The Effectiveness of Compassion-based Acceptance and Commitment Group Therapy on Adjustment and Happiness in Patients with Major Depression Disorder

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ABSTRACT: The aim of this study was exploring the effectiveness of compassion-based acceptance and commitment group therapy on adjustment and happiness in patients with major depression disorder. The research method was quasi-experimental with pre-test-post-test, with control group and follow-up. The sample was selected randomly from patients with major depression disorder in Jam city, Pardis and Naft towns, and randomly assigned into experimental and control groups. Compassion-based Acceptance and Commitment Group Therapy was performed for the experimental group, but the control groups did not receive any specific intervention. The research instruments included Sohrabi and Samani (2011) adjustment questionnaire and Argil (2001) happiness scale. The results of analysis of covariance (ANCOVA) with repeated measures showed that intervention increased adjustment in the experimental group, so that intervention in the second stage increased the adjustment compared to the first stage, this is while there was not difference between second and third stages. So it can be said that the treatment in patients with major depression disorder was more effective in the post test. Also, the intervention increased happiness in the experimental group, so that intervention in the posttest increased the happiness compared to the pretest, this is while there was not difference between posttest and follow up. So it can be said that the treatment in patients with major depression disorder was more effective in the post test.

Keywords: Acceptance and commitment therapy, compassion therapy, adjustment, happiness.

Introduction

Depression is one of the most common mental health problems in the world. According to the latest edition of the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders, major depressive disorder is one of the categories of mental disorders, which is accompanied by changes in emotion, cognition, and biological neural functions that occur over a two-week period, and there is also depression, apathy, or a lack of pleasure in almost all activities. The person also expresses at least a few other symptoms, including changes in appetite or weight, sleep and motor-motor activities, loss of strength, feelings of worthlessness or guilt, difficulty thinking, lack of focus in decision-making, sadness, emptiness or irritability, physical and cognitive changes, and recurrent thoughts about death and suicide (Zohourian, 2016). This disorder is currently the third leading cause of disability in the world and one of the most common debilitating and recurrent psychological disorders (Arslan et al., 2018) that has several effects on various aspects of life. It can also be a progressive factor for other disorders and disorders related to suicide risk (Asola & Sanderson, 2019) that is associated with many problems including social problems, negative life events and substance abuse (Hassani & Ariana Kia, 2016).
According to research evidence, it seems that one of the most important and effective indicators in major depressive disorder is adjustment. Adjustment plays an important role in improving people's lives and health, and helps meeting environmental needs by increasing their ability to control impulses, emotions, or attitudes. If for any reason, the flow of adjustment is disrupted, maladaptive behaviors or behavioral disorders occur (Horwood, Allan, Goss, & Gilbert, 2020) and if adjustment increases, happiness as one of the most important human psychological needs and a positive emotion, a profound effect on the structure and it will have human physical, cognitive and psychological functions (Ludwigs, Henning, & Arends, 2019).

In the society, between 5% to 20% of people with adaptive disabilities are people suffering from depressive disorder, which is caused by personality and mental disorders or acquired inappropriate behaviors (Asola & Sanderson, 2019). Adjustment refers to the relationship that exists between the individual and his environment, especially the social and family environment, and allows him/her to respond to his/her needs and motivations (Aghavousafy, Zare, & Porbafrany, 2015). Man as a social being has always sought to acquire skills to communicate with others in order to achieve adjustment to the environment. Adjustment is defined as the ability of an individual to adapt to the environment and has various dimensions, including social, family, emotional, health, educational, etc. (Barnes, Mondelli, & Pariante, 2017). Adjustment is an innate psychological tendency to cope with life's challenges and is seen as a dynamic flow that refers to a person's response to the environment and the changes that occur in it (Park & Zarate Jr, 2019). Adjustment is a more or less conscious process by which an individual adapts to a natural or cultural social environment. This adjustment requires the individual to change himself/herself or to actively make changes in the environment, resulting in the necessary coordination between the individual and the environment. Chaplin (Bullock et al., 2018) also sees adjustment as a change in activities in order to overcome obstacles and satisfy one's needs. Lazarus (Bullock et al., 2018) sees adjustment as cognitive-behavioral strategies for coping with life situations, in order to manage stress and identify debilitating factors in those situations.

