



Efficacy of Treatment Acceptance and Commitment and Emotion Regulation Strategies on Anxiety Sensitivity, Excitement Irregularities and Self-Efficacy

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ABSTRACT

The present study was to evaluate and compare the efficacy of treatment acceptance and commitment therapy based on cognitive emotion regulation strategies on the sensitivity of anxiety, excitement irregularities and efficacy in patients with chronic headache disorder. For this purpose, in a single subject multiple baselines pre-test and post-test and follow-up in two groups, 3 patients with chronic pain who were referred to health centers in Kerman using the sampling method Selected and randomly divided and were assigned into two experimental groups. The group initially sensitivity of anxiety, excitement irregularities and self-efficacy were tested. The training is based on acceptance and commitment therapy and cognitive emotion regulation strategies were presented and then after completing the training program and follow-up period, both in terms of sensitivity, anxiety, excitement irregularities and self-efficacy were tested. Results: Analysis of data by the method of Cohen's effect size indicators was showed that acceptance and commitment therapy based on reducing anxiety sensitivity, excitement irregularities and increase self-efficacy in disarray and the treatment based on cognitive emotion regulation strategies has not affecting on reducing anxiety sensitivity and excitement irregularities and the self-efficacy. The cognitive and behavioral intervention (acceptance and commitment cognitive emotion regulation) was significant in reducing anxiety sensitivity and excitement irregularities of migraine headaches and tension.

Keywords: accepting and commitment, cognitive emotion regulation, sensitivity anxiety, cognitive disorder, self-efficacy

INTRODUCTION

Headache is the most common human disorders increases with ageing; the frequency increases [1]. This is most common side effects pain syndrome [2] and its incidence are even more than cold. Today, according to research conducted in the International Headache Society, migraine headaches seem to be one-sided and pulsating often manifested [3]. One of the most severe headaches is by high strength disabling [4]. The amount of disability that cause migraine headaches during year is equal to or even greater than major human diseases such as blood pressure, breast cancer and rheumatoid arthritis. Complications of migraine headaches is a lot and important. Including headaches can be damaging effect on family life, creating anxiety sensitivity and disorders in taking care of yourself and others (children), decreased sense of self-efficacy and quality of life [5], loss of working time (Murillo and et al., 2005), creating emotional chaos and disruption in daily activities [6], direct costs of treatment, medicines and hospital admissions [2].

Psychological treatment standards in the field of headache, due to headache adverse effects on the lives of patients and the role of psychological stress at start-up and exacerbation of headache [7], is considered since the late 1970s [8]. Several studies, which has been done in this area that have declared acceptance and commitment therapy and

treatment of cognitive emotion regulation as the most useful of these interventions. These treatments are compared with drug treatment and less emphasis on physiological factors instead emphasize more on patient participation and personal responsibility. The aim of this treatment is that the patient is capable of coping with pain and their similarities with it. The patient can lead to enhanced efficacy in patients participate actively in its ability to prevent and control pain and in turn, reduce the disability of headaches.

According to Roditi [9], in these two treatment instead of cognitive changes, psychological relationship with the thoughts and emotions should be increases. The purpose of this treatment is assisting people to achieve a stronger and more satisfying life in chronic pain, the treatment, control strategies and avoid the pain of inefficient farming techniques, behavioral, cognitive and emotional targets [9] and can reduce the impact of chronic pain on individuals and improve their health status in different domains of physical, mental and social and the people at the reception, or thoughts associated with it and promote meaningful aspects of life And psychological capital (hope, resiliency, optimism and self-efficacy), flexibility and self-help [10].

In addition, according to Garnfsky (2002), emotion regulation is a fundamental principle in the initiation, evaluation and organization of adaptive behavior and considered as preventing negative emotions and maladaptive behaviors. Also Hayes [9] study also found that hesitation in expressing excitement or dysregulation, in addition to increasing stress and depression episodes, unfortunately, are effective in increasing the feeling and experience of pain.

