



Divorced Family-Based Cognitive Training on Reducing Anxiety: The Mindfulness Features Effects



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Keywords	Abstract
<i>Anxiety;</i> <i>Cognitive;</i> <i>Psychology;</i> <i>Mindfulness;</i> <i>Divorced Family;</i>	The nature of the current study is semi-experimental with pre-and post-test stages and one group monitor, and the population of this study was all teenage female students who were studying in Tehran in 2016. They were selected by randomized cluster sampling that selected from twenty – two regions of Tehran, one region. From all schools in that area (1 school), 30 individuals were selected by purposeful sampling method and then randomized to experimental and control groups (15 in experimental and 15 in control groups). The study group had eight ninety-minute mindfulness sessions focused on cognitive training plans. However, the monitoring group did not have any psychiatric facilities. Two questionnaires were conducted before and after the interventions. The methods used in this research are the Beck Anxiety Inventory. Covariance analyzes indicate that there are substantial variations in reduced anxiety between the experimental and control groups ($p < 0.01$). The results of this research show that mindfulness-based cognitive training to reduce anxiety in adolescents of divorced families is successful.

1. Introduction

Family is the first pillar and primary element of society and has a very significant law in the mental wellbeing of children and other members of the community. Today, however, families in every community with any culture suffer various traumas, one of which is divorce. Parental divorce is one of the most stressful events that children and adolescents experience in their lives, and this can have a short-term and long-term economic, social and emotional impact on adults and children, particularly adolescents. Fagan and Churchill (2012): Locks (2014): Halligan, Cheng and Nuxe (2014): Weaver and Scofield (2015).

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Parental divorce requires a wide range of changes and needs a major reorganization of the family that, over time, affects the cohesion of adolescents. Such changes require a change in housing, family relationships and living conditions that not only endangers couple intimacy but also affects children and the psychological health of others. In this case, teenagers are one of the key perpetrators of the parent's decision (Jeremy 2015). For certain cases, divorce has physical, social and mental difficulties. These changes make adolescents experience different kinds of emotions, such as frustration, discomfort, fear, anxiety, depression, and adaptive difficulties (Brewer, 2010). In recent years, this social problem has increased in our region: Iran is the world's leading region in this field, and there is a challenge to society and families in that country (Ranjbar, 2014). Some issues such as reduced consistency of the relationship, reduced cohesion, the tension between family members are evident in the divorced and non-divorced families (Sie and Chec families, 2008). Generally speaking, it can be said that this is a complex issue and that it is a significant shift in people's lives and that it has long-term and short-term economic, social and cultural consequences. This problem involves new relational structures (Amato, 2000; Hetherington and Kelly, 2002). Several studies have shown that parental issues influence children and their relationship quality and there is a positive link between marital conflict and adolescent behavioural problems (Stroman, Been, Miller, Dee, Finoez et al., 2011 as cited in Besharat, Dehghani, and Tolaeyan, 2014). Teenager hood is a special stage of development in human life, marked by physical growth, emotional and social development and an effort to achieve social goals (Taghizadeh, 2014). Teenager hood is also a very critical time for intellectual growth and social evolution. At this stage of life, emotional harmony, knowing the importance of being, self-awareness, having a real meaning for life, emotional freedom from the family, sustaining emotional and psychological equilibrium in the face of various stressors, learning social skills that create a healthy relationship with others and recognizing a balanced life are the most important needs of adolescents.

Teenagers are rising physically, and their emotional growth is insufficient, their interactions are minimal and social, they are impressive and poor (Anissi et al., 2017). Different moods, personality shifts, various needs, vulnerability, frustration and hostility at this stage of life are what psychologists term the "sensitive level." Likewise, biological changes in this life stage predict anxiety and stress among adolescents and lead to negativity (Jena Abadi and Nastizadeh, 2011). There is more anxiety in separated families, including teenagers who fear rejection, change in living conditions, humiliation, shame, worry about future separations (Miller, 2006). Anxiety at this age has various effects and can lead to depression and other physical illnesses (Legrand, 1988). Problems such as divorce and parental separation can increase the anxiety of adolescents and lead to a vulnerability in interpersonal relationships and a decrease in compatibility. Anxiety teenagers encounter more psychological difficulties than peers (Zvolensky & Smits, 2007; Compton et al., 2010). Anxiety may be followed by other problems such as declining self-esteem, feeling inadequate, depression, helplessness, etc. (Bos and Maurice, 2006). Physical, emotional, and social changes in adolescents and unique issues such as parental separation and divorce together make a good and desirable situation for adolescence anxiety, stress, and psychological problems (Bologiniet al., 1993; Bolat et al., 2011). The World Health Organization estimated in 2005 that the prevalence of mental illnesses ranged from 12 to 29 per cent (World Health Organization, 2005).