Another psychological problem of depressed people is their low happiness. Happiness is one of the basic emotions and one of the most important psychological needs of human beings. Happiness includes several mental concepts such as happiness, contentment, pleasure and pleasure, but it does not mean unfounded optimism and self-deception, denial of facts and not seeing the problems of oneself and others. Happiness and cheerfulness as two most important psychological needs of human beings, because of their major effects on the formation of human personality and the whole human life, have always occupied the human mind (Ludwigs et al., 2019). Psychologists consider happiness to be a kind of "positive emotion" that has a profound effect on the structure and functions of the body, cognition and psychology, and improves human performance in a variety of contexts (Wilkinson & Chilton, 2017). Happiness is not the opposite of depression, but the absence of depression is a necessary reason for achieving happiness. Happiness has three basic components: positive emotion, life satisfaction and the absence of negative emotions such as depression (Gottlieb & Froh, 2019). Happy people are those who
tend to be optimistic and happy in information processing, that is, they process and interpret information in a way that leads to their happiness (Lauriola & Iani, 2015).

On the other hand, compassion for oneself is a positive mental state and one of the theoretical constructs that can mediate the results of intervention based on mindfulness. Compassion is a healthy form of self-acceptance that expresses the degree of acceptance and recognition of undesirable aspects of oneself and life (Horwood, 2019). Compassion is defined as being open and accompanying one's sufferings, experiencing a sense of care and kindness towards oneself, adopting an intolerant attitude, and understanding one's own inadequacies and failures, and recognizing that one's experience is part of the human experience (Sun et al., 2019). In the last decade, research on the beneficial effects of compassion cultivation has progressed tremendously and the inner cultivation of compassion has become an important focus and therapeutic goal, so that today, self-compassion is considered as a way to reduce mental disorders by many researchers (Stefan & Hofmann, 2019). Every intervention that is used in compassion-focused treatment is accompanied by approval, support and kindness (Hosseinzadeh Meybodi, Masoudi, & Nikkhah, 2017). On the other hand, acceptance and commitment therapy is a revolutionary breakthrough in psychology that seems to have a significant impact on the treatment of anxiety and depression. The principles of acceptance and commitment therapy can be applied to a wide range of human problems. Acceptance and commitment therapy is the third wave of cognitive-behavioral therapies that increases psychological flexibility and promotes mental health in patients (Hamidi & Dehghani Cham Piri, 2016). Third wave therapies try to increase a person's psychological connection with his/her thoughts and feelings instead of changing cognitions. (full form of act?????) ACT is an awareness-based behavioral therapy that has been shown to be effective in treating a wide range of clinical conditions. In fact, the goal of commitment-based therapy is to create a rich and meaningful life while one accepts the inevitable suffering and prepares and commits to live with it (Harris, 2019). Few studies have examined the effectiveness of compassion-based acceptance and commitment group therapy on cognitive regulation of positive emotions and happiness in patients with depressive disorder. For example, Saeedi (2019) in his research entitled ‘Assessing the effectiveness of commitment-based therapy and acceptance on social and emotional adjustment of mothers of children with mental and physical disabilities’ showed that commitment and acceptance therapy is effective on social and emotional adjustment of mothers. Rahimzadegan, Fattahi Hosseinabadi, and Khalili Tajreh (2019) in a study investigated the effect of happiness education on depression and suicidal ideation in students. The results showed that the rate of depression and suicidal tendencies are significantly different between the experimental and control groups. Ansari (2018) in his study entitled ‘The effectiveness of acceptance and commitment therapy on mental flexibility, cognitive regulation of emotion and mental adjustment in people with stuttering’ showed that treatment based on acceptance and commitment is effective in improving speech improvement in patients with stuttering. Manshae and Hoseini (2018) in a study entitled ‘The effectiveness of child-centered mindfulness training on social adjustment and depressive symptoms in children with depressive disorder’ showed that child-centered mindfulness training has an effect on social adjustment and depressive symptoms in children with depressive
disorder. Aghaei (2017) in their study entitled ‘The effectiveness of commitment-based therapy on social adjustment and compassion’ concluded that training on acceptance-based therapy increases social adjustment and self-compassion in the experimental group compared to control group. Saadati, Rostami, and Darbani (2021) in their study entitled ‘Comparison of the effectiveness of acceptance-based therapy and compassion-based therapy in boosting self-esteem and adjustment’ concluded that acceptance-based therapy and compassion-focused therapy improve adjustment after divorce and self-esteem. Sarikhani and Alizadeh Mousavi (2014) investigated the effect of acceptance and commitment treatment on the happiness of the elderly living in Gorgan nursing home. The results showed that acceptance and commitment based therapy is effective on the happiness of the elderly people. In their research, Howell and Passmore (2019) systematically examined the role of commitment-based therapy education and acceptance as a positive psychological intervention in promoting happiness in students. The results showed that there is preliminary evidence for the role of acceptance and commitment as a positive psychological intervention in students' happiness. Montero-Marín et al. (2019) investigated the effectiveness of compassion-based therapy, attachment and stress reduction, and mindfulness-based therapy on depressive, anxiety, and adjustment disorders. The results showed that compassion-based therapy is very effective in reducing the symptoms of depressive disorders, anxiety and adjustment.

