The Effectiveness of Group Training of Choice Theory Concepts in Addicts' Quality of Life

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Abstract

Objective: This study aimed to investigate the effectiveness of group training of the concepts of Choice Theory in addicts' quality of life. **Method:** A quasi-experimental research design along with pre-test and post-test and follow-up and control group was employed for the conduct of this study. The population of this study consisted of the addicted men who referred to addiction treatment centers in Ahvaz in 2015. From among these addicts, 50 subjects were randomly selected using purposive sampling and were randomly assigned to two groups. The participants completed Quality of Life Questionnaire in three stages (pre-test, post-test and follow-up after 60 days). The experimental group received ten 90-minute sessions of group training on the concepts of Choice Theory (once a week). **Results:** The results showed that group training of the Choice Theory concepts leads to enhanced quality of life in physical, psychological, social, and environmental domains in addicted people. **Conclusion:** Group training of Choice Theory concepts can enhance the quality of life in addicts.

Keywords: Choice Theory concepts, quality of life, addicts

Introduction

Substance abuse is a complex issue that brings changes into people's normal life in terms of behavior, self-esteem, nutrition, occupational status, and social relationships (Hampton, 2009) and makes human beings encounter social, economic, criminal, and health challenges (Aceijas, & Stimson, 2004). In addition, this disaster can been seen in all occupations, educational levels, and socioeconomic strata among the sufferers (Zargar, Najarian & Na'ami, 2008). Health is one of the greatest blessings given by God whose maintenance, securing, and upgrading are among each person's responsibilities (Abolghasani, 2004; cited in Esmaili, 2009). Also, substance abuse heavily influences the individuals' physical, psychological, social and relationships as well as their daily life; therefore, the society's effort towards the promotion of people' health and the consequent increased quality of their lives is very important. During the past three decades, quality of life has been considered as a significant portion of health (Kaplan,2003) and has received increased attention as an important factor in the assessment of the outcomes and effectiveness of addiction, and the recovery of physical and mental health (Karow et al., 2010).

In the same way, quality of life is considered as one of the health indicators or as a combination of each person's cognitions and functions in different aspects of life in terms of human, social, and work relations. Human health is necessary to be maintained so that compared today's quality of life and life expectancy can have the potential to get promoted. Quality of life is the opposite of quantity and has been defined as the enormity of health and its purpose which is life satisfaction during the coming years of life (Seligman, 1998).

According to the health factor, quality of life should include physical, emotional, social, spiritual, and occupational aspects (Seligman, 2007). Dienner, & Seligman (2004) found that there is a mutual and reciprocal relationship between health and quality of life. The importance of health status and quality of life is to such an extent that the focus of health care experts have been placed on the improve of quality of life and health status in this century and they have found health to be one of the categories and components of quality of life. The World Health Organization considers quality of life as an individual's perception of a situation in the field of culture and value system in which one's life and expectations get shaped in relation to the objectives, criteria, and standards. Health-related quality of life is studied in four areas, namely: a) physical health domain, b) psychological domain, c) social relationship domain, and d) environmental domain.

Nordon Felts (2003) describes quality of life as life satisfaction, so people measure happiness by studying their experiences in the achievement of their aspirations. It is possible that this experience does not have the same meaning to other people, as well. Substance abuse is one of the most important issues where the assessment of the quality of life of is of great importance. Substance abuse

has been associated with a number of consequences that severely affect physical, psychological, social, and daily life aspects and also affect the quality of life. Therefore, studies have focused their concentration on the investigation of quality of life among addicts. Studies in Iran and other countries show low quality of life in addicts is affected negatively because in most cases the quality of people's lives is influenced by such factors as addiction (Emamipoor, Shams, Sadrossadat and Naderi, 2009; Bizari et al., 2005; cited in Narimani, 2011).

