Original Research

The Effectiveness Of Training Techniques Based On Acceptance And Commitment And Cognitive Behavior On Reducing Emotional Ataxia And Job Burnout Of Health Care Service Centers Employees

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Abstract:

Background: The aim of the present study is to investigate the effectiveness of teaching techniques based on acceptance and commitment and cognitive behavior on reducing emotional ataxia and job burnout of employees of health and medical service centers.

Method: The statistical population consists of 150 employees of health care centers affiliated to three health and treatment networks of Isfahan University of Medical Sciences. Among the employees, 60 people were selected completely randomly and replaced in three groups. In order to collect data, the Toronto Ataxia Scale (TAS-20) and Mezlach's Job Burnout Questionnaire (1981) were used, which were administered as a pre-test and post-test for all three groups.

Results: The results showed that the Acceptance & Commitment Therapy has a more favorable effect than the cognitive-behavioral method on job burnout and emotional ataxia of health care service center employees.

Conclusion: Acceptance & Commitment Therapy can be focused on any or all of the behavioral, emotional, thoughts and relationships between individuals according to what patients need to experience.

Keywords: Acceptance And Commitment, Cognitive-Behavioral Approach, Emotional Ataxia, Job Burnout, Employees Of Healthcare Service Centers

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Introduction

One of the most important aspects of every person's life is his job. In addition to meeting the living expenses, the job also meets the psychological needs of people. With the growth of the global economy, increased competition, changes in relations between employees and the introduction of current technologies, work life has changed drastically in today's world. Among these changes, employees are increasingly faced with stress in the workplace. Because the major part of every person's life is spent on employment and it can be said that people spend more than half of their waking hours in the work environment. In the work environment, five categories of factors, including physical, chemical, biological, environmental and psychological, threaten human health. Stress is considered as the most important psychological factor affecting health, and in the long run, it destroys the physical and mental resistance of a person, leading to job burnout (1). Today, job burnout is a product of long-term stress at work and one of the main factors in reducing the efficiency and loss of human resources of employees, which is a problem in all systems. Job burnout has a set of emotional, behavioral, psychophysical and organizational signs and symptoms. In the emotional dimension, it causes symptoms such as using insincere methods with the patient, feelings of helplessness, depression and job dissatisfaction (2). In the attitudinal dimension, negative attitudes such as fault-finding, blaming, and lack of empathy towards the patient appear, and the person gradually feels low job value, mistrust of work and colleagues, and negligence. Behavioral symptoms include reduced job performance, limited social and recreational activities, and increased interpersonal problems and high-risk behaviors such as drug abuse, alcohol, and smoking. Psychosomatic symptoms such as fatigue, headache, sleep and digestive disorders and in the organizational dimension, it causes irregularity in patient care or absenteeism, accidents in the work environment, and finally changing or leaving the job, and ultimately leads to a sharp drop in the quality of health care services (3). Job burnout can sometimes be considered as one of the reasons for the occurrence of disorders in the expression of emotions and ataxia. Emotional ataxia is the inability to cognitively process emotional information and regulate emotions, and it includes the components of difficulty in identifying emotions and distinguishing between emotions and physical stimuli related to emotional arousal, difficulty in describing emotions, weakness in imagination, objective cognitive style and external intellectual orientation (4). In the description of these people, they state that people with emotional ataxia exaggerate normal physical stimuli and misinterpret physical signs of emotional arousal. They show emotional helplessness through physical complaints and look for physical symptoms in therapeutic measures. Acceptance and commitment therapy (ACT) was introduced by Hayes and her colleagues in the early 1980s and known as ACT, and is rooted in a deep philosophical theory called functional contextualism. And theoretically, it is based on the mental relations framework theory (RFT), which explains how the human mind creates suffering and the useless methods of dealing with it, as well as alternative contextual approaches for these areas (5). ACT uses metaphors, experiential exercises, and logical contradictions to get rid of the verbal content of language and create more connection with the continuous flow of experience in the present, and includes the main components, as: Acceptance, defusion, self as context, connection with the present, values and commitment (6) ACT is based on the assumption that the main problem that most clients face is experiential avoidance, which is a person's avoidance of thoughts, feelings, senses, and other private events In ACT, attempts to control private experiences are seen as the problem rather than the solution; Because instead of being a solution, it creates more problems. Therefore, the main goal of acceptance and commitment treatment is to create psychological flexibility (7). Cognitive-