Considering the importance and role of acceptance and commitment group therapy in patients with depressive disorder, the present study aimed to evaluate the effectiveness of compassion-based acceptance and commitment group therapy on adjustment and happiness in patients with major depression disorder.

**Material and Methods**

This study was of a quasi-experimental type with pre-test, post-test, followup and control group. 16 participants were randomly assigned to experimental and control groups. In the experimental group, the compassion-based acceptance and commitment group therapy was executed, but the control groups did not receive any specific intervention.

The statistical population of the present study included all patients with major depressive disorder aged 25 to 50 years in Jam, Siraf, Kangan, Assaluyeh, Pardis and Naft Jam towns who referred to Baran Jam Psychology and Rehabilitation Clinic (Health office of Oil Industry). The sample size in the present study included 16 patients with major depressive disorder who were selected by purposive sampling method and randomly assigned to experimental and control groups. Inclusion criteria were: 1. Age group of 25 to 50 years old, 2. Patients with major depressive disorder diagnosed by a psychiatrist, and 3. Not receiving shock therapy 3 months before the intervention. Criteria for excluding the subjects from the study were: 1. Failure to complete the questionnaires, 2. Absence for more than 2 sessions, 3. Lack of interest in continuing to participate in the intervention, 4. Committing suicide at the time of the intervention, 5. Suffering from depressive disorder due to organic causes, and 6. Being diagnosed by a psychiatrist as having a history of psychiatric illness, including personality disorders and substance
abuse. In order to comply with the research ethics, informed consent was taken from the participants before the start of the study. To collect data, the following two questionnaires were used.

**Oxford Happiness Inventory:** The Oxford Happiness Inventory (OHI) is one of the well-known self-assessment tools that has been used in most of the studies related to happiness (Liaghatdar, Jafari, Abedi, & Samiee, 2008). The scale has 29 items and is based on the views of Hills and Argyle (2002) on feelings of happiness. The reliability of the questionnaire in Iran was reported by Dehshiri, Akbari Balootbangan, Najafi, and Moghadamzadeh (2016) through Cronbach's alpha calculation, 0.71. The reliability of this scale in the present study was calculated to be 0.72.

**Sohrabi and Samani Adjustment Questionnaire:** This is a 15-item questionnaire which has been developed by Sohrabi and Samani (2011) in five factors including 1. Personal, 2. Social, 3. Educational, 4. Occupational, and 5. Family in the 8-point Likert scale from never (0) to very severe (8). Based on previous studies, the reliability coefficient of the adjustment questionnaire was obtained by calculating Cronbach's alpha of 0.76. The reliability of this scale in the present study was calculated to be 0.74.