MATERIALS AND METHODS

This research is a quasi-experimental design with multiple baselines and a single subject. In this scheme which consists of the two groups (experimental and control), pre-test was implemented for both groups and post-test implemented after the program in this study.

The study population included all patients with chronic headache were referred to health centers in Kerman health. The subject's available 6 patients who met inclusion criteria and were selected volunteer to participate in the meetings. And then given consent for the research objectives of the study and randomly divided into two groups of 3person (experimental and control).

The tools used in this study were:

1) Questionnaire Anxiety Sensitivity Index

Anxiety Sensitivity Questionnaire is a self-report questionnaire that has 16 items. This questionnaire has been made by Rice and Peterson [11]. The structure of the questionnaire was from three factors: fear of physical concerns (8 items), fear of lack of cognitive control (4) and fear of seeing the anxiety of others (4). Reviews psychometric properties of this scale, has shown its internal consistency. Cronbach's alpha was calculated to assess the internal consistency coefficient was obtained between 0.80, 0.90. Retest reliability after two weeks 0.75 and for three years 0.71 has shown anxiety sensitivity is a stable personality [11].

2) Bandura's self-efficacy questionnaire

Bandura's self-efficacy questionnaire was made by the 25 items, which may be used to assess self-efficacy. Scoring on a 7-point Likert scale is that for options "impossible", "very hard", "difficult", "a little hard", "simple", and "too simple", respectively Points 1, 2, 3, 4, 5, 6 and 7 will be considered. To test the validity of this scale was correlated with the size of several personality traits. These measures include internal control Rutter Personality size, scale social tendency, scale alienation, interpersonal competence scale, respectively. Previous studies have shown the negative correlation between self-efficacy scores and scores of internal control Rutter ($r = 0.40$), respectively. Positive correlation between the scales of your Byganyg ($r=0.60$, $r=0.50$) and interpersonal competence scale, with scores of self-efficacy positively correlated was ($r=0.46$) [12].

3) Cognitive emotion regulation questionnaire Garnfsky

Cognitive emotion regulation questionnaire have been developed by Garnefski and colleagues [13], this questionnaire is multidimensional questionnaire and is a self-report tool that has 36-item and a form for adults and children. Emotion regulation Scale 9 cognitive strategies that assess blame, acceptance, and rumination, positive refocusing, refocus on planning, positive reappraisal, perspective, ideas, and blame others. Garnefski and colleagues have reported good reliability and validity for the questionnaire. The questionnaire contains 36 questions graded score of 5 (always or never), which evaluates all 4 questions and gives a total of 9 elements in place, self-blame, blame others, catastrophic out, rumination, refocus on planning acceptance, positive focus and gives positive assessment . Persian version of this scale has been validated by Samani and Jokar (2007).

RESULTS

Table 1- Demographic characteristics of the study subjects according to age and gender

Subjects	Age	Sex	Intervention
1	24	Female	Acceptance and Commitment
2	29	Female	Acceptance and Commitment
3	37	Male	Acceptance and Commitment
4	42	Female	Cognitive emotion regulation
5	28	Female	Cognitive emotion regulation
6	44	Male	Cognitive emotion regulation

The findings related to the research hypothesis:

Table 2- Descriptive Index scores of the first sample (based on acceptance and commitment therapy) in all variables at different stages of treatment and recovery, Cohen's effect size indicators

