



## Effectiveness of Cognitive Behavioral Therapy on Anger Management and Quality of Life Improvement among Opiate-dependent Men

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### Abstract

*The aim of this research was Comparison job satisfaction of athletes and non-athletes personnel of Islamic Azad university of Ghazvin and Takestan branches. The present research is a kind of descriptive and measurement one. For gathering data a scholar made question are has been used containing individual characteristics and JDI that is designed by Visuki and chrome. Statistical universe of the research were personnel of Islamic Azad University in Ghazvin and Takestan and sample statistic of the research paying attention to Morgan table were 100 people that were chosen randomly in a simple form. Reliability of the questionnaire inside the company has been reported 88% by Gholami Fesharaki et al and its topic is surveying reliability and legitimacy Najimahs job satisfaction questionnaire by calculating Kronbachs alpha. Spss software was used for analyzing data descriptively and testing hypothesis. Statistical test was an independent with meaningful level of .05 results of the research showed that in totally in Takestan university, job satisfaction of athletes personnel is more than non- athletes ones and job satisfaction is most items is 3.6 from 5, that is more than average. So there is meaningful difference between job satisfaction of athletes and non- athletes personnel of Takestan University. In Ghazvin University both groups, I mean. athletes and non- athletes personnel were close to each other is all items related to job satisfaction in a way that, there wasn't any meaningful difference was meaningful.*

**Keywords:** Satisfaction of job, athletes and non-athletes personnel.

### Introduction

The anger itself is a functional and normal emotion with adaptive value which can initiate psychological resources, enable the behavior for corrective affairs and facilitate the resistance. However, this emotion, which is hidden in our daily life, is the feature of many clinical disorders including personality disorders, psychosomatic, bipolar, schizophrenia, etc<sup>1</sup>.

The uncontrolled anger is a feature for lots of physical and mental disorders. Weaknesses and shortcomings impacts in the anger management are further than personal distress and interpersonal relationships destruction which result in impairment of general health, incompatibility and harmful outcomes as well as aggressive behavior. If such a strong emotion cannot be controlled correctly, it can prevent to get successful in different aspects of life and threat strongly efficient function of individuals, groups and societies<sup>2</sup>.

A literature review about psychological and personality specifications of drug-dependent persons indicate that a major part of such people has antisocial personality traits and aggressive behavioral pattern in dealing with stressful conditions and they have problem to control their anger and aggression<sup>3</sup>. This aggressive behavioral pattern causes to

increase individual tendency to addiction and social and psychological problems and makes a vicious circle so that emotional reaction of anger will be predictive factor and cause of tendency to addiction<sup>4</sup>. One of the factors for tendency to addiction is inability to cope with stress and emotional control. Anger is one of the dominant emotions for substance abuse disorder so that addicted people are not able to control and manage anger. This issue assessed and verified in lots of studies. For instance, Kaplan and Sadock work on the relation between drug abuse and a variety of risky behaviors including use guns, suicidal behavior, early sexual experiences, dangerous driving and mischief. For this reason, anger control training is a life-skill program which leads to facilitate interpersonal relations and reduce stresses and incentives of tendency to addiction<sup>1</sup>. A study use anger group therapy with cognitive behavioral approach for 91 Cocaine-dependent teenagers which resulted in increased anger control and decreased Cocaine use as well as more prolonged opiate withdrawal<sup>5</sup>. Also, Ansari (2006) find in a study titled "effectiveness of cognitive – behavioral group therapy on reducing students' anger" that cognitive – behavioral group therapy is generally effective on anger reduction. Cognitive – behavioral group therapy approach is effective on state anger, trait anger and effective anger expression and reduces them. The findings of this study definitely imply on effectiveness of this treatment approach on anger reduction<sup>6</sup>.

In addition, Ghahari (2006), by studying efficacy of cognitive-behavioral method on Cannabis abuse treatment, concludes that cognitive-behavioral method is effective on reduction of cravings, increase of self-control, reduction of anxiety and depression, changing the opinions regarding drugs and enhancing the capabilities of individual components of emotional intelligence, stress tolerance, adaptability and general mood. Therefore, it seems that cognitive-behavioral approach has a considerable effect on Cannabis abuse treatment and the corresponding relapse prevention<sup>7</sup>.

Besides, Orki (2008) in order to study effectiveness of cognitive-behavioral therapy combined with anger management on self-efficacy, coping styles, anger control, reducing the desire to use drugs and relapse prevention in a group of drug-dependent students concludes that both methods of cognitive-behavioral therapy combined with anger management and cognitive-behavioral approach are more effective in terms of days of stay in treatment (medication compliance), return rate of drug use, the desire for drug use of drug therapy (taking Naltrexone)<sup>8</sup>.

