

An investigation into the effectiveness of acceptance treatment on the reduction of depression among the disabled who referred to the Social Welfare Organization in the county of Darreh Shahr

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Abstract

Objective: Nowadays, the third wave psycho-therapy treatments emphasize on acceptance, awareness of feelings, cognitive abilities, emotions and behaviors, rather than challenging the knowledge. For this reason, the current study aimed to investigate the acceptance-based training on and commitment on depression among the disabled who referred to the Welfare Organization in the city of Darreh Shahr.

Methods: In this study which is considered a semi-empirical activity of the type of pre-test and post-test with control group, the sample was selected through a purposive sampling from among the patients who referred to the Social Welfare Center in Darreh Shahr. They were tested using Beck Depression Inventory, of which 30 people were selected and assigned to experimental and control groups (15 people). The experimental group was trained by independent variable (Project of Acceptance Treatment and Commitment) while the control group did not receive any treatment. In the post-test process, Beck Depression Inventory was performed on both groups once again and the data were analyzed using analysis of covariance.

Findings: Using analysis of covariance and Galmogrov Smirnov-Shapiro tests by a factor of ($P > 0,05$), the effect of acceptance treatment training on reducing depression has been effective among the disabled patients with a factor equal to $F = 28/78$, $P < 0/01$.

Results: The results of the current study clearly show that the treatment acceptance and commitment has been influential in reducing depression among the people with disabilities in the study.

Keywords: acceptance treatment, depression, physically disabled people (handicapped).

1. Introduction

It is estimated that 7 to 10 percent of people suffer from disabilities. The number of people with moderate and severe disabilities in developing countries is roughly 200 million people. In some developing countries, there have been some plans to assist people with disabilities. Also, some physical and mental rehabilitation services are provided which cover only 1 to 3 percent of persons with disabilities. But in many of these countries, there is still no spinal rehabilitation facilities for persons with disabilities, particularly people with spinal disabilities and the lack of this process could be seen in conditions of employment and social ties of people with disabilities.

Disability is defined as a crisis that any individual may experience in his/her lifetime, providing a different situation compared to the past. In any case, the disability facilitates the emergence of mental crises through anxiety, decreased self-esteem and psychological difficulties. Despite the fact that these disorders and disabilities have negative influences on people, it not only creates social and economic problems, but also facilitates the prevalence of mental and psychological illnesses including isolation, anxiety, depression, low self-esteem and so on. Individuals who suffer from spinal disorders deal particularly with depression issues, pushing them

away from living in the community. These people are in a system of negative expectations about their future and their lives. This is closely related to the concept of learned helplessness.

Today, depression is a common psychiatric disorder in 20th century which is also one of the most important problems and concerns of the communities. It is considered a factor that threatens the economic situation, attracting the attention of countries' many health experts and policymakers and World Health Organization's authorities. Based on research and forecasts performed by the researchers of the World Health Organization and the World Bank, depression which is often appeared as a secondary reaction to loss of health and psychosocial consequences due to physical illness, was the fourth cause of inability to during one's lifetime in 1990 considering the total burden of disease. Unfortunately, it will become the second cause of disability of one's lifetime in 2020. The figures indicate the growing importance of depression and the increasing need to investigate it.

Depression impairs the quality of life and increases the risk of suicide and health care costs, especially in people who are unable to do their personal responsibilities. Depression is a disease that can be controlled and treated, and there are many techniques for its treatment [4]. Depression can be one of the longest and most debilitating diseases in all countries of the world [5]. Depression is one of the causes of long-term interventions (60 days) [1]. In all societies, treatment techniques used for long-term mental illnesses are primarily at the individual level. Treatments that are done collectively are not applicable. The spread of long-term diseases or lack of treatment facilities has led to some collective interventions, such as treatments used for depression and anxiety [2].

Patients suffering from spinal disabilities experience the trauma of losing. Theorists suggest that people who respond to this trauma can perceive the discomfort process including meaning reconstruction and position acceptance [3]. Half a century ago, people were not expected to survive during a suffrage from a spinal cord injury. Those who survived did not expect to live in the community. Spinal cord injury was the worst incident that could have happened in one's life, so that life can be very difficult. However, in the last decade of the 20th century, it became apparent that people with disabilities are identical to ordinary people in all other respects, other than physical disability [4].