**Content of Compassion Based Acceptance and Commitment Group Therapy:** Content of this Protocol was developed based on the Summary and Integration of the Depression Strategy Handbook (Kumar, Feldman, & Hayes, 2008). After being adapted to the cultural context, the format of the sessions and its content validity were approved. Then, it was performed on the experimental group by consulting psychologists familiar with third wave therapies (supervisor and consultant). Therapeutic intervention was performed in the group form in 8 training sessions of 90 minutes (once a week) for the experimental group. At the end of the intervention, intensive sessions were conducted along with the preparation of a brochure for the control group. The content of the sessions is as follows:

- **Session 1:** Pre-test. Familiarity with members and introduction of treatment methods and treatment contracts.
- **Session 2:** Review of values, clarification of values, and goals. Introducing self-compassion and self-criticism and how it affects a person's mental states.
- **Session 3:** Defusion, human commonalities versus self-destructive emotions.
- **Session 4:** Mindfulness and presence in the moment, your unconditional acceptance.
- **Session 5:** See yourself, yourself as a context. Compassionate correspondence.
- **Session 6:** Accepting compassionate correspondence, accepting yourself unconditionally.
- **Session 7:** Commitment, unconditional acceptance.
- **Session 8:** Summarizing the concepts discussed in the sessions, running the posttest

**Results**

Descriptive findings of the adjustment components are presented in Table 1.
Table 1. Descriptive findings of adjustment components in the experimental and control groups

| Variable            | Group    | Mean   | Std. Error | Confidence interval .95 % |
|---------------------|----------|--------|------------|---------------------------|
|                     |          |        |            | Low limit                 | High limit   |
| Personal adjustment | Control  | 7.29   | .450       | 6.327                     | 8.256        |
|                     | Experimental | 8.958 | .450       | 7.994                     | 9.923        |
| Social adjustment   | Control  | 9.00   | .292       | 8.374                     | 9.626        |
|                     | Experimental | 10.833 | .292       | 10.207                    | 11.460       |
| Educational adjustment | Control  | 8.958 | .576       | 7.722                     | 10.194       |
|                     | Experimental | 10.792 | .576       | 9.556                     | 12.028       |
| Occupational adjustment | Control  | 6.875 | .343       | 6.139                     | 7.611        |
|                     | Experimental | 9.042 | .343       | 8.306                     | 9.778        |
| Family adjustment   | Control  | 7.875  | .477       | 6.851                     | 8.899        |
|                     | Experimental | 10.542 | .477       | 9.518                     | 11.566       |

The results of Table 1 show that the adjustment components in the experimental group have a higher mean. Table 2 shows the significant differences between the two groups in the adjustment components (p < .05).

Table 2. Comparison of control and experimental groups in adjustment components

| Variable            | Group    | Difference | Std. Error | p     | Confidence interval .95 % |
|---------------------|----------|------------|------------|-------|---------------------------|
|                     |          |            |            |       | Low limit                 | High limit   |
| Personal adjustment | Control  | -1.667     | .636       | .020  | -3.030                    | -.303        |
|                     | Experimental | 1.667     | .636       | .020  | .303                      | 3.030        |
| Social adjustment   | Control  | -1.833     | .413       | .001  | -2.719                    | -.947        |
|                     | Experimental | 1.833     | .413       | .001  | .947                      | 2.719        |
| Educational adjustment | Control  | -1.833     | .815       | .041  | -3.581                    | -.085        |
|                     | Experimental | 1.833     | .815       | .041  | .085                      | 3.581        |
| Occupational adjustment | Control  | -2.167     | .485       | .001  | -3.208                    | -1.126       |
|                     | Experimental | 2.167     | .485       | .001  | 1.126                     | 3.208        |
| Family adjustment   | Control  | -2.667     | .675       | .001  | -4.115                    | -1.219       |
|                     | Experimental | 2.667     | .675       | .001  | 1.219                     | 4.115        |

Descriptive findings of the happiness components are presented in Table 3.