Generally, as shown in subsequent research, divorce children are more depressed compared to children in non-divorced families. Goldman and Butin (1998) cited as Begmumaras (2003) found that children are divorced.

There is more fear in primary schools relative to children in stable households. Hoyt and Corn (1990) compared 49 children of divorce with 83 children of a stable family. Studies have shown that

divorce is a traumatic occurrence for children and can lead to anxiety. Results of another study (Fatemi, 2014) evaluating 150 children found that anxiety in children of separated families is significantly higher than other children.

One of the latest methods in the treatment of mental illness and functional change is the synthesis of conventional cognitive strategies proposed by Kabat-Zinn (2003), called Mindfulness-Based Cognitive Therapy. Mindfulness-based cognitive training was an innovative mixture proposed by Segal, Williams, and Tizdel in 1995 (2009).

Studies used Mindfulness-Based Behavioral Therapy to address a wide variety of physical and anxiety disorders. Research by Goldin & Gross (2010) has described the efficacy of mindfulness-based approaches as unique and focused focus at present, without bias or adjudication. Mindful persons interpret internal and external reality honestly and without interference and can encounter a wide variety of feelings, emotions and physical senses (Brown and Kasser 2005). The key concepts of mindfulness-based cognitive training are 1) Aid the individual stop negative thoughts; 2) When there are negative feelings, this training will show us the best strategies not to get involved with them; 3) Emphasis and sensitivity preparation; 4) Training of living in the present focused on thinking about the past and the future; and 5) Acceptance of thoughts and emotions, 6. Assist people with mental health treatment by using different approaches (such as strategies that improve emotional energy) (Segal, Williams, and Tizdel, 2009). This approach not only prevents worrying and negative and irritating feelings but also allows teenagers to control their thoughts and emotions (Paterniti, 2007), enhances effectiveness and adaptive coping (Craske and Hazlett, 2003), decreases the lack of experience and deepens emotional regulation (Goldin and Gross, 2010). Mindfulness-based cognitive therapy is a third-generation behavioural, cognitive therapy, and thus this technique focuses on turning the attention of patients to their negative emotions (and thoughts and physical senses) and helping to control them. Segal, Williams, and Tizdel (2009) have shown that mindfulness can improve anxiety disorders in patients, especially by reducing stress, avoiding actions and emotions, and also by an automatic emotional reaction to negative beliefs, and by-control of emotions. Beachemine (2008) examined mindfulness-based cognitive therapy to alleviate anxiety and improve social skills and academic performance in adolescents with learning disabilities. Results of this study showed that mindfulness-based cognitive therapy could increase academic performance and enhance social skills and reduce stress and trait-state anxiety (Sibinga, et al., 2014; Hamill et al, 2015).

In his dissertation, Song (2014). She reveals the effectiveness of mindfulness – cognitive therapy focused on increasing relaxation, self-awareness and emotional regulation, the vulnerability of the behavioural avoidance system, resisting and fleeing, managing psychological discomfort, raising mindfulness, and the anxiety and depression; thus, according to the material, parental separation and divorce is a stress factor. Current research addresses this main question: is mindfulness-based cognitive training successful in reducing anxiety among adolescents in divorced families?