Depression has profound effects on the treatment of patients [5]. Reduction in the incidence of suicide among depressed patients is the outcome of collective treatments in the hospitals.

Considering the research conducted in the treatment of these mental and emotional disorders such as anxiety, depression, panic and anger and to attempts for discovering psychological interventions to achieve a healthy mental status have had quite positive influences on the improvement of such issues, using the common behavioral-therapeutic techniques [33].

In addition to medical treatments, psychological medicines also have been developed over many years to treat psychological disorders, especially depression. The first generation treatments were introduced as behavioral approach in contrast to the initial approach of psycho-analysis in the 1950s and 1960s based on conditional classic perspectives. Second generation treatments known as cognitive behavioral therapy came into existence in the 1990s, with greater emphasis on cognitive aspects, the role of beliefs, knowledge, schemas, and information processing in mental disorders. Various techniques should be used to change or adjust the psychotherapy procedures [6,7].

We are nowadays faced with the development of the third generation of this type of treatments that are called acceptance-based models. In this type of therapy, the goal is increase to psychological relationship of the individual with their thoughts and feelings, rather than trying to change the cognitive abilities [8,9]. The third wave of psychotherapies that are known as post-modern psychotherapies, it is believed that cognition and emotions should be considered in the context of conceptual phenomena. For this reason, instead of using approaches such as cognitive-behavioral treatment changes inefficient knowledge and beliefs to amend emotions, people will be trained to accept their emotions in the first place. Then life here and now are more psychologically flexible. The creation of practical ability to choose between various options may be more appropriate and practical, rather than merely avoiding thoughts, feelings, memories or turbulent desires imposed to the person [10].

For this purpose, the traditional behavioral-cognitive techniques are combined with an aware mind. So here are some examples of the effect of combination of behavioral therapy-based interventions on acceptance that include using dialectical behavioral therapy in the treatment of surfeit disorder [11], acceptance and commitment therapy in drug abuse and drug dependence [12], nicotine dependence[8], reduction of psychotic symptoms, treating anxiety and depression [13], behavioral couple therapy on marital satisfaction [29]

Acceptance treatment has some solutions for improving negative thoughts and behaviors among the

depressed patients. In a research that was conducted last year in Washington, it was revealed that acceptance treatment has utilized behavioral-mental processes to overcome depression. This not only influences personal affairs, but also affects the processes related to the improvement of social lives of people under treatment. The results indicate that short-term individual therapies have been successful in restoring individuals' mental health [14].

These results lead to the use of these interventions in the treatment of depression, anxiety, anger at the treatment groups and its test it in these fields. Individual and group therapies are considered a method of admission treatments in the short-term behavior, having had the same effects [15]. In a survey of a sample consisted of 101 people in New York it was shown that acceptance treatment has been applied on a group of the depressed and anxious people. This sort of behavior was used by its own typical organization, showing some positive impacts on the improvement of depressed and anxious patients [16].

Various studies show that the use of acceptance-based interventions in the clinics has increasing effects and applications on depression, leading to an increase in the patient's quality of life and social life [13].

In previous research, a significant relationship has been approved between acceptance variables and value-based life, considering treatment results [17,18]. In a study titled "Evaluation of the effectiveness of acceptance and commitment therapy mediators in reducing symptoms of generalized anxiety disorder", the goal was to evaluate the effectiveness of acceptance and commitment therapy mediators and provide solutions in order to optimize generalized treatment methods of anxiety disorder [19].

It is necessary that the patient is treated sooner and ground is paved for her/him to re-enter the society. Therefore, the aim of this study is to evaluate the effectiveness of acceptance and commitment therapy in reducing depression in depressed patients with spinal cord injury.

2. Research method

This study was conducted in the form of quasi-experimental with pre-test and post-test control group. The research community is consisted of persons with disabilities referring to the Social Welfare Organization in Darreh Shar in 1394, having an average age of 20-30. The sample size was determined using purposive sampling and 30 people were selected from among visitors. They were

arranged in two experimental and one control groups after the pre-test. The Beck Depression Inventory which has been used in many studies was also used here to assess the members. The experimental group was trained and gone through commitment therapy, while the control group was waiting for treatment. At the end of treatment, both groups were assessed again after.