Table 3. Descriptive findings of happiness components in the experimental and control groups

| Variable            | Group    | Mean   | Std. error | Confidence interval .95 % |
|---------------------|----------|--------|------------|---------------------------|
|                     |          |        |            | Low limit                 | High limit   |
| Self concept        | Control  | 11.917 | .534       | 10.771                    | 13.062       |
|                     | Experimental | 14.792 | .534       | 13.646                    | 15.937       |
| Satisfaction with life | Control  | 7.375 | .307       | 6.717                     | 8.033        |
|                     | Experimental | 10.000 | .307       | 9.342                     | 10.658       |
| Psychological readiness | Control  | 5.292 | .255       | 4.744                     | 5.839        |
|                     | Experimental | 6.708 | .255       | 6.161                     | 7.256        |
| Pleasant            | Control  | 4.833  | .264       | 4.268                     | 5.399        |
|                     | Experimental | 6.667 | .264       | 6.101                     | 7.232        |
| Aesthetic feeling   | Control  | 6.500  | .256       | 5.952                     | 7.048        |
|                     | Experimental | 9.458 | .256       | 8.910                     | 10.007       |
| Self - Efficacy     | Control  | 7.625  | .254       | 7.081                     | 8.169        |
|                     | Experimental | 10.000 | .254       | 9.456                     | 10.544       |
| Hope                | Control  | 3.667  | .235       | 3.162                     | 4.172        |
|                     | Experimental | 5.792 | .235       | 5.287                     | 6.297        |
The results of Table 3 show that the happiness components in the experimental group have a higher mean. Table 4 shows the significant differences between the two groups in the happiness components (p < .05).

Table 4. Comparison of control and experimental groups in happiness components

| Variable            | Group | Difference | Std. error | p    | Confidence interval .95 % |
|---------------------|-------|------------|------------|------|--------------------------|
|                     |       |            |            |      | Low limit                | 95 %                |
|                     |       |            |            |      |                          |                    |
| Self concept        | Control | -2.875*    | .755       | .002 | -4.495                  | -1.255              |
|                     | Experimental | 2.875*    | .755       | .002 | 1.255                   | 4.495               |
| Satisfaction with life | Control | -2.625*    | .434       | .000 | -3.556                  | -1.694              |
|                     | Experimental | 2.625*    | .434       | .000 | 1.694                   | 3.556               |
| Psychological readiness | Control | -1.417*    | .361       | .002 | -2.191                  | -.642               |
|                     | Experimental | 1.417*    | .361       | .002 | .642                    | 2.191               |
| Pleasant            | Control | -1.833*    | .373       | .000 | -2.633                  | -1.034              |
|                     | Experimental | 1.833*    | .373       | .000 | 1.034                   | 2.633               |
| Aesthetic feeling   | Control | -2.958*    | .362       | .000 | -3.734                  | -2.183              |
|                     | Experimental | 2.958*    | .362       | .000 | 2.183                   | 3.734               |
| Self - Efficacy     | Control | -2.375*    | .359       | .000 | -3.144                  | -1.606              |
|                     | Experimental | 2.375*    | .359       | .000 | 1.606                   | 3.144               |
| Hope                | Control | -2.125*    | .333       | .000 | -2.839                  | -1.411              |
|                     | Experimental | 2.125*    | .333       | .000 | 1.411                   | 2.839               |