2. Materials and Methods

Research design: a current analysis, with the pre- and post-test stage and control group, was half experimental. The subjects were 30 students in Tehran who have inclusion requirements for this analysis from all teen students who have separated families with clinical signs of anxiety disorder in 2016. The students were chosen using a purposeful system of sampling. We were randomly grouped into two groups: 15 experimental students and 15 control group students. In the screening process, 20–2 Tehran regions, region One was chastened and randomized cluster sampling from all schools in this area (1 school) was taken and then students from that school were asked to classify the adolescents with divorced parents who had and were willing to take part in this research with

clinical symptoms of anxiety disorder. Thirty students earning higher than average scores were chosen as examples in Beck 's anxiety subscales. The requirements for inclusion include participation by volunteers and the completion by students and their parent of informed consent formulas. Criteria for exclusion involve the diagnosis of anxiety medications, depression, the use of psychotherapy schemes the therapies, and students who were deceased with one of their kin.

In these studies, Beck Anxiety Inventory was used to measure anxiety in adolescent students in separated families and to determine the frequency of anxiety in adolescents and adults as a self-reported questionnaire. Studies demonstrated strong validity and reliability of this questionnaire. Internal coefficient of accuracy (Alpha coefficient) 0.92, reliability scores after a week 0.75, and a correlation between questions was 0.30 and 0.76. In the evaluation of anxiety, it has been established that the material, the concomitant, the positive, discriminating and the factorial validity of these questions are highly successful (Beck et al, 1988). In Iran, other experiments were carried out in this questionnaire to analyze the psychometric properties. For example, Gharayi (1993) stated that after two weeks, the validity coefficient was 0.80. Kaviani and Mousavi (1999) have stated the reliability coefficient similar to the psychometric properties of this questionnaire in their evaluation.

Validity coefficient 0.72 after one month and validity coefficient 0.92 after a test-retest process. The questionnaire is an inventory of 21 – query multiple-choice automatically – indicated that individuals would pick one of the decisions that show their anxiety's intensity. This 4 – questions were scored between 0 and 3. Each questionnaire describes one common anxiety symptom (mental, physical and panic signs). So, in this questionnaire, the total score is between 0 and 63. No angst, or low anxiety rates (0-7), tiny (8-15), medium (16-25), strong (26-63), are the proposed cut-off points for this questionnaire. Skill classes involve students who gain above medium grades.

Research implementation is described as follows. First, pretesting was conducted after the random substitution of topics in the experimental and control community; then 890 topics were educated in the researching group – weekly minute session by a specialist in clinical psychology, MSc – cognitive therapy as principal therapeutic and physician in health psychology as co-therapist; but no intervention was done. Immediately after the intervention, all pupils in both groups answered the Beck Anxiety Inventory.

Intervention: these handbooks are based on an "Attention – Cognitive Learning" book (Segal, Williams, Tizdel, 2009). The formal and serious practice of every session (except Session 1) began Pleasure, and then therapist demonstrated this training process to subjects, then updated last sessions and given more instruction and then homework. Booklet and student CDs are available. Table 1 outlines the topics and contents of this session:

Table 1: The content of mindfulness-based cognitive training sessions

Sessions	Activities
Personal session	Referrals and getting to know, final evaluation and measurement of inclusion criteria for subjects, and implementation of pretest
Session 1	Defining the plans, structure and purpose of the group, defining anxiety and factors involved in it, training and practising of "eating a raisin" with mindfulness and explaining the reason of this practice, then assign homework.

Session 2	Training and practising mindfulness or breathing awareness techniques to increasing the capacity of attention and focus like: 45 – minutes check the body meditations, 10 minutes mindful breathing and talking about the reason of this techniques, thinking about practices and feeling them, and them 3 minutes breathing and talking about reasons.
Session 3	Doing muscle relaxation techniques, practising conscious movements, keeping mind and thoughts open by doing meditations and focus on conscious breathing and other body organs, understanding mindfulness (the concept of automatic conduction, mind states), understanding reasons and purposes of this intervention and practising mindfulness techniques, 3 minutes of breathing
Session 4	Training and practicing 45 – minutes sitting technique, talking about the reasons, 3 – minutes breathing and patterned training for hard times with hard feeling, understanding Beck's anxiety cognitive model based on ABC method and recognition of automatic negative thoughts in anxiety disorders, training of how thoughts make emotions, and training and practicing 10 – minutes mindful breathing.
Session 5	Doing 45 – minutes check the body training, training and practicing reaction discovery to normalized patterns and using the potentials of mindfulness skills to facilitate response to present's experiences, training and practicing acceptance meditation and evaluation of automatic thoughts and recognition of common cognitive errors in anxiety disorders.
Session 6	Practicing 45 – minutes sitting technique, reviewing subject's problems during practicing at home and their feelings and emotions during practicing, training useful techniques for response to automatic negative thoughts, doing 30 – minutes check the body training and mindful breathing and thinking about the response to stress and anxiety.
Session 7	Meditating, doing 3 – minutes breathing with thinking about a problem and during this training and finding its effect on body and mind, having conversations about how we can continue learned techniques in our lives, listing enjoyable and suitable skills, and doing check the body training
Session 8	Concluding and reviewing the plan, giving feedback from each other, using learned techniques in real-life activities, implementation of post-test.