Rector, Kubo, & Cohn (1993) have shown that the abuse of alcohol, drugs, and tranquilizers is correlated with low quality of life. Furthermore, Smith, & Larson (2003) showed that the physical and mental aspects of quality of life are low among addicts. The results reported by Hojjati et al. (2010) showed that drug-dependent individuals had lower mental health and quality of life. Preau, & Spire (2007) conducted research on 243 addicts with AIDS to investigate the effective factors in mental health among HIV-positive injecting drug abusers. They completed the related questionnaire to assess clinical and social characteristics within 24 months. In this proposes, 65% of them did not have a normal mental health state and 63% of them also did not benefit from normal physical health. There is strong evidence suggesting that went the level of consumption and intensity of drug dependence are higher, the quality of life would be lower. In addition, drug addicts' quality of life is a valuable measure of clinical conditions that can help to identify predictors of addiction relapse (Srivastava, Bhati, Rajanda, & Angad, 2009). Quality of life is also an important indicator in the assessment of health; in this regard, the effectiveness of many interventions has been addressed in different societies and health has been regarded as a measurement indicator. The effectiveness of health interventions is evaluated by these indicators.

The increasing rate of addiction in the society and the problems caused by it, on the one hand, and the demand for the improvement of addicts' problems, on the other hand, are indicative of the need for individual interventions and specialized training in this field. Several approaches can be used to train addicted people were choice theory is one of them. According to the choice theory, all the activities that people do, including their sense of misery, are based on their own choice (Glasser, 1999).

Human beings always try to harmonize the surrounding world, including the conditions, the environment, and others with their own wishes (Glaser, 2010). The emphasis of choice theory is placed upon individuals' attempts to meet the basic needs of survival, love, power, fun, and freedom (Glaser, 1998). The main tenet of the choice is that one can have control over his/her life. Unfortunately, a large portion of this control is not effective (Glasser, 1999). In this theory, the focus is on the fact that if people in their lives have a sense of control and are able to meet their basic needs, they will experience a sense of satisfaction. On the other hand, the inability to control behaviors makes individuals feel dissatisfied (Corey, 2013). This theory emphasizes that the feeling of

dissatisfaction or unhappiness is the most comprehensive experience of human life. Some unhappy people constantly are in search for pleasure without relationship, and meet such a need mostly through eating, drinking, drugs, conflict, violence, and sex without love (Glasser, 1999). Glasser also believed that what all human beings are doing are in fact the targeted and selected behaviors. It can be concluded what are called mental problems are actually the ways that people choose for their behavior. It means people select to get a disease when they have problem in meeting their basic needs (Corey, 2005). Glasser in choice theory has a certain perspective about addiction and drug addicts. He argues that these people deceive their brains by using drugs (Glasser, 1999).

Drug addiction is not a mental illness that occurs due to dysfunction of the brain. But it is finding a way to take pleasure or relief from pain which has starting to cut the links and ties with others and then brings addiction (Glasser, 2002). So addicts constantly have a tempting picture of substance abuse in their mind (Glasser, 1999). Glaser (2010) found that addiction to drugs and alcohol and psychosis are some examples of severe irresponsibility where the sufferers' treatment towards the creation of the necessary link for more effective ways of satisfying their needs difficult (Glasser, 2010). Drug abuse makes the addicted person not feel good or love, power and freedom of having good relations which is required for everyone (Glasser, 2002).

Mottern (2002) stated that the focus should be put on teaching clients to understand their needs and how these needs are met through their choices affecting in order to help addicts based on choice theory (Wubbolding, 2011) and adjust their needs and priorities through WDEP evaluation system (Wubbolding, 2000). In this system, W represents wants (e.g., clients are asked to identify and prioritize their wants and needs), D represents doing (for example, clients are asked to determine what they do for their choices), E represents evaluation (for example clients are asked to evaluate whether their current choices lead them to what they wanted), and P represents plan (for example, clients are asked to plan a more effective program to adjust to their demands without having to harm the self or to harm others) (Glasser, 1990). Glasser (2010) stated that the choice theory's world is serious, responsible, and humane; and the person who feels responsible for his/her behavior will act in such a way that a kind of self-worth comes to his/her being that makes him/her bear deprivation and frustration. Several studies have confirmed these results. For example, Najafi, Naderi & Sahebi (2014) showed that the application of the choice theory has an effect on drug actions' quality of life and flexibility. Similarly, Hokmabadi, Rezaei, Ebrahim Asghari Ebrahimabad and Salamat (2014) showed that the reality of group therapy based on the choice theory increased substance abusers' hope. Kazemi Mojarad, Bahrainis and Mohammadi Aria (2014) showed that the training of choice theory enhances the quality of life and happiness among substance abusers. In this study, the researchers sought to

examine the effectiveness of concepts of group choice theory in addicts' quality of life.