3. Research Tools

Beck Depression Inventory: Beck and his colleagues reviewed studies using this tool and found that its validity coefficient varies from 0/48 to 0.86. This tool is used in Iran to evaluate the psychometric properties of the instruments discussed. The research conducted by Ghasem zadeh (Ph.D) and his colleagues in 2008 specified that the reliability of the tool is 0.87 [20]. Tashakkori and Mahyar found out that the reliability coefficient is 0.78. In another research, the validity of the questionnaire varied from 0.70 to 0.90. The questionnaire contains 21 questions, assessing depression with varying degrees from mild to severe. Scores range from zero to 63, and participants must be at least on a scale of zero to three to respond to it. The SPSS software was used to analyze the data and the analysis of covariance.

The Therapeutic Layout of Acceptance and Commitment: In this study, the therapeutic layout of acceptance and commitment was utilized. The goal is to increase the person's subjective experiences (thoughts, feelings, etc.) and thus reduce the ineffective control measures. These experiences must be accepted without any internal or external reaction to remove them. In the second step, the mental awareness is added in the present moment, meaning that the person becomes aware of all moods, thoughts and behaviors in the moment. The person is trained in the third stage to separate him/herself from these mental experiences in a way that becomes able to act independent of them.

The fourth stage includes efforts to reduce excessive focus on visual or personal stories (such as being victimized) that person has made for himself in his mind. Fifth, assisting the individual to know his/her personal values and clearly identify and convert them into specific behavioral goals (clarification of values). Finally, the motivation to act responsibly towards the goals and values of specified activities with the acceptance of subjective experience is prioritized. This subjective experience can be depressing thoughts, obsessive, thoughts related to events (trauma), social phobias or anxiety and so on.

Table 1: Steps in acceptance treatment on the reduction of depression

Step 1	Increase in psychological acceptance of mental experiences and decrease in ineffective controls.
Step 2	Emphasis on psychological awareness at current time
Step 3	Learning to separate himself from the mental experiences
Step 4	Trying to decrease the overemphasis on cognitive diffusion or personal stories.
Step 5	Helping the case in realization and application of his own values
Step 6	Motivating the case for commitment to the objectives and values and objective-based action.

The empirical evidence on the effectiveness of the treatment of various disorders is increasing. For example, efficiency of the treatment of disorders like depression has increased [34]. Psychologists [28], have investigated the substance abuse [8], burnout [21], and chronic pain [22]. Therapies based on the acceptance hypothesize that mental damage occurs along with efforts to control or avoid negative emotions and thoughts [35].

4. Research question

Is Acceptance and Commitment Therapy training influential on the level of depression among the patients who referred to the Social Welfare Organization in the city of Darreh Shahr?

5. Results

Table 2 shows the demographic status of the participants in the study. Of the 30 participants, education level was as follows: 7.27% illiterate, 40 percent having diploma and 3.33 percent having bachelor's diploma. 20 percent of the respondents were between 20-23 years, 40% between 24-26 years and 40% between 27-30 years. 3.66% of these people were unemployed and 36.6 percent were working in sectors open to the public. In addition, 7.56 percent and 3.43 percent had disabilities caused by accidents and disasters.

Table 2: Demographic information of the participants

Variable	Levels	Frequency	Percent
Education	Illiterate	8	26/7
	Some College	12	40
	B.A.	10	33/3
Age	20-23	6	20
	24-26	12	40
	27-30	12	40
Job background	Unemployed	19	63/3
	Employed	11	36/6
Disability type	Congenital	17	56/7
	Accidental	13	43/3

Table 3: Mean and standard deviation of the depression

Variable	Group	Pre-test		Post-test	
		M	SD	M	SD
Depression	Experiment	47/8	4/57	33/7	7
	Evidence	46	9/41	46/93	9/8

The descriptive findings regarding the variable scores of pre-test and post-test stages are presented in Table 3. Table 3 shows that in the post-test, post-test score for the variable of depression has decreased among the experimental group. To compare the effectiveness of treatment admissions test, ANCOVA was used to reduce depression in people with disabilities, but before that it was needed to examine the assumptions of the test.

Table 4: Kolmogorov–Smirnov test and Shapiro-Wilk test results for analyzing data distribution

Variable	Group	Kolmogorov–Smirnov test			Shapiro-Wilk test		
		St	DF	Sig	St	DF	Sig
Depression	Pre-test	0.09	30	0.20	0.979	30	0.79
	Post-test	0.11	30	0.20	0.977	30	0.74

According to Kolmogorov–Smirnov test and Shapiro-Wilk test results, the depression variable ($P > 0.05$) has a normal distribution (Table 4).