3. Results and Discussions

For the present analysis, the central trend and the dispersion index of descriptive statistics such as mean and standard deviation are used for summarizing and describing results. To assess efficacy,

Multivariate covariance analysis is used to evaluate the impact of attentiveness – cognitive conditioning to minimize anxiety in adolescents of divorced families. In this investigation, 30 female students were selected and allegedly divided into experimental and control groups with separated parents with qualifications for this research. In these two classes, the age of subjects was between 15 and 17, and the average age was 16.3. However, parametric tests were used to evaluate data in these studies, the key precondition for testing the assumption of equal variances in post-test classes. Levene was used for this precondition, and the anxiety scores of the study were not significant ($F = 4.11$, $P = 0.052$). The results showed that variances are homogeneous. As the key precondition for covariance analysis, tests of the regression slope analysis have indicated that the degree of association and pretest is greater than 0.05 ($p=0.153$). Therefore it was agreed that regressions were homogeneous.

Table 2 displayed informative variables, including mean and normal anxiety scores in two stages (pre and post-test) for both the experimental and the control group.

Table 2: reviewing descriptive data of the experimental and control group in pre and post-test stages.

Variable	Group	Number	Mean	Standard deviation	
Anxiety	Control	pretest	15	20.86	5.24
		posttest	15	19.66	4.43
	Experimental	pretest	15	20.93	4.97
		posttest	15	16.73	4.13

Next, as shown in the following Table 3, after adjustment of pretest effects the comparison of anxiety ratings in both experimental and control groups showed that $F=8.869$ and the significance level was lower than 0,01. Due to this and since the mean results of the post-test study teams were higher, anxiety in adolescents of separated families decreased after the involvement in the effects of conscience-based cognitive training.

Table 3: comparison of post-test in two groups after controlling the pretest effect

Source of changes	SS	DF	Mean squares	F	Significance level	Effect size
Pretest	311.940	1	311.940	41.627	0.01	0.247
Group	66.459	1	66.459	8.869	0.006	
Error	202.327	27	7.494			
Total	578.800	29				

The goal of the current research was to study the efficacy of attention – a cognitive technique focused on reducing anxiety in divorced families' adolescents. The findings of this study showed that consciousness – cognitive education dependent considerably affects reducing anxiety in divorced family adolescents. Such findings lead to the findings of the subsequent studies. Hug et al. (2014) observed a decrease in emotional response and emotive control of a knowledge-based cognitive training in generalized anxiety. Such improvements minimize anxiety and tension and increase optimistic disclosure. The role of consciousness – based on cognitive preparation in the reduction of anxiety symptoms – was seen in Goodman et al. (2013), Beauchemine (2008), Weaver & Schofield (2015). Findings suggest that perception of the present completely decreases extreme anxiety, and also may have a role to play in shifting perceptions and anxiety about features.

Sibinga et al. (2014) found that knowledge – cognitive therapy focused on cognitive therapy improves relaxation, conflict avoidance, self-consciousness and adolescent emotion. Hamill et al. (2015) has shown the intervention effect on lowering the responsiveness of the behavioural inhibition mechanism, decreasing avoidance and escape behaviour, and improving tracking capability and emotional distress in a study entitled "Leveling effectiveness – cognitive therapy focused on behavioral inhibition and psychological stress." Lindquist (2014) showed effectiveness- a cognitive technique focused on the reduction of nursing anxiety and depression.