Method

Population, sample, and sampling method

A quasi-experimental research design along with pre-test-posttest/ control group/follow-up was employed for the conduct of this study. The statistical population of the study consisted of all the male addicts who came to one of the addiction treatment centers of Ahvaz in 2015. From among this population, the number of 50 participants was selected through purposive sampling, and they were randomly assigned to two experimental (25) and a control group (25). The criteria for the inclusion of participants in this study were male gender, the passage of 6 months from methadone consumption, minimum education of secondary school and maximum education of bachelor's degree, aged between 17 and 40 years, and low quality of life based on the questionnaire results. The exit criteria were inactivity and no collaboration in doing assignments, and absence in more than two sessions.

Instrument

Quality of Life Questionnaire: This questionnaire consists of 26 items that measure four areas of physical health, psychological health, social relationships, and environmental health. The items are responded to based on a 5-point Likert scale. In the end, the total score of this questionnaire ranges from 0 to 100. Based on the obtained scores, the respondents' quality of life is placed in one of the three groups, namely undesirable, moderate, and desirable. The efficiency of this tool has been shown in studies pertaining to health policy assessment, the estimation of the relative burden of different illnesses, screening of patients, and the differentiation of the loading effects. It has also been used in economic assessments and treatments in patients with health care interventions as a guide to resource allocation at the social level. Montazeri, Gashtasbi & Vahadaninia, 2005). It has been standardized for the Iranian population and has been proved to enjoy a good validity and reliability. Nejat, Montazeri, Holakouee Naeini, Mohammad & Majdzadeh (2006) evaluated the criterion validity of the questionnaire in making a distinction between healthy and patient groups and reported it to be acceptable. The Cronbach's alpha coefficients in different areas of the questionnaire for two groups of healthy individuals and patients, are as follows, respectively: physical health (0.77, 0.72), psychological health (0.73, 0.70), social relationships (0.55, 0.52), environmental health (0.084, 0.72). In this research, the Cronbach's alpha reliability of this questionnaire was obtained equal to 0.79 for the whole scale and 0.71, 0.74, 0.72, and 0.73 for physical health, psychological health, social relationships, and environmental health.

Procedure

After the preparation of preconditions for sampling, randomization, and random allocation, the volunteered participants were present at each stage of the study and the appointment of the training sessions was conducted with full coordination with the individuals. First, the Quality of Life Questionnaire was administered to both groups as the pretest; then, the experimental group was trained in ten 90-minute sessions (one session per week), the concepts of choice theory were taught to them while the control group was engaged in their daily activities. After the completion of the intervention, post-test was administered and, finally, the follow-up test was administered after the passage of two months from the completion of the training. The content of the sessions is presented in Table 1.

Table 1: Brief description of group training sessions: concepts of choice theory

Session	Content
First	Establishment of connection and good relations and familiarity with choice theory
Second	Teaching of five essential needs (survival, fun, freedom, power, and belonging)
Third	Teaching of full behavior (acting, thinking, feeling, and physiology)
Fourth	Identification of types of control (internal and external), familiarity with external control and seven destructive behaviors, and explanation of the seven destructive behaviors through their current behavior
Fifth	Training the importance of internal control and seven constructive behaviors and the explanation of the seven constructive behaviors through the current behavior of individuals
Sixth	Teaching the world of quality and acquaintance with one's own world of quality
Seventh	Familiarity with the conflict of needs and its impact on interpersonal relationships and the selection of effective or ineffective behaviors
Eighth	Familiarity with the concepts of reality and responsibility, and teaching accountability and responsible behavior
Ninth	Familiarity with the types of identity (success and failure) and the characteristics of each individual with different identities
Tenth	Teaching of the facilitative techniques and ways to change behavior through the WDEP model

