

Abstract

Objective: The aim of this study was to investigate the effectiveness of group reality therapy based on choice theory in anxiety and hopefulness in drug abusers during abstinence.

Method: The current study was a quasi-experimental research and the research design was a pre-test and post-test one along with control group. The statistical population of this study included all the addicted individuals residing in the rehabilitation camps of Maragheh. From among this population, the number of 30 participants was randomly selected and the participants were then randomly assigned to two control (15 people) and experimental (15 people) groups. Zung's Self-Rating Anxiety Scale (SAS) and the Miller Hope Scale were used for data collection. Then, the experimental group took part in eight 90-minute sessions of group reality therapy. **Results:** The results of multivariate analysis of variance showed that group reality therapy based on choice theory reduced anxiety and increased hope. **Conclusion:** Due to the importance of anxiety and hopefulness levels in abstinence period, addiction treatment centers can help sufferers improve their hopefulness and decrease their anxiety by the provision of choice theory after treatment.

Keywords: reality therapy, anxiety, hopefulness, addiction

On the Effectiveness of Group Reality Therapy based on Choice Theory in Anxiety and Hope for Drug-Dependent Individuals during Abstinence

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Introduction

Substance abuse is one of the main issues of concern to health; and Iran is among the countries that need more effort to control this problem compared with the global statistics and figures. The high prevalence of drug abuse with more than 1.8 million people in the country clarifies the importance of need for attention to this problem. On the other hand, addiction as a treatable and preventable disease is one of the most important research priorities (Ekhtiari, 1999). Substance abuse in young adults is related to genetic factors (Schuchit, Smith & Kalmijn, 2004), determinant of social factors (Hussong, 2003), and various individual differences (Colder & O'connor, 2002). Most of the addicts have been suffering from psychological, personality, and life disorders before addiction and these disorders become intensified and appear in destructive manifestations after addiction. Addictive substances bring about some changes in the persons' biological and physiological levels due to their medicinal effects where the most important part of these changes is on the central and peripheral nervous system and ultimately influences the physical and mental conditions of the person. The temporary relief of physical pains, sense of satisfaction, inner peace, and temporarily relief of depression, stress and anxiety are among the most important changes from among the above-mentioned ones; however, the extra use of these substances makes a person addicted to them and undergo substance abuse (Chen, Sheth & Elliott, 2004). Nearly 90% of opioid-dependent individuals suffer from a kind of psychiatric disorder where depression, anxiety, and personality disorders are more important (Ganji, 2014). Therefore, it can be claimed that anxiety can be investigated in three dimensions before dependence, during dependence, and abstention period among drug-dependent persons, especially in camp environments. In this regard, Marlatt (1996) showed that several factors increase the risk of relapse where negative emotional states, including stress, depression, and anxiety account for nearly 30 percent of the relapse rates. On the other hand, primary anxiety is the cause of 6 to 27 percent of all mental health problems that require treatment (Shamloo, 1991); avoids one's contact with others; prevents one from establishing meaningful collaboration with the world, and lowers life expectancy (Adler, 1910; translated by Javahersaz, 2000).

Hope is defined as the ability to design some pathways toward desired goals despite the existence of obstacles or as the motivation to use these pathways (Synder, 2002; cited in Beigi, Mohamadifar, Farahani & Mohamadkhani, 2011). Therefore, hope is the ability that can help the individual keep his/her motivation despite the difficulties in the way of goals (Mehrnejad & Rajabi Moghadam, 2012). People with high levels of hope experience positive emotions; and people with low levels of hope have difficulty achieving their desired objectives in the face of problems and, thereby, report more negative emotions, have a feeling of

low efficiency and reduced self-respect, and will be less successful (Synder, 2002).

Depending on the conditions of a drug-dependent individuals in the community, his/her low hope is not too far-fetched. Therefore, one's conditions should be changed to increase hope; however, the drug-dependent individuals who seek to change their living conditions to increase their hope face this problem (Mehrinejad & Rajabi Moghadam, 2012). This is so because they confine themselves to external forces, such as substance and poverty and, thereby, lose their internal control. Accordingly, anxiety increases and the possibility of relapse also witnesses an increasing trend in such persons. Considering the above-mentioned points, anxiety should be reduced and hope be increased for the successful drug use abstention and reduction of relapse risk.