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behavioral therapy, which is one of the effective methods used in this research, states that for effective treatment, it is necessary to intervene in the patient's cognition and beliefs (8). Researchers believe that if cognitive treatment methods are combined with behavioral methods, it will have a better effect on the treatment of this disorder and will result in a significant reduction of symptoms (9). This approach deals with the content of the person's thoughts and beliefs and is focused on evaluating and recognizing negative thoughts, modifying the attitudes and behaviors of the affected patient. Farhat et al. (2021) investigated the effect of cognitive-behavioral counseling on increasing students' reading motivation. The results of the research showed that cognitive-behavioral counseling has a significant effect on the study motivation of sixth grade elementary school students. According to the obtained results, it can be said that cognitive-behavioral therapy, having a rich source of behavioral exercises, has the potential to improve the motivation of reading in students by strengthening and training. However, the development of counseling programs with an emphasis on cognitive-behavioral counseling is suggested for the development of study culture (10). In their research, Mirshamsi et al. (2020) focused on the effectiveness of cognitive-behavioral anger control training on empathy and mental health of male bullies with attention deficit/hyperactivity disorder. The results showed that the effectiveness of cognitive-behavioral anger management training had a significant effect on the empathy and mental health of male bully students with attention deficit/hyperactivity disorder. It is suggested that medical centers related to education and also schools use this treatment method in order to reduce the problems of hyperactive and bully students (11). In a research, Salehian et al. (2019) compared the effectiveness of group therapy based on acceptance and commitment with group therapy based on awareness of psychological disorders and behavioral patterns of students with personality type D. The results of the research indicate that the effectiveness and durability of two group therapy interventions on psychological disorders and behavioral patterns of students with personality type D were significantly at the same level. The results showed that two group therapy interventions led to the reduction of psychological disorders and behavioral patterns of students with personality type D (12). Galea et al. (2022) showed that acceptance and commitment therapy was of better quality compared to other treatments, which increased the mental health of patients (13). In a research, Godfrey et al. (2020) examined acceptance and commitment therapy with conventional treatment in patients with chronic back pain. The results showed that during the one-year follow-up period, the patients who received acceptance and commitment therapy had less pain and disability (14). The results of Moynihan et al.'s research (2013) indicated the positive and significant effectiveness of cognitive behavioral intervention on reducing tension and increasing the cognitive flexibility of subjects (15).

Methods

The current research is an applied and experimental research of three groups with pre-test and post-test. Before the experiment (applying independent variables), all the subjects underwent a pre-test at the same time, and then one group of subjects (the first experimental group) underwent cognitive-behavioral group therapy and one group of subjects (the second experimental group) underwent attention and awareness-based group therapy. There was no intervention in the control group. The statistical population consists of 150 employees of health care centers affiliated to three health and treatment networks of Isfahan University of Medical Sciences. Among the employees, 60 people were selected completely randomly and replaced in three groups in the same way. In order to collect data, two questionnaires were used as follows:

Toronto Ataxia Scale (TAS-20): The Toronto emotional ataxia Scale (Bagby, 1996) is a 20-

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question test and subscales difficulty in identifying emotions, difficulty in describing emotions and objective thinking in a five-point Likert scale from 1 (completely disagree) to 5 (completely agree). A total score is also calculated from the sum of the scores of the three subscales for emotional ataxia (4). Cronbach's alpha coefficients for the sub-scales of difficulty in identifying emotions, difficulty in describing emotions and objective thinking were calculated for the sample of the present study, respectively, 0.81, 0.77, 0.75,

Mezlach Job Burnout Questionnaire (1981): This questionnaire includes 4 subcategories of emotional exhaustion, depersonalization, sense of personal sufficiency, and conflict. For grading each question, 2 grades are considered, frequency grade and intensity grade. In this way, each person scores from 1 to 6 in frequency and from 1 to 7 in intensity in each question. Finally, according to the questions, each subtest is calculated separately. It should be noted that the scores of these 4 scales cannot be added, it means that the components are added algebraically. This means that the points of the factors of emotional exhaustion and depersonalization are added and subtracted from the points of personal performance and conflict, then the score of frequency and intensity of job burnout is obtained (16-17). After determining the statistical sample size of the groups, all three groups were simultaneously pre-tested by research questionnaires on one day, then the first experimental group was treated with cognitive behavioral therapy for 12 sessions of 50 minutes. The second experimental group participated in 12 sessions of 50 minutes acceptance and commitment therapy, and the control group did not receive any intervention. In order to analyze the research data, descriptive and inferential statistical methods have been used.

Results

The first hypothesis: treatment based on cognitive-behavioral approaches and the Acceptance & Commitment Therapy have a different effect on the burnout of health care service center employees.

According to the results and after adjusting the pre-test scores, it was found that the therapeutic Acceptance & Commitment Therapy had a greater effect than the cognitive method on reducing job burnout ($P<0.005$).

Second hypothesis: The treatment based on cognitive-behavioral approaches and the Acceptance & Commitment Therapy has a different effect on the emotional ataxia of the employees of health and treatment centers.

According to the results and after adjusting the pre-test scores, it was found that the treatment Acceptance & Commitment Therapy had a greater effect on emotional ataxia than the cognitive-behavioral method($P<0.005$).

Discussion

The purpose of this research is to investigate the effectiveness of training techniques based on cognitive and behavioral awareness on reducing emotional ataxia and job burnout of health care service centers employees. The research findings are presented as follows:

First finding: The treatment based on cognitive-behavioral approaches and the Acceptance & Commitment Therapy have a different effect on the burnout of health care service center employees.