Results

Participants in the experimental group mean and standard deviation age of 25.60 and 5.66 years with a range of 17 to 39 years; 20% (n=5) with a secondary school degree, 48% (n = 12) with diploma and 20% (n=5) have associate's degree in education and 12% (3 patients) had bachelor's degree. Participants in the control group mean and standard deviation age of 25.28 and 5.98 years with a range from 18 to 39 years; 24% (n = 6) with a secondary school degree, 32% (n = 8) has diploma and 28% (n=7)had associate's degree, and 16% (n=4) had bachelor's degree. Descriptive statistics quality of life in separate groups and types of tests are presented in Table 2.

Table 2.Descriptive statistics quality of life in separate groups and types of tests

Variables	*Groups*	*Pretest*		*Posttest*		*Follow -up*	
		Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*
physical health	Experimental	16.88	1.61	22.56	1.93	22.32	1.79
	Control	16.52	2.34	16.80	2.41	16.68	2.26
mental health	Experimental	15.24	1.76	19.76	2.52	19.64	2.32
	Control	14.36	2.19	14.16	1.95	14.32	1.99
social relations	Experimental	7.32	1.06	10.04	1.54	9.80	1.52
	Control	7.44	1.29	7.40	1.38	7.40	1.38
environmental health	Experimental	18.56	2.06	25.80	2.70	26.04	2.73
	Control	16.72	2.07	16.76	1.47	16.76	2.00
Total score	Experimental	58.32	3.92	79.48	4.49	75.56	3.45
	Control	58.36	4.47	57.52	3.79	57.44	4.16

Multivariate analysis of covariance must be used to evaluate the effectiveness of intervention. At first analysis of covariance assumptions should be investigated. Kolmogorov-Smirnov test was used to check the normality of the distribution of as follows.

Table 3: results of Kolmogorov-Smirnov test for normal distribution of variables

Variables	*Experimental*		*Control*	
	Z statistic	*Sig.*	*Z statistic*	*Sig.*
physical health	0.78	0.58	1.06	0.21
mental health	0.87	0.44	0.66	0.66
social relations	1.08	0.19	1.14	0.15
environmental health	0.83	0.49	0.77	0.60

As can be seen in Table 3, in all components in both normal distribution condition is established. Levene's test was used to search for homogeneity of variances. The results showed that the homogeneity of variances condition is established in the physical health domain (P>0.05, F=0.059), mental health domain (P>0.05, F=0.708), social relations domain (P>0.05, F=0.024), environmental health domain (P>0.05,F=0.203).The another assumption of regression slope homogeneity is presented in Table 4.

Table 4: Results of homogeneity of regression slopes and follow-up test scores on quality of life

Variables	*Mean of squares*	*F statistic*	*Sig.*	*Mean of square*	*F statistic*	*Sig.*
physical health	1.49	0.318	0.73	5.02	1.004	0.54
mental health	4.93	0.897	0.46	3.20	0.954	0.51
social relations	0.39	0.166	0.85	1.67	0.298	0.72
environmental health	2.27	0.483	0.62	2.64	0.470	0.65

As can be seen in Table 4, all components of this assumption are established. According to establishment of multivariate analysis of covariance assumptions for assessing the effectiveness of interventions to improve the quality of life in post-test, scores' results proved the effectiveness of the intervention (effect size=0.90, P <0.001, F=94.40, Wilks Lambda =0.099). Univariate analysis of

covariance was used to examine the patterns of the difference between the results of which are presented in Table 5.