Subjects	Variable	Treatment Stages					Recovery Indicators			Effect Size Indicators				
		Baseline	fourth Session	Eighth Session	After treatment	Average interventions	Percent recovery	% Reduction in scores after treatment	Cohen coefficient Average interventions	The average impact factor interventions	Follow-up	Cohen coefficient Tracking	Multiplier Effect Tracking	
First	Anxiety Sensitivity	80	80	48	38	51.33	61	0.39	3.27	0.89	32	3.57	0.85	
	Irregularities excitement	82	82	46	35	48.33	58	0.34	3.42	0.91	30	3.26	0.84	
	Efficacy	21	21	32	34	32.66	-0.52	-0.35	-2.25	-0.82	39	-3.16	-0.82	
Second	Anxiety Sensitivity	84	84	57	39	56	0.57	0.49	4.52	0.84	34	5.14	0.89	
	Irregularities excitement	89	89	59	41	58	0.58	0.46	4.62	0.86	36	5.22	0.92	
	Efficacy	23	23	34	38	33.67	-0.68	-0.42	-3.74	-0.82	32	-4.67	-0.87	
Third	Anxiety Sensitivity	80	80	55	35	58	0.55	0.58	4.59	0.82	32	5.47	0.88	
	Irregularities excitement	88	88	57	39	60	0.55	0.48	5.74	0.87	34	6.17	0.92	
	Efficacy	22	22	38	41	40	-0.81	-0.45	-2.59	-0.82	44	-3.70	0.84	

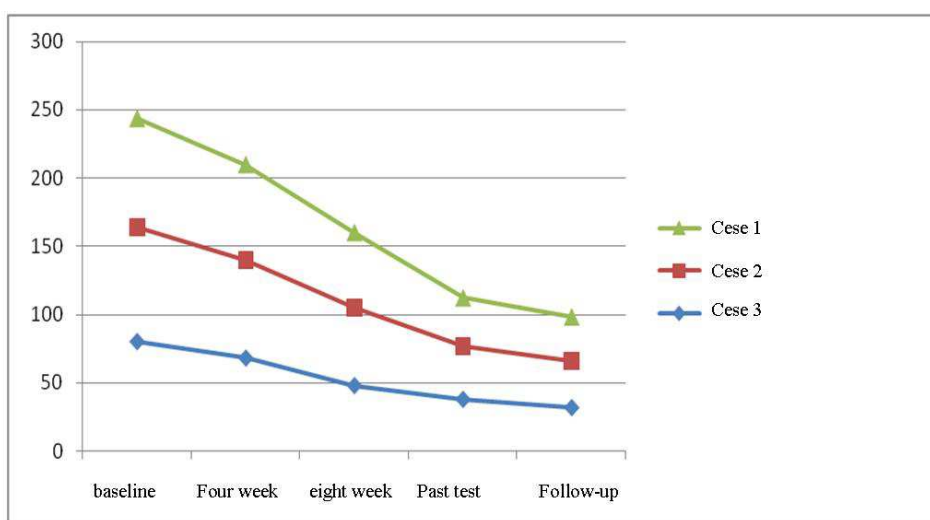


Figure 1. Shows the sensitivity of anxiety scores in group therapy based on commitment and acceptance

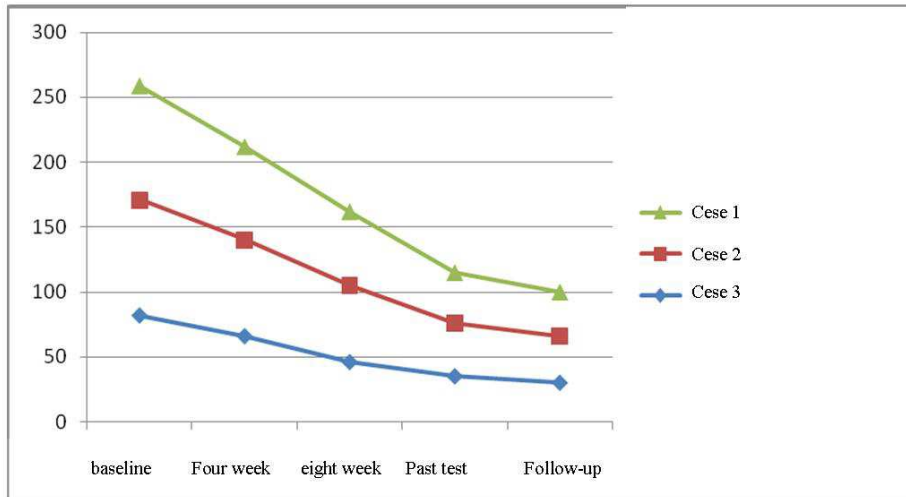


Figure 2. Shows emotional disorder scores in group therapy based on commitment and Acceptance