Using covariance analysis, it was determined that after adjusting the pre-test scores, the Acceptance & Commitment Therapy had a greater effect than the cognitive-behavioral method on reducing job burnout, and this result was confirmed at the $P<0.0005$ level.

Second finding: The treatment based on cognitive behavioral approach and the Acceptance & Commitment Therapy has a different effect on the emotional ataxia of the employees of health and treatment centers.

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The results show that after adjusting the pre-test scores and using covariance analysis, it was determined that the Acceptance & Commitment Therapy had a greater effect on emotional ataxia than the cognitive method, and these results were significant at the level of ($P<0.0005$).

Conclusion

In the interpretation of these findings of the first hypothesis, it can be stated that the Acceptance & Commitment Therapy is more favorable than other treatment approaches on the burnout of employees of health and medical service centers, so that the Acceptance & Commitment Therapy helps a person to reduce the job burnout that leads to the feeling of incompetence in their behavior and performance, and therefore the effect of the Acceptance & Commitment Therapy on the treatment of job burnout, especially the employees of health service centers And the treatment is undeniable. When they experience a traumatic situation, especially one that reminds them of early failures or losses, pervasive negative thoughts emerge that manifest themselves in the form of low self-esteem. According to Adler, lack of self-esteem is the most important reliable variable in the etiology of personality deviations or incompatibility. Therefore, it can be said that Acceptance & Commitment Therapy makes the employees of healthcare service centers feel sufficient and able to adapt to their surroundings and feel that they are valuable and free, which is also in turn reduces job burnout.

According to the findings of the second hypothesis, it can be concluded that Acceptance & Commitment Therapy is effective as a more favorable treatment for the correction of emotional ataxia of employees of health and treatment centers. Psychopathology and health are based on the three elements of emotion, thinking and behavior, and Acceptance & Commitment Therapy is used in any field where there is a need to reveal the psychological dimensions of a problem. In other words, Acceptance & Commitment Therapy can be focused on any or all of the behavioral, emotional, thoughts and relationships between individuals according to what patients need to experience.

One of the limitations of the research is the non-cooperation of some members of the statistical community in data collection. It is suggested that in future researches, the effect of age and personality characteristics on research variables should be investigated.

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Table

Table 1: Average age distribution of the subjects in the studied sample

Statistics group	N	Mean	SD
Acceptance and commitment	18	16.46	1.14
cognitive	18	46.98	1.02
Control	18	46.27	0.89

Table 2: Effect of comparison between groups

Statistics / auxiliary random variable	sum of squares	df	average of squares	F	significance level	Partial η2
confrontation	1710.215	2	885.108	16.324	0.000	0.395
error	2619.135	50	52.383			

Table 3: Tukey's post hoc test results for comparison between groups

Group (I)	Group (J)	The difference between Averages	standard error	The significance level
Acceptance and commitment	cognitive	1.15	2.41	1.00
	Control	12.52	2.41	0.000
cognitive	Acceptance and commitment	1.15	2.41	1.00
	Control	11.36	2.41	0.000
Control	Acceptance and commitment	12.52	2.41	0.000
	Control	11.36	2.41	0.000

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Table 4: Covariance analysis of parameter estimation of the effect of treatment methods on the burnout of employees of healthcare service centers

	B	Std.Error	t	The significance level	Partial η2
Acceptance and commitment	-12.52	2.42	-5.16	0.000	0.348
cognitive	-11.36	2.42	-7.4	0.000	0.307

Table 5: Adjusted averages

Group	Average	standard error
Acceptance and commitment	12.67	1.71
cognitive	13.81	1.71
Control	25.18	21.75

Table 6: The results of covariance analysis of the effect of treatment and ataxia of employees of health and medical service centers

statistics / auxiliary random variable	sum of squares	df	average of squares	F	The significance level	Partial η2
Subjects' performance in the pre-test	7615.083	1	7615.083	17.378	0.000	0.258

Table 7: Effect of comparison between groups

statistics / Variable	sum of squares	df	average of squares	F	The significance level	Partial η2
confrontation	11013.923	2	5506.961	12.567	0.000	0.335
error	21909.972	50	438.199			

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Table 8: Tukey's post hoc test results for comparison between groups

Group (I)	Group (J)	The difference between Averages	standard error	The significance level
Acceptance and commitment	cognitive	2.849	6.99	00.1
	Control	*66.31	6.979	000.0
cognitive	Acceptance and commitment	2.849	6.99	00.1
	Control	*811.28	7.00	000.0
Control	Acceptance and commitment	*66.31	6.979	000.0
	Control	*811.28	7.00	000.0

Table 9: Covariance analysis of parameter estimation of the effect of treatment methods on emotional ataxia

	B	Std.Error	t	The significance level	Partial η2
Acceptance and commitment	-31.66	979.6	536.4-	0.000	292.0
cognitive	-28.811	00.7	116.4-	0.000	253.0

Table 10: Adjusted averages

Group	Mean	SD
Acceptance and commitment	148.997	4.935
cognitive	151.846	4.945
Control	180.657	4.939

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