Glasser used choice theory in 1985 to describe addiction. This theory is widely used to treat any type of addictive disorders (Kim, 2008). Reality therapy has positive effects on the modification of education, human relations, alcohol and drug abuse, violence, family therapy, mood control, and stress management (Kalantari Hormozi, 2006). The research conducted on the effects of reality therapy on reducing anxiety has proved the effectiveness of this method (Prenzlau, 2006; Sadrpooshan, 2009; Mashayekhi, 2009). In addition, reality therapy brings hopefulness and mental health (Klug, 2006; Barnes & Parish, 2006; Hokmabadi, Rezaei, Ebrahim Abad & Salamat, 2014) and also leads to increased quality of life in people with substance dependency (Najafi, Naderi & Sahebi, 2015), which can be indirectly effective in reducing anxiety and increasing hope. However, the individuals who are not on the verge of abstention experience significant anxiety and consequently give up hope. Thus, considering the research conducted in the field of addiction, especially on the individuals who are not on the verge of abstention, it seemed necessary to apply reality therapy in the field of addiction due to the success of reality therapy in reducing anxiety and increasing hope. Therefore, the following research question was formulated for this study: Does reality therapy based on the theory of choice has a significant effect on anxiety and hope among the drug-dependent individuals during abstention?

Method

Population, sample, and sampling method

A quasi-experimental research design with pre-test, post-test, control group was employed for the conduct of this study. The statistical population of this study included all the addicted individuals residing in the rehabilitation camps of Maragheh. Participants were selected via simple random sampling method. In this way, the number of 30 participants was randomly selected out of the two camps with 120 drug-dependent individuals in this city. Then, the participants

were randomly assigned to two control (15 people) and experimental (15 people) groups. In the following, because of one control group member's discharge in the middle of the intervention, one member of the experimental group was also dropped at random and the sessions were proceeded with 14 participants in each group. All participants were male between 25 and 45 years of age. The inclusion criteria included at least dependence one drug type (industrial and/or non-industrial), experiencing at least one year of substance use, holding at least elementary education, and attending the camp at least more than a month.

Instruments

Miller Hope Scale: Miller test is a diagnostic test that was first applied in America to assess the level of hope in cardiac patients. Miller questionnaire was reviewed and reevaluated by six university professors in America; and the proposed factors for hope, the harmony of items with each other, and precision in the selection of items from different perspectives were all approved. Miller test includes 48 items of hope and helplessness with scoring values ranging from 1 to 5 (strongly disagree to strongly agree) for each item, which is representative of one behavioral aspect. In this test, the range of scores is variable from 48 to 240; and score 48 represents complete helplessness while the score 240 indicates the maximum level of hope. Nikroo (2008) reported the reliability coefficients of .83 and .74 for this scale via Cronbach's alpha and split-half methods, respectively. For the calculation of the validity of the scale, its score was correlated with the item scores and it was revealed that there was a significant relationship between scores ($P < .01$; $r = .35$). Pasha & Amini (20010) carried out a study and reported the desirable reliability coefficients of .92 and .95 for this scale via Cronbach's alpha and split-half methods, respectively. They obtained the validity of the scale via the correlation of its score with the item scores and obtained a significant positive relationship between the scores ($P < .01$; $r = .48$). This shows that Miller Hope Scale enjoys acceptable validity. In the present study, Cronbach's alpha was obtained equal to .86.

Zung's Self-Rating Anxiety Scale (SAS): This questionnaire was designed by Zung in 1970 to measure anxiety. It consists of 20 four-choice items (a little of the time, some of the time, good part of the time, and most of the time). The items have been designed based on somatic-affective symptoms. Reliability coefficient of coherence, which is based upon internal consistency or homogeneity, was used to calculate the reliability of this scale. In this regard, the statistical analysis of Kutach et al. (1987) obtained the reliability coefficient of .84, which indicates the suitable reliability of the scale. Karami (2009) conducted a survey on more than 500 participants and used Hamilton Anxiety Rating Scale to assess the convergent validity of the scale. Their results led to the coefficient of .71 (Karami, 2009).