Several reports have also documented the positive effect of consciousness on obsessive – Kulzak and rose compulsive disorder (2014), which is a cognitive therapy that is focused on the perception and increased control of ideas and thoughts. The results of this work lead to Tizdel 's theory. Divorce, in reality, is an unwelcome occurrence for children, when the family is the main component of a community and communicates in various circumstances. Kids have discovered and are growing up and making strides in family identity and personality. Yet divorce will increase the tension, concern and anxiety of children and lead to a dysfunctional process between the physical senses and negative judgment and perceptions. It leads to excessive worrying and worries about the different issues of children and increases their fear and their care for the drivers at risk. If treatment and understanding among anxious people are improved, less anxiety symptoms have been reported (Kashdan et al., 2008). The principal knowledge that, based on the recognition of negative thoughts and emotional differences, enhances a person's ability to control the permeability of his thoughts and emotions. Attention to a high level of anxiety and stress-reducing more and more resources to those that use it.

Many who face automatic thoughts leading to emotional problems should preserve calm, not care about upsetting thoughts, but instead watch them go by. Such capacity allows the mind to not consider unconscious thinking as before. Aware – based cognitive training by applying specific awareness strategies that reduce stress and anxiety among teenagers, but it can contribute to an improved capacity to think and address automatic and upsetting ideas through the change of the cognitive habits, improving the way of thinking and identification of cognitive errors.

4. Conclusion

In awareness – we have learned to consciously understand our pleasant and unpleasant physical feelings, to recognize the parts of our body which produce such an unpleasant feeling, and to acknowledge the thoughts and emotions related to our physical senses (Segal, Williams and Tizdel, 2009). Being able to look at our feelings and emotions without denying them or ignoring them is something that can ruin great answers. Yet the key purpose of focus is not relaxation, but a non-judgment on negative internal events or physiological stimulation contributes to relaxation. Regular engagement in issues increases the power of these typical responses, which decreases understanding and then begins to obscure any appraisal, which means the power of these normal

responses and knowledge in this mental process loses control. Attention involves being aware of cognitive activities, such as emotions, beliefs, memory and feelings (Wells, 2005). The results of the research include an aspect of consciousness – cognitive conditioning focused upon the application of concentration strategies, enhanced inner consciousness and perception, improved resistance to distress such as divorce and appreciation of physical and emotional sensibilities. Current research provides some benefits, for example, a quick preparation, concentrating on mental and physical factors together, using conscientiousness with a cognitive strategy, which at least disturbs people's thoughts and increases the understanding of their thoughts and emotions.

The presence and organization of the school and the appropriate office structure for this training are some advantages and drawbacks of this study, and the lack of control and proper monitoring of training sessions has prevented us from introducing comportamental training between sessions. Researchers could not equate the efficacy of this training approach with another technique, such as masculine teens in separated families, with limited access to broader or larger samples and the absence of long-term stability monitoring limited this research. It is also recommended that next work using this training method is undertaken during the summer and on holidays in order to ensure that students have ample time and emphasize this in their personal sessions and researchers. We may analyze MBCT's efficacy in reducing anxiety caused by circumstances and social and family situations more specifically by increasing the sessions and by planning a follow-up level.