Discussion

The aim of this study was investigating the effectiveness of group therapy based on acceptance and commitment with a view to compassion therapy in the adjustment and happiness of patients with major depressive disorder. The results of analysis of covariance with repeated measures showed that intervention increased adjustment in the experimental group and its effectiveness remained until the follow-up stage. Our results are in line with the results of Aghaei (2017), Ansari (2018), Howell and Passmore (2019), Manshaee and Hoseini (2018), Montero-Marín et al. (2019), Rahimzadegan et al. (2019), Saadati et al. (2021), Saeedi (2019) and Sarikhani and Alizadeh Mousavi (2014). Acceptance and commitment therapy based on compassion increase cognitive emotion regulation (adjustment) in patients with major depressive disorder. These people often do not like being in the community and enjoy being alone more. They are often lonely and isolated due to incompatibility and inability to adapt to the environment. Depressed people are more inclined to be alone due to lack of interest and enjoyment of many daily activities, and inability to communicate. In the society, between 5 to 20% of people with adaptive disabilities are people with depression. Adjustment means the ability of an individual to adapt to the environment and has various dimensions such as social, family, emotional, health, educational and .... On the other hand, adjustment to the environment is necessary for patients with depressive disorder, and without adaptation, they are severely rejected by society and their social interactions are at their lowest level. The basis of adjustment is to create a balance between patients' desires and community expectations that can affect all aspects of their lives (Hamidi & Dehghani Cham Piri, 2016).
On the other hand, today we live in a world where we need more personal and social flexibility and adjustment than ever before. This is due to the many changes and challenges created by the advancement of technology and the expansion of modern life. In such situations, having adjustment and flexibility can play an important role in improving the health and well-being of patients. The principles of acceptance and commitment therapy can be applied to a wide range of patient problems (irrelevant to discussion!!!!!!!). This treatment creates psychological flexibility that helps depressed patients change their acceptance of thoughts, beliefs, feelings and sensory and physical perceptions and life in the present. Acceptance and commitment therapy with mindfulness, acceptance and cognitive skills is used to increase psychological flexibility, acceptance, and communication with the present encourage patients to commit to behavioral change.

On the other hand, compassion therapy focuses on components such as shame and self-criticism and increases compassion for oneself. The active system in the brain leads to a change from the system of threat which is the source of difficult and painful emotions to the self-protection system of calming, satisfaction and hope, and thus, by practicing the mentioned techniques, the body is released from the state of defensive reactions to higher level of adjustment. People with the characteristic of self-sufficiency as a result of experiencing failure do not isolate themselves, but accept that events and problems are part of the human experience. Acceptance and commitment therapy, through the processes of acceptance, accept the contents of their mind and through mindfulness exercises, change and modify the person's relationship with thoughts and cultivating a compassionate mind strengthens (Howell & Passmore, 2019).

Another part of the findings indicated that acceptance and commitment therapy increased happiness in the experimental group, and this effectiveness maintained until the follow-up stage. The findings are consistent with the results of Rahimzadegan et al. (2019), and Sarikhani and Alizadeh Mousavi (2014). Researchers say that acceptance and commitment therapy increases cognitive emotion regulation (adjustment) in patients with major depressive disorder. Explaining this, it should be said that another psychological problem of people with major depressive disorder is low levels of happiness. Research has shown that people with higher levels of happiness are better prepared and better able to cope with life's troubles. Happiness as a coping mechanism by creating positive thoughts prevents negative thoughts. Consequently, happiness is effective in psychological and physical well-being and is one of the variables that is involved in the life quality and reduction of depressive symptoms (Wilkinson & Chilton, 2017). Commitment and acceptance therapy helps patients with major depressive disorder achieve a lively, purposeful, and meaningful life (happiness). Acceptance and Commitment Therapy helps patients with major depressive disorder to achieve psychological skills through the six processes of Acceptance, Cognitive Defusion, Contacting the Present Moment, Self as Context, Values, and Committed Action. The first three processes are described as acceptance and mindfulness skills and the other three processes are described as behavior change skills (Plieger, Melchers, Montag, Meermann, & Reuter, 2015). The main advantage of acceptance and commitment therapy is to consider the
motivational aspects along with the cognitive aspects, in order to increase the effectiveness and continuity of the treatment.

The integrated intervention used in this study accelerates admission and teaches patients the processes of communication with the present moment and commitment to action.

Due to the fact that the participants in this study were patients with major depressive disorder, the generalization of its results to people with other disorders or normal people is limited. Also, generalization of research results to other cities should be done with caution. Moreover, the disadvantages of using self-report questionnaires and the bias of participants’ answers should be considered in generalizing the results.