Furthermore, Ashouri et al (2008), in a study to assess effectiveness of cognitive-behavioral group therapy on improvement of coping skills and relapsing prevention among addicted people, indicate that cognitive-behavioral group therapy is effective on relapse and use reduction. In other words, relapse rate in experimental group- participating in cognitive-behavioral treatment session- was reduced significantly compared to control group which indicates efficacy of such a treatment on relapse and drug use reduction in addicted people<sup>9</sup>.

In this regard, present study tried to test an intervention program of anger management with cognitive-behavioral approach among opiate-dependent men who have problem to control their anger and assess the corresponding impacts on anger rate reduction, quality of life improvement and relapse reduction. It is obvious that treatment program after the impacts test can be in hand of concerned therapists and researchers in order to be used to reduce the anger and also successfully treat the opiate-dependent people.

## Material and Methods

Present work was a quasi-experimental study by pretest- posttest method with a control group. It was composed of two groups of subjects both of which were measured twice. The first measurement was done by performing a pretest and the second one by conducting a posttest. The statistical universe included all opiate-dependent men who were under methadone maintenance treatment in opium withdrawal clinics of Shahr-e-Rey.

Random sampling method was used to compose the groups. The sample size was 20 people. Therefore, initially based on the information available in social workers and psychological

documents and clinical interviews, the people compatible with statistical universe features (i.e. reported anger and aggression) were selected randomly and Spielberger's State-Trait Anger Expression Inventory - 2 (STAXI-2) was implemented. Then, 20 people with a score higher than mean were selected as the research sample among which 10 persons were randomly placed in experimental group and the remaining in control group. The experimental group members participated in 12 (90 minutes) sessions twice a week in anger management group with cognitive-behavioral approach. The control group members did not participate in the sessions and did not take any specific treatment except methadone maintenance treatment. Furthermore, the control group was matched with the experimental one in terms of some variables such as substance type, duration of addiction, age, marital status, and educational level, as well as physical and mental conditions.

Participants' inclusion criteria: Opium or heroin consumption, addiction period of 1 to 5 years, age of 15-29 years, being male and married, without important physical and mental diseases, under methadone maintenance treatment and a least educational level of diploma

The research tools are as follows: Spielberger's State-Trait Anger Expression Inventory - 2 (STAXI-2), Quality of Life questionnaire, Morphine test kit i. Spielberger's State-Trait Anger Expression Inventory - 2 (STAXI-2): Persian version of STAXI-2 includes 57 items which are composed of 6 scales (anger state, anger trait, anger inward, anger outward, anger control inward and anger control outward) and an Anger Expression Index. Since the inventory is used widely in the researches related to Behavioral Medicine and Psychology, enough confidence is obtained about the reliability and validity of this instrument<sup>10</sup>. ii. Short Survey (SF-36) on Quality of Life: The SF-36v2 Health Survey is the world's most widely used tool for assessing the health of general and specific populations. It contains 36 questions and 3 factors of physical health, mental health and total score of quality of life. Given the results of Cronbach's Alpha Coefficient of 0.65 to 0.96, scientific validity of the questionnaire is approved. Also, the corresponding reliability is approved by Stock and Hot (1999) and all comparisons had a high correlation ( $r=0.7$ )<sup>11</sup>. iii. Morphine test kit: In order to assess opiate dependency and also participants' relapse, some special kits were used to measure Morphine available in urine. These kits are known as a diagnostic tools approved by Iranian Ministry of Health and are used in addiction withdrawal clinics.

Also, structured clinical interview was another tool in present study which was used by therapist to diagnose anger among participants. Descriptive statistical methods (mean indicators, frequency, percentage, etc) were used to analyze obtained data and information. In descriptive statistics section, correlated t-test was used to compare pretest and posttest scores in both groups and independent t-test was hired to compare experimental and control group. All these steps were implemented by SPSS software.

**Results and Discussion**

Pretest and posttest scores of Anger Scales and Indices (Spielberger) and Quality of Life Questionnaire are shown in tables 1 and 2 separated by control and experimental groups.

Given the  $t=0.395$  in pretest stage, the difference between mean values of control and experimental groups was insignificant in Spielberger’s Anger Expression Index ( $p=0.698$ ). Therefore any changes in posttest measures can be caused by the intervention. It has been shown in table 3.