Table 5: Levin test for homogeneity of Variances

Dependent Variable	Df2	Df1	F	Sig
Depression	28	1	0.39	0.54

$p > 0/05$

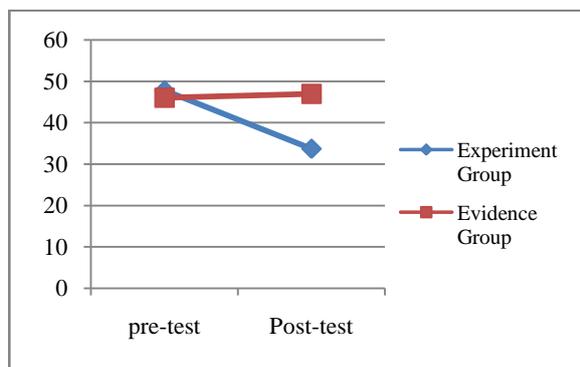
Default homogeneity test of depression's variable variance was carried out by Levin test that was found to be not significant ($p > 0/05$), so the default of variances' homogeneity was accepted (Table 5).

Table 6: The result of co-variance analysis (ANCOVA)

Variables	SE	SS	df	MS	F	Eta S	SP
Depression	Pre-test effect	1399.04	1	1399.04	59.5	0.69	1
	Group effect	1793.61	1	1793.61	76.28	0.74	1
	Error	634.83	27	23.51			

** $P < 0/01$

As seen in Table 6, keeping fixed the effect of pre-test scores, the education of acceptance treatment has been influential on the decline among the people with disabilities. Eta square was also obtained to decrease the depression ($F = 28/78$, $P < 0/01$) which has been effective in people with disabilities. Statistical power for both variables is 100% indicating the high accuracy of adequate sample size for the analysis and conclusions.



Graph 1: Mean of depression scores at pre-test and post-test stages in experimental and control groups

6. Discussion and Conclusion

Perhaps as a result of a transition from tradition to modernity, our developing society copes with certain disturbances associated with this transition in political, cultural, social, religious and aspects the like. This process has problems that cannot be solved, at least in the short term. It can be treated with methods such as modifiable and non-modifiable ACT in this particular situation to move personal and environmental changes toward more constructive activities. Therefore, energy and investment waste is prevented in the lives of individuals and the society. It was attempted to answer to one of the fundamental questions regarding the effectiveness of this type of therapy on the level of depression among those depressed people with physical disabilities and disorders. It was found that acceptance and commitment therapy ($F = 28/78$, $P < 0/01$) was effective in reducing depression in disabled patients. This finding is consistent with the research carried out by other authors. [13,16-27].

In addition, studies show that acceptance-based behavioral therapy attributes mental health problems to three causes as follows: the problems in awareness of inner experiences, avoiding unpleasant experiences inside and avoiding behaviors and actions that are valuable and important for the individual.

Incorrect cognition of individuals' inner experiences reduces their ability to make practical use of their emotional responses. This process makes the treatment of patients unable to exercise or to understand the root of their problem behavior. Another thing that can exacerbate psychiatric disorders in people is the kind of relationship with their emotions. Patients are accustomed to critical judgments about the existence of their unpleasant experiences and efforts in order to avoid these growing experiences. These avoiding efforts have contradictory effects are inevitable (Manndafkar, emotions or physical sensations), increasing psychological distress that interferes with quality of

life. Negative views and experiences may motivate individuals to change behavior or reduce their engagement with life. Efforts to avoid the experience make the changing process difficult, because the inevitable answer is often immediate reduction of discomfort through negative reinforcement. Avoiding experiences fuels doing certain behaviors individuals are afraid of, constraining their lives and maintaining the disorder symptoms.

The acceptance-based behavioral therapy tries to change people's relationships with their inner experiences, reducing severe empirical avoidance. Behavioral therapy helps individuals with increased flexibility and choice to act according to the value of his/her life. So the person starts emphasizing on life's precious behaviors with positive thoughts, feelings, avoiding unpleasant physical sensations. Acceptance-based behavioral therapies, have demonstrated their effectiveness in various fields. However, because of the novelty of these treatments, there are many questions about the effectiveness mechanisms.

7. Conclusion

During the training, participants' performance increased remarkably in activities. This testifies to the effectiveness of group training and group life and psychological processes.

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