References

- Amato, P. R. (2000). The consequences of divorce for adults and children. *Journal of Marriage and the Family*, 62, 1269-1287.
- Anissi J, Salimi SM, Raeesi F, and Niknam M (2007). Evaluation of behaviora problems in adolescents, *Journal of Behavioral sciences*, 1 (2) pages 163 – 170
- Beauchemine J. (2008). Mindfulness meditation may lessen anxiety promote social skills and improve academic performance among adolescents with learning disabilities. *J Psychol.* (11) :34-45.
- Bolat, N., Doğangün, B., Yavuz, M., Demir, T., &Kayaalp, L. (2011). Depression and anxiety levels and selfconcept characteristics of adolescents with congenital complete visual impairment. *Turkish Journal of Psychiatry*, 22(2) : 77-82
- Bologini, M., Plancherel, B., Nunez, R., &Bettschart, W. (1993). Assessment of the effects of age at start of puberty on mental health in pre-adolescence: results of a longitudinal study (1989-1991). *Revue*
- Brewer, M. M. (2010). The effects of child gender and child age at the time of parental divorce on the development of adult
- Brown, K. W., & Kasser, T. (2005). Are psychological and ecological well-being compatible? The role of values, mindfulness, and lifestyle. *Social indicators research*, 74(2), 349-368.
- Compton, S. N., Walkup, J. T., Albano, A. M., Piacentini, J. C., Birmaher, B., Sherrill, J. T., ... & Iyengar, S. (2010). Child/adolescent anxiety multimodal study (CAMS): Rationale, design, and methods. *Child and adolescent psychiatry and mental health*, 4(1), 1. <https://doi.org/10.1186/1753-2000-4-1>
- Craske, M. G., & Hazlett-Stevens, H. (2002). Facilitating symptom reduction and behavior change in GAD: The issue of control. *Clinical Psychology: Science and Practice*, 9(1), 69-75. <https://doi.org/10.1093/clipsy.9.1.69>
- Fagan, P. F., & Churchill, A. (2012). The effects of divorce on children. Marriage & Religion Research Institute. Washington DC.[Online] Available: <https://downloads.frc.org/EF/EF12A22.pdf>[Accessed 20/03/2016].
- Goldin, P. R., & Gross, J. J. (2010). Effects of mindfulness-based stress reduction (MBSR) on emotion regulation in social anxiety disorder. *Emotion*, 10(1), 83. <https://doi.org/10.1037/a0018441>
- Goodman., Grand ,M.P., Clark, I.R., andadams,G.R. (2013). The Moderating effect of Identity Style on the Relation Between Adolescent Problem Behavior and Quality of Psycological Functioning. *Jtheory and Reseach*,8,pp221-248.
- Hamill TS, Pickett SM, Amsbaugh HM, Aho KM. (2015). Mindfulness and acceptance in relation to Behavioral Inhibition System sensitivity and psychological distress. *PersIndiv Differ.* (72):24-29.
- Hetherington, E. M., & Kelly, J. (2002). Divorce reconsidered: For better or worse. Individual and interactive risk factors for anxietyrelated symptoms. *J Anxiety Disord.* (22):429-40.
- Jeremy, A. (2015). The temporal effects of divorces and separations on children's academic achievement and problem behavior. *Journal of Divorce and Remarriage*, 56, 25- 42.
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: past, present, and future. *Clinical psychology: Science and practice*, 10(2), 144-156. <https://doi.org/10.1093/clipsy.bpg016>
- Kashdan TB, Zvolensky MJ, McLeish AC. (2008). Anxiety sensitivity and affect regulatory strategies: Legrand, J. C. (1988). The relationship between selected biographical characteristic and anxiety and depression of participants in a divorce workshop, Texas University.
- Loucks Greenwood, J. (2014). Effects of a midto late-life parental divorce on adult children *Journalof Divorce & Remarriage*, 55, 539-556.

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- Paterniti, A. (2007). Comparing the efficacy of a mindfulness-based program to a skills-training program in the treatment of test anxiety. *Unpublished Doctoral Dissertation, Island, England: University of Islan*, 15-18.
- Sibinga EM, Perry-Parrish C, Thorpe K, Mika M, Ellen JM. A small mixed-method RCT of mindfulness instruction for urban youth. *J Sci Heal*. 2014 ;(3):180-86
- Song, Y., & Lindquist, R. (2015). Effects of mindfulness-based stress reduction on depression, anxiety, stress and mindfulness in Korean nursing students. *Nurse education today*, 35(1), 86-90. <https://doi.org/10.1016/j.nedt.2014.06.010>
- Weaver, J. M., & Schofield, T. J. (2015). Mediation and moderation of divorce effects on children's behavior problems. *Journal of Family Psychology*, 29(1), 39. <https://doi.org/10.1037/fam0000043>
- Zvolensky, M. J., & Smits, J. A. (Eds.). (2007). *Anxiety in health behaviors and physical illness*. Springer Science & Business Media.