**Table-1**  
**The results of Anger and Quality of Life tests in the control group as pretest and posttest measures**

Control group									
Posttest Results					Pretest Results				
Quality of Life	Anger Expression Frequency	Trait Anger	State Anger	Anger Expression Index	Quality of Life	Anger Expression Frequency	Trait Anger	State Anger	Anger Expression Index
52	23	31	32	54	65	51	25	50	51
57	58	30	41	55	50	23	26	52	53
58	42	28	43	57	52	57	27	57	64
57	41	26	57	59	53	58	28	54	62
58	32	25	58	53	75	42	26	46	49
59	34	24	59	42	78	46	15	32	61
71	61	32	58	62	64	45	32	45	60
71	31	32	36	55	62	47	27	57	52
65	48	16	32	54	59	48	26	42	56
65	49	32	58	45	71	53	25	50	55

**Table-2**  
**The results of Anger and Quality of Life tests in the experimental group as pretest and posttest measures**

Experimental group									
Posttest Results					Pretest Results				
Quality of Life	Anger Expression Frequency	Trait Anger	State anger	Anger Expression Index	Quality of Life	Anger Expression Frequency	Trait Anger	State anger	Anger Expression Index
75	22	15	27	31	53	32	30	40	57
84	24	14	22	35	58	62	31	43	58
86	25	20	25	36	59	61	32	50	54
82	31	13	12	32	57	51	32	52	53
92	26	12	16	38	58	53	18	47	61
94	25	18	31	39	62	57	17	46	60
98	33	17	14	25	63	58	25	42	45
97	21	21	10	50	51	34	26	35	41
86	17	10	8	34	75	62	28	40	61
72	42	8	7	51	62	65	29	40	62

**Table-3**  
**A comparison on control and experimental groups’ pretests in Anger Expression Index of Anger Expression Scale (Spielberger)**

Group	Members quantity	Mean	Standard deviation	T	Degrees of freedom	Table-t	Sig	p-value
Control	10	56.30	5.165	0.395	18	2.101	0.05	0.698
Experimental	10	55.2	7.146					

Taking a look on table 4 reveals that Anger Expression Index was significantly different between posttest results of control and experimental groups.  $P < 0.05$  means that The Anger Management Group Treatment with cognitive – behavioral approach reduced Anger Expression Index of opioid dependent men under methadone therapy.

management group treatment reduced State Anger Index of opioid dependent men under methadone therapy.

Given the  $t = 1.375$ , table 5 shows that the difference between mean values of control and experimental groups was insignificant in state anger index (Spielberger) ( $p = 0.158$ ).

Given the  $t = 0.503$ , table 7 indicates that the difference between mean values of control and experimental groups was insignificant in Trait Anger Index (Spielberger) ( $p = 0.621$ ).

A glance on table 6 clarifies that the difference between posttest results of control and experimental groups was significant in mentioned test ( $p < 0.005$ ). In other words, the anger

Taking a look on table 8 shows that the difference between control and experimental groups' posttest was significant in mentioned test ( $p < 0.05$ ). Comparing significance of the difference of posttest mean values and insignificance of pretest mean values, it can be concluded such a difference is caused by intervention; in other words, the anger management group treatment reduced Trait Anger Index of opioid dependent men under methadone therapy.

**Table-4**  
**A comparison on control and experimental groups' posttest measures in Anger Expression Index (Spielberger)**

Group	Members quantity	Mean	Standard deviation	T	Degrees of freedom	Table-t	Sig	p-value
Control	10	53.6	6.003	5.180	18	2.101	0.05	0.000
Experimental	10	37.1	8.089					

**Table-5**  
**A comparison on control and experimental groups' pretest measures in State Anger Index (Spielberger)**

Group	Members quantity	Mean	Standard deviation	T	Degrees of freedom	Table-t	Sig	p-value
Control	10	47.8	8.44	1.375	18	2.101	0.05	0.158
Experimental	10	43.5	5.212					

**Table-6**  
**A comparison on control and experimental groups' posttest measures in State Anger Index (Spielberger)**

Group	Members quantity	Mean	Standard deviation	T	Degrees of freedom	Table-t	Sig	p-value
Control	10	47.4	8.495	6.611	18	2.101	0.05	0.158
Experimental	10	43.5	5.212					

**Table-7**  
**A comparison on control and experimental groups' pretest measures in Trait Anger Index (Spielberger)**

Group	Members quantity	Mean	Standard deviation	T	Degrees of freedom	Table-t	Sig	p-value
Control	10	25.7	4.47	0.503	18	2.101	0.05	0.621
Experimental	10	26.8	5.432					

**Table-8**  
**A comparison on control and experimental groups' posttest measures in Trait Anger Index (Spielberger)**

Group	Members quantity	Mean	Standard deviation	T	Degrees of freedom	Table-t	Sig	p-value
Control	10	27.6	5.0815	6.118	18	2.101	0.05	0.621
Experimental	10	26.8	5.432					

Given the  $t=1.347$ , table 9 indicates that the difference between mean values of control and experimental groups was insignificant in Anger Expression Index (Spielberger) ( $p=0.195$ ).