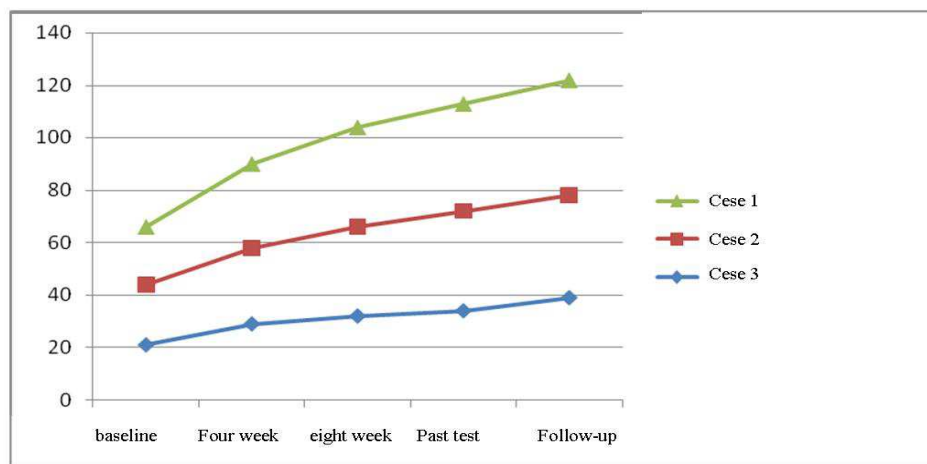


Figure 3. Shows efficacy scores based subjects in the treatment group shows commitment and acceptance.

In the first hypothesis test has higher impact on acceptance and commitment therapy in anxiety sensitivity and excitement irregularities and self-efficacy in patients with chronic headache showed findings The impact of the first, second and third subjects in reducing anxiety sensitivity and excitement irregularities and increase self-efficacy was significant. This results in Table 1 and Figures 1 to 3 below. First, second and third in the pre-test subjects scored higher in anxiety sensitivity and excitement irregularities have achieved than the self- efficacy and after cognitive behavior therapy (Oct) score of these measures reduces and this reduction was maintained at follow-upas well as low self-efficacy score was in the pre-test Self-efficacy score increased after the intervention and the increase in follow-upwas retained.

Table 3. Descriptive Index scores in group therapy based on emotion regulation variables in the course of treatment with the rate of improvement index of effect size Cohen

Subjects	Variable	Baseline	fourth Session	Eighth Session	After treatment	Average interventions	Percent recovery	% Reduction in scores after treatment	Cohen coefficient Average interventions	The average impact factor interventions	Follow-up	Cohen coefficient Tracking	Multiplier effect Tracking
First	Anxiety Sensitivity	84	67	52	41	53.33	0.52	0.42	2.64	0.84	35	3.47	0.89
	Irregularities excitement	90	69	55	47	42	0.59	0.49	3.84	0.88	32	4.24	0.94
	Efficacy	25	30	36	39	36.37	-0.47	-0.34	-1.15	-0.74	42	-3.25	-0.81
Second	Anxiety Sensitivity	85	74	60	47	60.33	0.54	0.39	3.56	0.82	35	3.95	0.87
	Irregularities excitement	82	70	57	42	58.67	0.59	0.45	4.55	0.86	34	4.64	0.92
	Efficacy	27	35	39	41	38.33	-0.42	-0.26	-1.71	-0.71	44	-2.01	-0.75
Third	Anxiety Sensitivity	79	64	52	42	53.33	0.57	0.42	3.56	0.85	34	4.08	0.89
	Irregularities excitement	85	72	59	44	58.33	0.62	0.45	4.55	0.88	32	4.27	0.91
	Efficacy	24	32	38	42	37.33	-0.75	-0.49	-1.71	-0.89	49	-4.22	-0.90

