



Effectiveness of Acceptance and Commitment Therapy on Hypochondriasis and Psychosocial Adjustment in Divorced Women

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Abstract

Background: Divorce is one of the most stressful life events leading to increased susceptibility to diseases and mood disorders such as hypochondriasis.

Objectives: The present study aimed to investigate the effectiveness of acceptance and commitment therapy (ACT) on hypochondriasis and psychosocial adjustment in divorced women in Tehran.

Methods: The research method was quasi-experimental with a pretest-posttest design and a control group. The statistical population in this study consisted of divorced women suffering from divorce-induced psychological distress who visited counseling centers in Tehran in 2018. The sample consisted of 30 divorced women selected by convenience sampling method. The participants were randomly divided into experimental and control groups (n = 15 per group), and the pretest was performed for the experimental and control groups before the intervention program. The experimental group underwent ten sessions of ACT (90-minute sessions per week), and the control group did not receive any treatment. The research instruments included the Health Anxiety Inventory (HAI) and the Psychosocial Adjustment to Illness Scale (PAIS). The Shapiro-Wilk test, Levene test, Pearson correlation coefficient, and analysis of covariance (ANCOVA) were used to analyze the data.

Results: The results indicated that the ACT-based intervention significantly reduced hypochondriasis in divorced women (P = 0.043). In addition, ACT improved the psychosocial adjustment in these women (P = 0.0001).

Conclusions: This intervention decreased anxiety under difficult conditions and also improved psychosocial adjustment in divorced women. Therefore, ACT can be used as an effective approach in reducing social and interactional problems and also anxiety in divorced women.

Keywords: Acceptance and Commitment Therapy, Hypochondriasis, Psychological Adjustment, Divorce

1. Background

Divorce is a serious crisis in women's psychosocial health. It is considered as important social harm leading to much psychological stress for women (1). The problems associated with divorce vary depending on social, familial, and cultural conditions and even gender. The level of adjustment decreases in divorced women who experience an emotional crisis (2). Women's mental health plays an important role in building a healthy family that guarantees the health of society. Divorce destroys the family structure and is a major loss in family life. It influences the adjustment of family members in emotional, cognitive, and social dimensions. Divorced women become more involved in interpersonal and social problems. Studies have shown that the social level and acceptance of divorce predict how the psychological well-being of individuals will be shaped

(3).

Hypochondriasis can be viewed as a concept that exists along a continuum ranging from mild anxiety concerning health and development of diseases to illness anxiety disorder (IAD). It imposes considerable costs related to healthcare (4), quality of life (5), and occupational capability (6). Hypochondriasis (or IAD) is characterized by the fear of a serious disease that interferes with activities of daily living. Hypochondriasis, especially IAD, is accompanied by extreme anxiety regarding diseases, particularly serious diseases, inability to ignore simple bodily symptoms and selective attention to these symptoms after hearing of or reading about a disease, excessive visits to physicians and healthcare centers, as well as extreme fear of death. There is a strong correlation between hypochondriasis and symptoms of mental disorders, especially anxiety and depression (7, 8).

Divorce and separation have many negative psychological and social effects on women, including a higher risk of mental diseases, increased physical illnesses, and violent and disorderly expression of emotions. In women, divorce disrupts the dimension of psychosocial adjustment. The stresses they experience due to divorce influence the level of their adaptation and adjustment to these stresses (9). Because of numerous social problems caused by it, unfavorable governing opinions in society concerning this issue, and the social stigma that it carries, divorce is a phenomenon that affects women's adjustment from different aspects. Therefore, divorce makes it difficult for women to attain individual and social adjustment in life. Increased individual and social adjustment in divorced women have positive effects both on their acceptance of occupational and familial roles and responsibilities of daily life and other opportunities and on the expansion of their independence (10).

Third-wave psychotherapies [cognitive-behavioral therapies (CBTs)] emphasize issues such as mindfulness, emotions, acceptance, relationships, values, goals, and metacognition. Acceptance and commitment therapy (ACT) is considered to be a component of third-wave CBTs and includes therapies such as integrated mindfulness-based cognitive therapy and behavioral couple therapy (11). ACT is one of the new cognitive-behavioral interventions that comprise the four approaches of mindfulness, acceptance, commitment, and behavior change. Its general goal is to achieve psychological flexibility so that there is no need to get rid of bad feelings, but rather, despite the presence of these feelings, the individual moves towards behavior that is based on perceived value. ACT is generally a behavioral therapy but still presents human cognition based on a comprehensive empirical analysis (12). In the analysis of clinical behavior, ACT focuses mainly on spirituality, values, and self-as-context (13).