A glance on table 10 clarifies that the difference between posttest results of control and experimental groups was significant in mentioned test ( $p<0.05$ ). In other words, the anger management group treatment reduced Anger Expression Frequency Index of opioid dependent men under methadone therapy.

Given the  $t=0.837$ , table 11 indicates that the difference between mean values of control and experimental groups was insignificant in Quality of Life test ( $p=0.414$ ).

Taking a look on table 12 reveals that Quality of Life was significantly different between posttest results of control and experimental groups.  $P<0.05$  means that The Anger Management Group Treatment reduced Quality of Life of opioid dependent men under methadone therapy.

**Discussion:** Anger is a human emotion which is formed instinctively. Adaptive value of anger is not hidden and its usefulness is clear to communicate with threat, creating

potentially aggression for dealing with the threat and providing the information to identify priorities and expectations. However, several interpersonal and social problems, tendency to violence and physical or medical illness originate also from anger<sup>12</sup>. Lots of addicted people take drugs to reduce anxiety and deal with aggressive feelings<sup>13</sup>.

Present study tried to test an intervention program of anger management with cognitive-behavioral approach among opiate-dependent men who have problem to control their anger and assess the corresponding impacts on anger rate reduction, quality of life improvement and relapse reduction. The results indicated that anger management group therapy with cognitive-behavioral approach reduces general anger index of opiate dependent men under methadone maintenance treatment. This important finding is in line with [9, 7, 8 and 6]. The findings of these studies definitely imply effectiveness of cognitive-behavioral approach on anger reduction.

Also, present study assessed effectiveness of anger management group therapy with cognitive-behavioral approach on state anger index of opiate-dependent men. Given the results, anger management program reduced state anger among people under methadone maintenance treatment. This finding is in harmony with<sup>6</sup>.

**Table-9**

**A comparison on control and experimental groups' pretest measures in Anger Expression Index (Spielberger)**

Group	Members quantity	Mean	Standard deviation	T	Degrees of freedom	Table-t	Sig	p-value
Control	10	47	9.88	1.347	18	2.101	0.05	0.195
Experimental	10	26.8	5.432					

**Table-10**

**A comparison on control and experimental groups' posttest measures in Anger Expression Index (Spielberger)**

Group	Members quantity	Mean	Standard deviation	T	Degrees of freedom	Table-t	Sig	p-value
Control	10	26.6	7.1055	3.418	18	2.101	0.05	0.000
Experimental	10	41.9	12.242					

**Table-11**

**A comparison on control and experimental groups' pretest measures in Quality of Life test**

Group	Members quantity	Mean	Standard deviation	T	Degrees of freedom	Table-t	Sig	p-value
Control	10	62.9	9.689	0.837	18	2.101	0.05	0.414
Experimental	10	59.8	6.570					

**Table-12**

**A comparison on control and experimental groups' posttest measures in Quality of Life test**

Group	Members quantity	Mean	Standard deviation	T	Degrees of freedom	Table-t	Sig	p-value
Control	10	61.3	6.3779	7.356	18	2.101	0.05	0.000
Experimental	10	86.6	8.80909					

Another finding here was impact of anger management group therapy with cognitive-behavioral approach on trait anger of opiate-dependent men under methadone maintenance treatment. Previous studies [6 and 8] are parallel with this finding. These studies suggest impact of cognitive-behavioral approach on increased anger control and decreased Cocaine use as well as more prolonged opiate withdrawal. In this regard, present work studied impact of anger management on anger expression in participants and concluded that anger management group therapy with cognitive-behavioral approach reduces frequency of anger expression of opiate-dependent men under methadone maintenance treatment. As a result, cognitive-behavioral approach is effective on addicted people's anger expression, this finding is in line with [6].

As the last finding, present study concluded that anger management group therapy with cognitive-behavioral approach increases Quality of Life among opiate-dependent men under methadone maintenance treatment. Holder et al (1991) in this regard argue that, among mental-social approaches valued in the field of drug abuse treatment, cognitive-behavioral treatments have gained a very high experimental support<sup>14</sup>. Cognitive-behavioral treatment causes to improve Quality of Life among the men with drug abuse disorder.

## Conclusion

Today, addiction is known beyond the medical treatment borders and has become a social treatment issue. It seems that addiction to narcotic drugs has become a widespread concern and is not a serious physical, psychological and social health problem<sup>15</sup>. Given the results of present study and other related studies, importance of anger management programs can be concluded to reach better treatment results in drug abuse disorder. In practical field, in addition to emphasis on positive impacts of group therapy with cognitive-behavioral approach to control anger among addicted people, the corresponding authorities shall be encouraged to use method of opium withdrawal clinics or related camps. Since present project was an experimental work and implemented in group form, number of participants was limited. Therefore, it is proposed to employ more participants in future researches in order to extract more reliable results and increase generalizability of results.

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