Based on the findings of the present study, it is suggested that those involved in developing training courses in psychotherapy centers develop courses so that patients with major depressive disorder have a more desirable ability to cognitively regulate their emotions. Also, these interventions for all people can lead to awareness and knowledge of people about emotions and increase their adjustment and happiness.

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References
Aghaei, Y. (2017). The effectiveness of commitment and acceptance therapy on social adjustment and compassion. (MA), Islamic Azad University Shahrood.
Aghayousafy, A., Zare, H., & Porbafrany, S. (2015). A Study of Relationship between Egocentrism and Social Adjustment. Social Cognition, 3(s1), 141-152.
Ansari, H. (2018). The effectiveness of acceptance and commitment therapy on mental flexibility and emotion regulation and mental adjustment in people with stuttering. The Journal Of New Advances In Behavioral Sciences, 3(26), 83-98.
Arslan, S., Ktena, S. I., Makropoulos, A., Robinson, E. C., Rueckert, D., & Parisot, S. (2018). Human brain mapping: A systematic comparison of parcellation methods for the human cerebral cortex. Neuroimage, 170, 5-30.
Asola, E., & Sanderson, S. (2019). OPTIMIZING THE PHYSICAL AND MENTAL HEALTH OF YOUNG CHILDREN WITH AND WITHOUT EXCEPTIONALITIES. Educating Young Children With and Without Exceptionalities: New Perspectives, 105.
Barnes, J., Mondelli, V., & Pariante, C. M. (2017). Genetic contributions of inflammation to depression. Neuropsychopharmacology, 42(1), 81-98.
Bullock, A., Liu, J., Cheah, C. S., Coplan, R. J., Chen, X., & Li, D. (2018). The role of adolescents’ perceived parental psychological control in the links between shyness and socio-emotional adjustment among youth. *Journal of Adolescence, 68*, 117-126.

Dehshiri, G. R., Akbari Balootbangan, A., Najafi, M., & Moghadamzadeh, A. (2016). Psychometric properties of the Oxford Happiness Questionnaire short form in university students. *Journal of Educational Measurement and Evaluation Studies, 5*(12), 9-26.

Gottlieb, R., & Froh, J. (2019). Gratitude and happiness in adolescents: A qualitative analysis. In *Scientific concepts behind happiness, kindness, and empathy in contemporary society* (pp. 1-19): IGI Global.

Hamidi, P., & Dehghani Cham Piri, A. (2016). *The Effectiveness of Acceptance and Commitment Therapy (ACT) on Depression and Parenting Practices of Married Women with Depressive Disorder*. Paper presented at the First International Conference on Psychology and Social Sciences, Tehran.

Harris, R. (2019). *ACT made simple: An easy-to-read primer on acceptance and commitment therapy*: New Harbinger Publications.

Hassani, J., & Ariana Kia, E. (2016). Cognitive Emotion Regulation Strategies, Anxiety and Impulsivity in Bipolar Disorder with and without Comorbid Obsessive-Compulsive Disorder. *Iranian Journal of Psychiatry and Clinical Psychology, 22*(1), 39-49.

Hills, P., & Argyle, M. (2002). The Oxford Happiness Questionnaire: a compact scale for the measurement of psychological well-being. *Personality and Individual Differences, 33*(7), 1073-1082.

Harris, R., Alle, S., Goss, K., & Gilbert, P. (2020). The development of the compassed focused therapy therapist competence rating scale. *Psychology and Psychotherapy: Theory, Research and Practice, 93*(2), 387-407.

Hosseinzadeh Meybodi, F., Masoudi, S., & Nikkhah, K. (2017). *The effectiveness of emotional intelligence training on depression, emotional adjustment of patients with multiple sclerosis*. Paper presented at the Fifth Scientific Conference on Educational Sciences and Psychology, Social and Cultural Trauma of Iran, Tehran.

Howell, A. J., & Passmore, H.-A. (2019). Acceptance and commitment training (ACT) as a positive psychological intervention: A systematic review and initial meta-analysis regarding ACT’s role in well-being promotion among university students. *Journal of Happiness Studies, 20*(6), 1995-2010.

