new expectations of the environment. Flexibility means changing previous strategies in some field and continuing some behaviors in other fields. When individuals can satisfy expectations of a valuable orientation that has currently contacted with it, they have not been flexible obviously. However, when a person deals with similar problems using previous responses without having a valuable orientation, such action can be named as flexible behavior. Moreover, it can be explained about the impact of ACT on cognitive flexibility of middle-aged depressed women that thoughts will be under the influence of negative conditions in depressive situations in which, the woman not only sees the world dark but also gradually believes that the condition is as bad as she thinks.

ACT was designed to encounter with linguistic barriers including past thoughts, feelings, memories and experiences of a person as inner self-description that is usually negative; in this case, person prevents from achieving her goals in a meaningful life by her words. It can be explained about impact of ACT on adjustment at home in middle-aged depressed women that such woman faces challenges when coping with life problem so that she has to match herself with new environment and children who have various demands and expectations or deal with the environment or children using her own educational, cultural and social attitude. Naturally, these differences and different expectations, as well as disagreements with new generation and adjustment with changing society, can affect their adjustment and flexibility so that reduction in these two factors may cause mood and anxious diseases. Acceptance is an alternative for avoidance and control in the ACT. According to this therapeutic method, the concept of acceptance does not point to a mental belief or mode but it relates to the behavior of active and consent acceptance of personal events without any attempt to change their form or frequency. It means that the person does not try to change nature of personal incident, but change occurs when the person tends to experience both negative and positive events since negative and disappointing events are inevitable. In this case, experiences are accepted instead of being avoided. It can be explained about the impact of ACT on health adjustment of middle-aged depressed women that ACT helps a person to find what in important and significant for her. It means that this

therapy clarifies values using this information to direct, inspire and stimulate a person to choose objective and do actions regarding a meaningful life. Hence, it can be stated that health adjustment can be done to choose objective and make life meaningful. It can be explained about the impact of ACT on emotional adjustment in middle-aged depressed women that one of the prominent goals of ACT is coping with experience avoidance, control and sympathy. It means that the person always avoids facing negative experiences or tries to control or cope with them. However, we know that there is not any life without negative experience, memories, thoughts or feelings.

According to the ACT theory, the more the person tries to avoid such experiences, the more the person experience disease and disorder. The substantial goal of this therapy is to teach individuals to accept life with its different problems, difficulties, negative experiences and emotions despite avoiding and controlling them. In this case, acceptance does not mean passiveness or retreat but it means accepting the point that mental health and through comfort is obtained if individuals do not struggle with their negative memories, emotions and thoughts accepting that they cannot control all of the life issues. It can be explained about the impact of ACT on career adjustment of middle-aged depressed women that the null hypothesis is rejected and the hypothesis of the effectiveness of ACT in career adjustment of middle-aged depressed women is admitted. It can be explained that although ACT is behavioral therapy, also it covers cognitive processes; hence, it is a cognitive approach based on behavioral thinking. In the opinion of creators of this therapy, some of the cognitive-behavioral therapies are in line with ACT. Accordingly, the therapist is responsible to change the form of the thought when tackling with an inefficient thought as if a computer is changed by replacing memory chips or software. Therefore, changing thoughts of women convincing them to accept life as it leads to job satisfaction. Finally, it can be explained about the impact of ACT on social adjustment of middle-aged depressed women that excessive responsibility in workplace or home, separation from husband, taking responsibility of children alone, looking after parents or children are some pressures that influence on women. Moreover, acceptance in ACT does not mean accepting annoying emotions and experiences or bearing them or resisting against them, but it is defined as a tendency to experience unpleasant events.

## REFERENCES

ABDILLAH, N. 2019. A future teacher trend: a sociological study on freedom writer's movie.

Humanities & Social Sciences Reviews. Vol. 7,  $N^{\circ}$  3: 306-314. India.

- BERK, L. 2007. Growth Psychology, Yahya Seyyed Mohammadi. Arasbaran Pub. Tehran, Iran.
- ETEHADIEH, S. 2016. Comparing effect of ACT group therapy with emotion-based group therapy on attachment harm and cognitive flexibility in infertile women. MSc dissertation. Ferdowsi University of Mashhad. Iran.
- FARJAD, M. 2005. Facing with behavioral problems and disorders in family. Doran Pub. Iran.
- FATHI, A. 2009. Psychological test (evaluation of personality and mental health). Besaat Pub. Iran.
- FAZELI, M., EHTESHAMZADEH, P., & HASHEMI, I. 2014. Effect of behavioral cognitive behavioral therapy on cognitive flexibility of depressed patients. N° 34, Pp. 27-36. Iran.
- HAYES, S., & STROSHAL, C. 2004. Practical guideline of ACT, Translated by Ibrahim Alizadeh Moosavi and Fatemeh Chir Javid. Tehran, Faraangizash Pub. Iran.
- HAYES, S., LUOMA, J., BOND F., & LILLI, S. 2006. Acceptance and Commitment therapy: model. Behavior. Netherlands.
- IMAMIAN, A., & LATIFI, Z. 2015. Effect of ACT with spirituality-based therapy on psychological wellbeing of women with COD, First International Conference on Psychology and Educational

**Sciences, Shiraz**. Higher Institution of Sciences and Technology of Hakim Orfi, Shiraz. Iran.

- JAHANGIRI, M. 2016. Effectiveness of ACT in mental flexibility and rumination of methadone-treated addicts, Razi University. First Congress on Third Wave of Psychological Therapies. USA.
- MOHAMMADI, E. 2015. Effectiveness of ACT in marital satisfaction, psychological flexibility and quality of life of depressed women with marital conflicts, Islamic Azad University Central Tehran Branch. Journal of Clinical Psychology. Vol. 7, N° 25. USA.
- MOHAMMADI, E., KESHAVARZI, F., FARZAD, V., & SALEHI, M. 2016. Impact of ACT on marital satisfaction of depressed women. Knowledge and Research in Applied Psychology. Vol. 17, N° 2: 26-35. Iran.
- MURNAT, G. 2007. Psychological assessment guideline, translated by Hasan Pashasharifi and Mohammadreza Nikkhoo. Sokhan Pub. Iran.
- NARIMANI, M., & ABBASI, M. 2013. Effectiveness of ACT with emotion regulation on adjustment of students with math disorder, Mohaghegh Ardabili University. Journal of Learning Inabilities. Vol. 2, N° 4. USA.
- POORKAZEM, M., FARIDNEY, F., & EHGHI, N. 2018. Effectiveness of ACT in increasing psychological wellbeing of transsexual individuals. Psychological and Psychiatric Journal of Cognition, fifth year. N<sup>o</sup> 1. P. 32. UK.

- SADOK, J. 2015. **Psychological summary of behavioral** sciences-clinical psychiatry. Translated by Farzin Rezaee. Tehran, Arjmand Pub. Iran.
- SHAHSAVARI, M. 2003. Study of the relation between inner interactions in family and growth of ethical judgment and adjustment of first grade high school boys in Arak. MSc, Tarbiat Moalem University. Pp. 30-34. Iran.



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