For hypochondriasis, the ACT is based on functional methodology and emphasizes the function of inner experience, i.e., how thoughts on diseases, feelings, and physical feelings are experienced and controlled using the strategy of acceptance and reduction of the tendency to dwell on negative thoughts (14). According to the results of various studies ACT is effective in reducing anxiety disorders, obsessive-compulsive disorder, psychological distress, anxiety, depression, and stress (15-18) and increasing general health (19). In addition, ACT decreases hypochondriasis and stress symptoms by changing psychological flexibility and paying conscious attention to the present (20, 21).

Evaluation and explanation of ACT on hypochondriasis and psychosocial adjustment in divorced women are among the most important innovations of this study. Re-

garding the above statements and the necessity of investigating divorced women's mental health, the present study aimed to investigate the effectiveness of ACT on hypochondriasis and psychosocial adjustment in divorced women referring to counseling centers of Tehran.

2. Methods

2.1. Research Design

The research method was quasi-experimental with a pretest-posttest design and a control group.

2.2. Participants

The statistical population in this study consisted of divorced women suffering from divorce-induced psychological distress who visited counseling centers of district one of Tehran in 2018. The inclusion criteria were having at least a middle school education, having lived together for at least one year and divorced, and lack of severe physical or mental problems. The exclusion criteria were the absence from more than two treatment sessions and reluctance to continue the treatment process. The sample consisted of 30 divorced women selected by convenience sampling method. We randomly divided the participants into experimental and control groups (n = 15 per group).

2.3. Intervention Program

The second intervention program consisted of ten 90-minute sessions of ACT. This intervention was performed by Ducasse and Fond (22) on couples (Table 1).

2.4. Research Instruments

2.4.1 The Health Anxiety Inventory (HAI)

The present study used the shortened version of the HAI designed first by Salkovskis and Warwick in 1989, which was developed almost based on a cognitive-behavioral model of health anxiety. It contains 18 self-report items, each consisting of four options and each option having a description of health and illness components in the form of a statement. The respondent must choose the option that best describes him/her. Each item receives a score of 0 to 3, and the minimum and maximum scores are zero and 54, respectively. A high total score indicates the possible presence of hypochondriasis (23). Nargesi (24) reported the Cronbach's alpha of 0.87 for the inventory, indicating good reliability of the inventory. In the present study, Cronbach's alpha was 0.90 for the inventory.

Table 1. A Summary of ACT Sessions (22)

Sessions	Description of the Sessions
First session	Establishing a therapeutic relationship, familiarizing the participants with the research subject, filling out the questionnaire, and signing a treatment contract.
Second session	Finding treatment methods, studying them and evaluating their effectiveness, discussing the transiency and low level of effectiveness of the treatments by using metaphors, receiving feedback, and assigning homework.
Third session	Helping the participants recognize the inefficient control strategies and their futility, accepting painful personal events without struggling to suppress them by using metaphors, receiving feedback, and assigning homework.
Fourth session	Providing explanations regarding avoidance of painful experiences and the consequences of failing to do so, teaching the stages of acceptance, changing linguistic concepts by using metaphors, teaching relaxation, receiving feedback, and assigning homework.
Fifth session	Introducing a three-dimensional model of human behavior to express the mutual relationships between behavior/emotions, psychological functions/observable behavior and discussing the attempt to change behavior based on the model, receiving feedback, and assigning homework.
Sixth session	Explaining the concepts of role and context, observing the self as a platform and making contact with the self by using metaphors, being aware of receiving various sensory perceptions and separating oneself from feelings that make up the mind content, receiving feedback, and assigning homework.
Seventh session	Explaining the concept of values, creating motivation for change and empowering the participants to lead a better life, practicing concentration, receiving feedback, and assigning homework.
Eighth session	Teaching committed action, identifying behavior patterns according to values and making a commitment to act according to them, and summing up the sessions.
Ninth session	Reviewing the exercises and assignments of previous sessions and continuing to teach the skills.
Tenth session	Reviewing both the previous sessions themselves and the homework of previous sessions, summarizing what was learned in previous sessions and the extent to which the goals of the therapy were achieved, and studying the perspectives of the participants regarding the future.