Kumar, S., Feldman, G., & Hayes, A. (2008). Changes in mindfulness and emotion regulation in an exposure-based cognitive therapy for depression. *Cognitive Therapy and Research, 32*(6), 734-744.

Lauriola, M., & Iani, L. (2015). Does positivity mediate the relation of extraversion and neuroticism with subjective happiness? *PloS one, 10*(3), e0121991.

Liaghatdar, M. J., Jafari, E., Abedi, M. R., & Samiee, F. (2008). Reliability and validity of the Oxford Happiness Inventory among university students in Iran. *The Spanish Journal of Psychology, 11*(1), 310-313.

Ludwigs, K., Henning, L., & Arends, L. R. (2019). Measuring happiness—A practical review. *Perspectives on Community Well-being, 1*, 1-34.
Manshaee, G. R., & Hoseini, L. (2018). The Effectiveness of Child-Centered Mindfulness Training on Social Adjustment and Depression Symptoms in Depressed Children. *Psychology of Exceptional Individuals, 8*(29), 179-200. doi:10.22054/jpe.2018.26467.1655

Montero-Marín, J., Collado-Navarro, C., Navarro-Gil, M., Lopez-Montoyo, A., Demarzo, M., Herrera-Mercadal, P., . . . García-Campayo, J. (2019). Attachment-based compassion therapy and adapted mindfulness-based stress reduction for the treatment of depressive, anxious and adjustment disorders in mental health settings: a randomised controlled trial protocol. *BMJ open, 9*(10), e029909.

Park, L. T., & Zarate Jr, C. A. (2019). Depression in the primary care setting. *New England Journal of Medicine, 380*(6), 559-568.

Plieger, T., Melchers, M., Montag, C., Meermann, R., & Reuter, M. (2015). Life stress as potential risk factor for depression and burnout. *Burnout Research, 2*(1), 19-24.

Rahimzadegan, S., Fattahi Hosseinabadi, A., & Khalili Tajreh, R. (2019). The effect of happiness education on depression and suicidal ideation in students, 3rd International Conference on Research in Psychology. Paper presented at the Counseling and Educational Sciences, Tehran.

Saadati, N., Rostami, M., & Darbani, S. A. (2021). Comparing the effectiveness of Acceptance and Commitment Therapy (ACT) and Compassion Focused Therapy (CFT) on improving self-esteem and post-divorce adaptation in women. *Journal of Family Psychology, 3*(2), 45-58.

Saeedi, S. (2019). *Evaluation of the effectiveness of commitment-based treatment and acceptance on social and emotional adjustment of mothers of children with mental and physical disabilities.* Paper presented at the Fifth National Conference on Positive Psychology Bandar Abbas.

Sarikhani, P., & Alizadeh Mousavi, S. I. (2014). *The effect of acceptance and commitment based treatment on the happiness of the elderly living in Gorgan Nursing Home.* Paper presented at the Third National Conference on Mental Health, Quchan.

Stefan, S. I., & Hofmann, S. G. (2019). Integrating metta into CBT: How loving kindness and compassion meditation can enhance CBT for treating anxiety and depression. *Clinical Psychology in Europe, 1*(3), 1-15.

Sun, S., Pickover, A. M., Goldberg, S. B., Bhimji, J., Nguyen, J. K., Evans, A. E., . . . Kaslow, N. J. (2019). For whom does cognitively based compassion training (CBCT) work? An analysis of predictors and moderators among African American suicide attempters. *Mindfulness, 10*(11), 2327-2340.

Wilkinson, R. A., & Chilton, G. (2017). *Positive art therapy theory and practice: Integrating positive psychology with art therapy.* Routledge.

Zohourian, N. (2016). *Effectiveness of Cognitive Emotion Regulation Training on Impulsivity, Cognitive Flexibility and Mood Symptoms of Female Patients with Bipolar Disorders in Isfahan Province.* (MA), Islamic Azad University, Isfahan

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