Table 5: Univariate analysis of covariance was used to examine the patterns of the difference between the results

Variables	*Mean of square*	*F statistic*	*Sig.*	*Size effect*
physical health	378.24	81.21	0.0005	0.65
mental health	302.91	56.65	0.0005	0.56
social relations	65.49	28.84	0.0005	0.40
environmental health	803.41	156.58	0.0005	0.78

Multivariate analysis of covariance was used to evaluate the effectiveness of interventions to improve quality of life that results showed that effectiveness was persistent in follow-up (effect size=0.72,P<0.001, F=61.6, Wilks Lambda=0.088). Univariate analysis of covariance was used to examine the patterns of the difference between the results of which are presented in Table 6.

Table 6: Results of univariate analysis of covariance for different patterns in follow-up

Variables	*Mean of squares*	*F statistic*	*Size effect*
physical health	376.92	79.02	0.61
mental health	233.02	62.27	0.52
social relations	52.25	26.14	0.37
environmental health	912.76	160.86	0.78

As seen in Table 6, effectiveness of all components is persistent.

Discussion and Conclusion

The results of this study showed that the training of the concepts of choice theory led to an increase in the quality of life in all its domains while this increase was durable. To explain the effectiveness, one may state that since the concepts of choice theory teaches a coherent concept of human behavior and invites individuals to internal control, identity, and responsible behavior and a sense of value. As a result, the individuals will be well placed in the effective and long-term path. Therefore, interventions based on group training of the concepts of choice theory opens up a new window to the addicted people; in this way, they evaluate their quality of life again and their sense of satisfaction with living conditions increases. Moreover, to explain the effectiveness of intervention in the field of physical health, one can argue that the teaching of the concepts of choice theory helps individuals to better recognize their needs and to identify the brain deception by drugs. In essence, the pleasure that is produced via drug use results from brain trickery. When an addictive drug enters the brain, it brings with itself such a pleasure that it is not comparable to any other human experience (Glaser, 2002) and, thereby, the person deceives his/her brain through drugs. In other words, the feeling of using drugs is similar to the emotion that usually results from the actual satisfaction of needs (Glaser, 1999). Through training and teaching, one learns not to be controlled by the underlying layers of the brain and hormones. Therefore, we can say that it is logical to expect that the

person's physical health status undergoes remarkable changes by group interventions based on choice theory.

In addition, this intervention also had an impact on the improvement of mental health, and this improvement has been durable. To explain it, it can be said that, after learning this theory, the individuals notice that they themselves choose the feeling of misfortune and misery, and that discontent and depression are the result of a lack of responsibility. Glaser believes that the sense of responsibility and control, and the satisfaction of needs, especially the need for love and belonging lead to the improvement of mental health. In this way, one can make a healthy person out of him/her by accepting reality, responsibility, and increasing the sense of self-value. Furthermore, the results showed that the intervention has been effective in the improvement of social relationships and this effect has been durable. In explaining this finding, one can say that all the individuals who do not have a close and friendly relationship with others almost always feel lonely and upset. Consequently, teaching the concepts of choice theory increases addicts' awareness and plays an important role in the creation and improvement of intimate relationships as well as in the selection of effective behaviors. In addition, this intervention has led to an increase in the degree of environmental health and this increase has been persistent even after a long-term interruption of the intervention. In explaining this finding, it can be said that addicted people change their perceptual world by learning the concepts of the theory of choice. In fact, when people find the right way to satisfy their needs, including the need for fun, the felling of valuableness, success in identity will undergo less suffering in life. Indeed, life, the world, and the human situation are changing momentarily at a time, and this requires us to always actively learn to know how to meet our psychological needs under different conditions and under different mental pressures.

Finally, with regard to the importance and effectiveness of teaching the concepts of choice theory in the improvement of addicts' quality of life, it is suggested that this methodology be used in addiction treatment counseling centers, addiction treatment camps, counseling clinics, private counseling offices, student counseling services at universities, and the expert counseling nuclei of the education department in order to prevent addiction and help addicted people. In addition, one of the limitations of this research is that its statistical population are the addicts of Ahvaz who are under abstention. Therefore, it is suggested that this type of research be carried out on age groups with a particular type of drug use in other provinces and in both genders.

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