Procedure

Reality therapy is founded upon here-and-now actions of clients. With the help of the client, the therapist organizes an achievable program with positive steps in which the client tries to satisfy his/her needs from the beginning (Glasser, 1998; cited in Sansone, 2005). In this study, the researchers referred to the two addiction camps available in Maragheh and one of the camp rooms was offered to the researchers for the determination of the research sample and data collection after providing necessary coordination with the chairman. Then, the researchers held a meeting with the Camp Chairman and the necessary information about addicts was obtained. Then, the selected addicts were randomly grouped and were informed about participation in the study and membership in each group. The experimental group attended two hours a day during one week and participated in therapy sessions in the presence of the researchers. The description of the sessions has been presented in the table below.

Table 1: Description of reality therapy sessions

<i>Session</i>	<i>Content</i>
First	Familiarity with group members to establish proper therapy relations and presentation of an introduction to reality therapy and choice theory
Second	The subjects' familiarity with the internal and external control and the New Psychology
Third	The introduction of the five basic needs that every human being responds to and behaves accordingly
Fourth	Familiarity of the members with successful and broken identities
Fifth	The introduction of four components of overall behavior and teaching them how to change behavior based on these four components
Sixth	Teaching how to communicate with family members, and teaching of the problem-solving circle
Seventh	Familiarity with anxiety from the perspective of reality therapy and relaxation training to control anxiety
Eighth	Teaching ten principles of reality therapy and familiarity of the members with the effect of punishment on the creation of effective relationship

Results

The sample units were placed in the age range of 25 to 45 years with the mean (standard deviation) of 38.56 (6.65) years. Descriptive statistics of the variables are presented in the table below for each group and test stage.

Table 1: Descriptive statistics of anxiety and hope for each group and test stage

<i>Variable</i>	<i>Group</i>	<i>Test stage</i>	<i>Mean</i>	<i>SD</i>
Anxiety	Experimental	Pretest	52.35	3.875

Hope	Control	Posttest	39.00	4.945
		Pretest	50.258	4.445
	Experimental	Posttest	47.00	4.867
		Pretest	140.64	13.84
	Control	Posttest	168.78	8.23
		Pretest	138.21	14.75
		Posttest	138.35	7.35

The assumption of the equality of variances was assessed via Levene's test, which was not significant for any of the variables. In addition, Box's test was used to examine the assumption of the equality of covariance matrices and the results suggested that this assumption has been met ($P > .05$, $F = 3.121$, Box's $M = .979$). Shapiro-Wilkes test was used to check the normal distribution of the data and the results indicate the satisfaction of this assumption ($P > .05$). The investigation of homogeneity of the regression slope indicated that this assumption has been met ($P > .05$, $F = 1.54$). Considering the satisfaction of the required assumptions, multivariate covariance analysis was performed and the results indicated the significance of the difference between the groups (effect size = .858, $P < .0001$, $F = 69.227$, Wilks' $\Lambda = .14$). In fact, % of the variance of the mixed variable is explained by group membership of the participants. Univariate analysis of variance was used to examine difference patterns as follows.

Table 2: Results of univariate analysis of covariance for examining the difference patterns

<i>Variable</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>	<i>Eta squared</i>
Anxiety	342.46	13.797	.001	.635
Hope	5220.78	91.379	.0005	.792

As it is observed in the above table, group reality therapy has been significantly effective in both variables.

Discussion and Conclusion

The present study aimed to investigate the effectiveness of group reality therapy based on choice theory in anxiety and hopefulness in drug abusers during abstinence. The results of this study showed that group reality therapy based on choice theory reduced anxiety in the experimental group compared with the control group during the abstinence period. This finding is consistent with that of the study done by Farmani, Karimi & Karami (2015) who evaluated the effectiveness of reality therapy in the reduction of depression, anxiety, and stress in addicts under rehabilitation. Their results represented the significant reduction of depression, anxiety, and stress in the addicts after the receipt of reality therapy. In addition, Rajabzadeh, Makvand Hosseini, Sharif & Hashem Abadi (2015) carried out a research on university students and reported that reality therapy significantly reduced students' anxiety. To explain this finding, one can