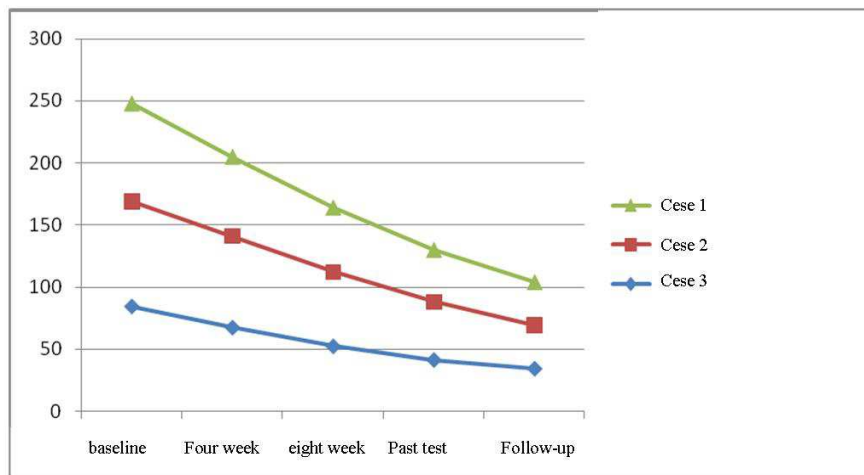


Figure 4. Shows the sensitivity of anxiety scores in group therapy based on emotion regulation

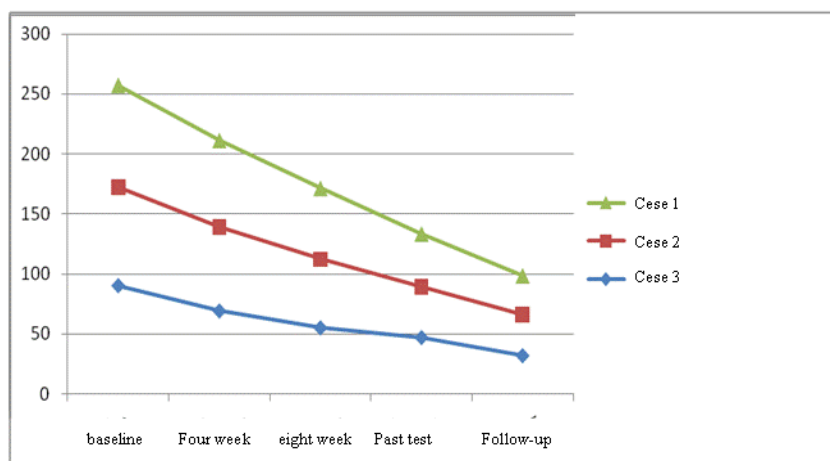


Figure 5. Shows emotional disorder scores in group therapy based on emotion regulation

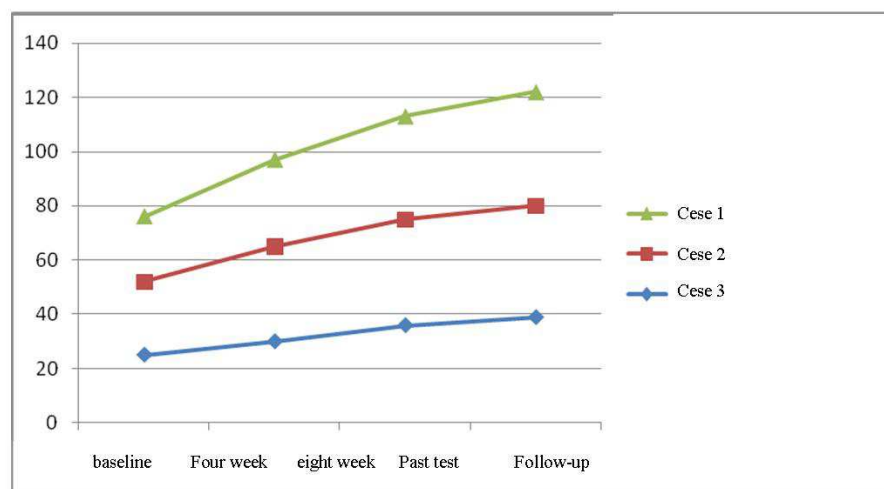


Figure 6. State-efficacy scores of participants in group therapy based on emotion regulation