2.4.2. The Psychosocial Adjustment to Illness Scale (PAIS)

This scale, developed by Derogatis (25), encompasses 46 items and seven subscales (namely healthcare orientation, vocational environment, family environment, sexual relationships, extended family relationship, social environment, and psychosocial distress). The scale is scored based on a 4-point Likert scale (ranging from 0 to 3). The maximum and minimum scores of this scale are zero and 138, with higher scores indicating greater psychosocial adjustment (25). Feghhi et al. (26) reported the reliability of the scale to be 0.91. In the present study, the reliability coefficient of the scale was 0.85 based on Cronbach's alpha coefficient.

2.5. Data Analysis

The Shapiro-Wilk test was used to assess the normality of the data. The Levene test was used to check the homogeneity of variance in the experimental and control groups. Canonical correlation between covariates was examined by using the Pearson correlation coefficient. Multivariate analysis of covariance (MANOVA) was used to determine the effectiveness of ACT on hypochondriasis and psychosocial adjustment in divorced women.

2.6. Ethical Approval and Consent to Participate in the Study

At the end of the intervention sessions for the experimental group and posttest execution for the experimental and control groups, suitable treatment sessions were also

conducted for the control group to observe ethical principles. The participants were informed of the objectives of the study and its stages before starting the research, and written informed consent was obtained from the participants for participation in the study. The Ethics Review Board of Islamic Azad University, Ahvaz Branch, approved the present study (code: 84520709981004).

3. Results

The participants in this study were 30 women aged 20-50 years, of whom 40.2 and 24.4% had finished high school and middle school, respectively, and 35.4% had a university degree. Table 2 shows the mean and standard deviation (SD) of the studied variables in the experimental and control groups in the pretest and posttest. The mean \pm SD of the hypochondriasis for ACT and control group in the posttest stage was 35.13 ± 1.92 and 37.33 ± 3.07 , respectively. However, the mean \pm SD of the psychosocial adjustment for ACT and control group in the posttest stage was 60.66 ± 4.51 and 53.91 ± 4.81 , respectively (Table 2).

The Shapiro-Wilk test was used to test the normality of the distribution of the scores. The null hypothesis of normality of distribution of the two groups' scores was confirmed (Table 3). In other words, the assumption of the normality of distribution of pretest scores for both experimental and control groups was confirmed. The result of the Levene test was not significant for hypochondriasis and psychosocial adjustment ($P > 0.05$); hence, the variances

Table 2. The Mean and Standard Deviation of the Dependent Variable in Experimental and Control Groups in Pretest and Posttest ^a

Variables	Experimental Group	Control Group	P
Hypochondriasis			
Pretest	36.17 ± 2.44	37.47 ± 3.23	0.845
Posttest	35.13 ± 1.92	37.33 ± 3.07	0.016
Psychosocial adjustment			
Pretest	54.13 ± 6.37	53.91 ± 4.81	0.642
Posttest	60.66 ± 4.51	54.19 ± 4.72	0.001

^a Values are expressed as mean ± SD unless otherwise indicated.

of the variables were not significant between the two experimental and control groups. Accordingly, the assumption of homogeneity of variance was confirmed. The results of the Pearson correlation test regarding the variables of hypochondriasis and psychosocial adjustment demonstrated a canonical correlation between them.

The results of MANCOVA showed a significant difference between the divorced women in the experimental and control groups in terms of at least one of the dependent variables (hypochondriasis and psychosocial adjustment). Table 4 presents the results of the ANCOVA for hypochondriasis and psychosocial adjustment in the experimental and control groups. According to Table 4, ACT significantly reduced hypochondriasis in divorced women. This difference indicated that decreased symptoms of hypochondriasis were observed in the divorced women after they received ACT compared to those in the control group. In addition, the results revealed that ACT had significant effects on psychosocial adjustment in divorced women. This difference suggested that the symptoms of psychosocial adjustment increased in the divorced women who had received ACT compared to those in the control group.