argue that group therapy provides individuals with an opportunity to talk about their problems and express their feelings (Hokmabadi et al., 2014). On the other hand, many people think that only they have a specific problem (Farmani, et al., 2015); however, group therapy strengthens factors such as group unity and the feeling of having a problem in common. Therefore, it creates a robust communications network wherein the individuals can experience the hope of humanity and peace in the interaction with other members (Omrani, Mirzaei, Aghabagheri, Hassanzadeh & Abedini, 2012). Reality therapy leads to an increase in individuals' feeling of freedom and control over their lives; therefore, people do not consider themselves enclosed with the past and external factors, give up self-blame for past events (which cannot have control over), and look for better choices and goals (Glasser, 2012). The feeling that one can do something for his/her life and make a main and decisive contribution to his/her destiny and can also change his/her future will help him/her build confidence and reduce anxiety. In support of the above-mentioned items, research has shown that reality therapy increases one's self-confidence (Moradi, Ghanbari & Sh'erbaf, 2010), increases the quality of life in people with substance dependency (Najafi, Naderi & Sahebi, 2015), and increases decision-making power (Mason, Palmer & Duba, 2009). These factors can indirectly be effective in reducing anxiety. Glasser, the founder of Reality Therapy, noted what is referred to as mental illness, in fact, contains hundreds of ways that people select when they are unable to satisfy their basic genetic needs of selection in order to show a behavior. Moreover, people's irresponsible behavior leads to the incidence of anxiety, but it is not true to claim that anxiety leads to irresponsible behavior. In reality therapy sessions, it is attempted to teach the right method of satisfying basic needs so that the lost self-esteem can come back. The main focus of this therapy was on the present time and conveying this message to the participants that they basically choose their actions in an attempt to satisfy their basic needs. If they are not able to do this, they will be annoyed and bring the suffering of others. In fact, failure to achieve basic needs that causes a person's behavior to deviate from the norm. The reality therapy is an approach that emphasizes individuals' responsibility and current behavior; and considers positive emotions to be an optional alternative (Esmkhani Akbarnejadi, Etemadi & Nasirnejad, 2014). Responsible humans behave in accordance with the facts, undergo failure to achieve a sense of worth, satisfy their needs in such a way that the needs of others will not be stopped, and remain faithful to their promises (Ladd, 2008). Focus on responsibility lies at the core of psychotherapy and education in reality therapy; therefore, this therapy can be effective in learning responsible behaviors in individuals and, thereby, the intensity of anxiety and substance users is reduced.

Moreover, the results of the present study also showed that teaching reality therapy based on choice theory led to increased hope in the experimental group during drug use abstention compared with the control group during drug use

abstention. This finding was consistent with that of the study done by Hokmabadi et al. (2014) who reported that modern reality therapy leads to increased hope in substance abusers. Several studies have also been done on non-drug-dependent individuals and the results have been also shown that reality therapy increases hope (Beigi, Farahani, Mohamadkhani & Mohamadifar, 2011; Kim, 2008). To explain this finding, we can say that hopelessness is a shocking state that appears with the feeling of lack of facilities, helplessness, and apathy; and individuals become severely inactive as a result of hopelessness, cannot measure life situations, and do not have the ability to adapt to life changes (Pasha & Amini, 2010). Hopelessness also makes it difficult to achieve goals and undermines interpersonal relationships (Marshall, 2004). In these situations, the individual considers him/herself enclosed with external factors while reality therapy attempts to help people opt for the psychology of internal control rather than the psychology of external control. In choice theory, it is believed that only the person him/herself can do something to him/herself and no one can do so without his/her permission (Jones & Parish, 2005). In addition hope is of one's own accord and originates from the fact that s/he decides not to regard him/herself less than a matchless creature. Therefore, one gains hope with previous intention and simply decides that s/he will not be burned out and broken by no means and will take the responsibility of his/her life in case of undesirability and risks available in life (Dyer, 1991; translated by Nikfetrat, 2009). On the other hand, hope can be synonymous with self-confidence; therefore, both of them are complementary to each other since hope is defined under the belief that the person can apply his/her creative forces in the improvement of his/her life. Trust is needed to put it into practice; and trust comes from behavior rather than from wishing or thinking about something. Hope is the mental side and trust is the behavioral side, which begins with the idea that nothing is remediable. Regardless of any conditions, one can still decide to hold hopeful thinking, and it will help him/her choose trustworthy behaviors (Dyer, 1991; translated by Nikfetrat, 2009).

From the above statements, it can be concluded that reality therapy is an approach that emphasizes individuals' responsibility and current behavior and hope is an optional alternative that hinges upon human behavior. Therefore, reality therapy provides group members with an opportunity to learn appropriate behaviors to satisfy their needs and this will probably increases hope in such people (Pasha & Amini, 2010). It is suggested that this therapy be applied among families with drug dependent individuals so that drug use abstention process can be accelerated.

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