In the second hypothesis, based on the impact of cognitive emotion regulation strategies in anxiety sensitivity and excitement irregularities and efficacy of chronic headaches, Results showed that subjects impacting on the fourth and fifth and sixth in reducing anxiety sensitivity and excitement irregularities have had significant effect; But has no effecting the self-efficacy. the fourth, fifth, sixth Subjects had received higher score in excitement and anxiety sensitivity scale pre-test and after the intervention scores were significantly reduced in on this scale and this reduction was maintained at follow-up.

CONCLUSION

Results of the study demonstrated the efficacy of treatment acceptance and cognitive emotion regulation strategies in reducing symptoms of anxiety sensitivity and emotion disorder in patients with headache. According to the findings obtained can be said that adding cognitive behavioral therapy leads to increase the efficacy of treatment, especially in reducing anxiety sensitivity scores and disorder excitement. The overall findings of the research findings is matched with Newton, Spence and Scott [14] that the non-adaptive beliefs about pain, the study Velyn et al. (1955, quoted by [14]) to improve the recognition of pain, and Turner et al [15] to increase the self-consistent. Treatment based on acceptance and Commitment Therapy through real-life according to the values and thinking person helps them to overcome their suffering. ACT is committed to treat people accept what is out of control and commit to taking action that life is meant to be with. In the ACT attempts to humanitarian goal of getting rid of the unpleasant emotions change to fully experience the emotions. For this purpose it is necessary for clients to learn the words to describe the emotions and excitement to the brand and its functions in the form of an entirely different experience. Thus other unpleasant emotions are not inherently harmful and are not necessarily determine the next behavior and the inability of emotion regulation makes it difficult to conduct efficient (Hayes, Wilson and others, 1996; quoted [12]).

When that person will be treated by ACT, he accepts his emotions, and his life will determine the actual values and commits to make a difference. As a result, learn to control his emotions and anxiety sensitivity and believe their ability.

Cognitive emotion regulation strategies, through the correct identification of individuals and focusing them on their malicious emotions helps people regulate their emotions. Given that cognitive emotion regulation can be self-regulatory guidance of attention to the one experienced considered [16] And part of the process of cognitive emotion regulation skills develop attention and selective attention is dedicated through seeing, hearing, smell and stimulate the sense of touch (Kering and Sloan, 2009), so in order to learn cognitive emotion regulation strategies by choosing the attention is effective in (distract them from the pain and disability and its problems) and away from negative automatic thoughts, mindfulness of emotions without judgment, emotional evacuation training, relaxation and mindfulness reverse acting in other words to increase disease.

It should also be noted that part of the cognitive emotion regulation strategies is dedicated to teach problem solving skills, anger management skills, identify and correct the traumatic cognitive assessment, reassessment strategies [17] and utilizes these strategies increased efficacy in patients with chronic helped them in pain and problems of the pain. For resiliency, the ability to adapt the level of control is based on environmental conditions [18]. People with high self-efficacy, self-shattering have not calmed down emotionally and their ability to turn stressful situations [19]

and cognitive emotion regulation strategies can be achieved through increasing the quality of life in chronic pain patients.

Finally, it should be noted that since cognitive emotion regulation strategies lead to change in cognition and behavior and regulate their negative emotions through efficient behaviors and learn new skills to help them experience less pain (lack of focus on signs of pain), In addition, prevented the social isolation and by educating people reduce their interpersonal skills of interpersonal problems [20] has been able to take advantage of strategies increase all aspects of the quality of life of chronic pain patients physical, psychological, social and spiritual.

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