4. Discussion

The present study aimed to investigate the effectiveness of ACT on hypochondriasis and psychosocial adjustment in divorced women referring to counseling centers of district one of Tehran in 2018. The results of the present study showed that the ACT approach decreased hypochondriasis. This finding is consistent with the results of Eilenberg et al.'s (27) and Hoffmann et al.'s (28) studies. Divorce is accompanied by social, economic, physical, mental, and psychological problems, as well as emotional changes for the divorced woman (29). In other words, stress and pressures resulting from divorce can decrease the psychological well-being of divorced women, disrupt their occupation and social relationships, and cause other difficulties

due to increased anxiety, psychosocial maladjustment, and depression (30). ACT shapes openness and interest in and acceptance of the experience of life by creating universal consciousness and awareness of the here and now (18, 31). In the ACT, mindfulness includes living in the here and now, being active, and avoiding painful thoughts related to the existing problems. In other words, mindfulness enables individuals to transfer their thoughts and feelings to self-consciousness without any specific control so that their acceptance makes it possible to turn threats into opportunities, to consider the most painful events more bearable, and to search for solutions to problems. They, thus, maintain their occupational and social adjustment while reducing their anxiety under difficult conditions and shaping a problem-focused approach instead of an emotion-focused one.

The present study found the ACT intervention to be effective in increasing psychosocial adjustment. This finding is consistent with the results of Beilby et al.'s (32) study. Since a major part of the negative emotions that people experience results from obsessive rumination developed in their mind following negative experiences, it can be said that the mindfulness component decreases the negative emotions (maladjustment) by reducing the divorced women's obsessive rumination. Consequently, group ACT increases adjustment, happiness, and hopefulness, and decreases depression and the feeling of being lonely in the divorced women in the experimental group compared to the control group. The effectiveness of ACT in reducing symptoms of mood disorders and increasing adjustment probably result from the familiarization of the divorced women with their healthy way of thinking and healthy emotions (32, 33). Divorced women, especially in Iranian society, generally face significant problems and challenges in organizing emotional and social problem-solving activities due to the pressures resulting from the attitude of the society and also the attitude of the people around them on the one hand and the problems caused by the divorce process and disintegration of marriage on the other hand. Therefore,

Table 3. The Results of the Shapiro-Wilk Test on the Normality of Distribution of the Scores

Dependent Variables	Shapiro-Wilk		
	Statistics	df	P
Hypochondriasis			
Experimental	0.87	20	0.61
Control	0.79	20	0.46
Psychosocial adjustment			
Experimental	0.91	20	0.72
Control	0.93	20	0.78

Table 4. Results of ANCOVA

Variables	SS	df	MS	F	P	η_p^2
Hypochondriasis						
Pretest	258.03	1	258.03	25.56	0.023	0.56
Group	302.53	1	302.53	12.07	0.043	0.65
Error	202.50	27	7.50			
Psychosocial adjustment						
Pretest	5827.67	1	1165.53	5.13	0.001	0.39
Group	8895.64	1	8895.64	39.18	0.0001	0.29
Error	74.21	27	2.74			

Abbreviations: SS, sum of squares; df, degrees of freedom; MS, mean square; F, F-distribution; η_p^2 , eta-Squared.

ACT can help people adjust to each other better while providing a more comprehensive viewpoint on problems.

4.1. Limitations

This study was conducted only on divorced women in Tehran. Consequently, caution must be exercised in generalizing the results to other communities elsewhere. The limitations of this study included the difficulty in having access to divorced women because they generally exhibited little inclination to participate in the research; lack of a follow-up phase, and the impossibility of investigating the physical-mental status of the participants during their attendance in the educational classes to make the group more homogeneous.

4.2. Conclusion

In the present study, the ACT intervention proved effective for divorced women who had experienced social, interactional, and adjustment-related problems. Consequently, ACT was effective in reducing unpleasant emotional effects as well as identifying and replacing them with logical and more adjusted thoughts. In addition, the results showed that ACT was successful in decreasing the hypochondriasis syndrome and increasing psychosocial adjustment. These

findings can be utilized by family psychologists, counselors, and experts in the field of family psychology. Therefore, based on the results of this study, new interventional-educational protocols can be developed to be used for further research on divorced women.

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Footnotes

Authors' Contribution: Study concept and design, acquisition of data, data analysis and interpretation, and statistical analysis, H.I.; Administrative, technical, and material support, and study supervision, B.M.; Critical revision of the manuscript for important intellectual content, S.B. and F.H.

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