# Effectiveness of Emotional Intelligence Training in Addiction Potential among Students

**Abstract**

**Objective:** The present study was carried out to investigate the effectiveness of emotional intelligence training in addiction potential among male students of Shahid Chamran University of Ahwaz**. Method:** This study was conducted as a quasi-experimental one with pre-test and post-test and a control group. The statistical population of the study consisted of undergraduate male students of Shahid Chamran University of Ahwaz in 2012-2013. From the number of 600 students in the initial sample, 30 students qualified with the inclusion criteria for entering the study were selected via criterion sampling and, then, were randomly assigned to two groups. Having received eight 90-minute training sessions (twice a week), the experimental group completed the post-test. The control group also completed the post-test while they received no intervention. Zargar's addiction potential scale (2006) was used as the measurement instrument of this study. **Results:** The results of the study showed the effectiveness of emotional intelligence training in reducing students' addiction potential. **Conclusion:** Emotional intelligence training is effective in reducing students' addiction potential.

**Keywords**: Effectiveness, Emotional Intelligence, Addiction Potential, Students

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**Introduction**

Drug dependence or addiction is in all occupations, educational levels, and socioeconomic classes seen and is not specific to particular individuals or groups (Zargar, Najarian & Na'ami, 2008). Addiction means a pathological dependence on the use of one or more narcotic substances that cause drug-seeking behavior and deprivation symptoms will appear in addicts in case of not using the needed substance (Bahari, 2013). American National Institute on Substance Abuse has estimated that one in ten Americans above 12 years old suffers from the problem of substance abuse (Grillo, 2010). According to research findings, the prevalence of addiction in men is higher than that in women (Sadock & Sadock, 2007, translated by Reza'ea, 2012, Dehghnai, Zare, Dehghnai, Sedghi & Pourmovahed, 2010). This disorder is very common in some groups; for example, it has been shown that a considerable part of the students (39.3%) have used at least one of the drugs during their lifetime (Taremian, Bolhari, Peyravi & Ghazi Tabatabai, 2007). On the other hand, in addition to the high prevalence of addiction in various groups and classes, this phenomenon brings about devastating effects and consequences since drug use or abuse has been proved to be undeniably correlated with other deviations and disorders such as mental disorders, escape from home, aggression and violence in social behavior, theft, crime, educational failure, educational reluctance, suicide, and prostitution (Swaid, 1999, cited in Taremian et al., 2007). Similarly, the rapid spread of drug use and related problems in the student population and the availability of laboratory substances such as crystal and their adverse consequences, including educational reluctance, educational failure, physical and mental illnesses, suicide, incautious driving, destruction of public property, aggressive behaviors, identity diffusion, and high-risk sexual behaviors (Perkins, 2002) reveal the need to plan and develop intervention strategies for addiction prevention in universities. Therefore, it is perceived that prevention of drug abuse is easier than the treatment of this disorder (Botvin & Botvin, 1992, cited in Eshrati, 2010). Therefore, the identification of the individuals who have tendency to addiction and more importantly addiction potential and research on them may be more effective. Addiction potential refers to individuals' preparation for drug use; in other words, those who are more at risk of addiction have higher addiction potential (Zargar, 2006). In this regard, several reasons have been mentioned for the tendency of people to different types of drugs. In clinical studies, various variables have been identified as predictors of drug dependence which fall within four categories, namely a) socio-cultural environment, b) inter-personal factors, c) psycho-behavioral factors, and d) bio-genetic factors (Newcomp & Richardson, 2000).

In this respect, one of the factors that may be associated with addiction and addiction potential is emotional intelligence since the relationship between low emotional intelligence and addictive behaviors has been proved (Trinidad,

Unger, Chou & Johnson, 2004; Parker, Taylor, Eastabrook, Schell & Wood, 2008). Emotional intelligence is the ability to recognize one's own and others' emotions and regulate emotions in social situations (Koczwara & Bullock, 2009). Similarly, emotional intelligence refers to the ability to identify and recognize the concepts and meanings of emotions, relations between them, reasoning, and problem solving (Mayer, Caruso & Salovey, 2000). People with high emotional intelligence enjoy more effective coping capabilities in dealing with stressful events because they assess and perceive their emotions more accurately and know when and how to express their feelings; they are also able to regulate their emotional states (Salovey, Mayer & Caruso, 2002).

In this respect, studies have shown that the application of educational programs in the field of emotional intelligence promotion can help the people with positive attitudes to addiction reduce addiction tendency through the management of bad events and problems on (Khan Mohammadi, Homayouni, Mousavi, Amiri & Nikpoor, 2009). One of the factors that makes people prone to addiction is low emotional intelligence. In accordance with Bar-On, Handley & Fund (2005), emotional intelligence and skills change over time and it is possible to improve them via corrective programs, training techniques, and treatment. Since addiction is a widespread and pervasive phenomenon and has irreversible consequences, the present study is an attempt to answer the following research question: Is emotional intelligence training effective in addiction potential among students of Chamran University of Ahwaz?

## Method

### Population, sample, and sampling method

This study was conducted as a quasi-experimental one with pre-test and post-test and a control group. The statistical population of the study consisted of undergraduate male students of Shahid Chamran University of Ahwaz in 2012-2013 that amounted to 4041 students in accordance with the Center for Statistics and Computation of the University. The number of 600 students was selected by random cluster sampling. To this end, 5 faculties of Engineering, Economics and Social Sciences, Agriculture, Arts, and Sciences were selected randomly out of the total of 11 university faculties. Then, four departments were selected from each faculty, and four classes were also randomly selected. After the consent of students, Zargar's addiction potential scale (2006) was distributed among half of the male students of these classes and were completed in researcher's presence and, then, were collected. The number of 600 questionnaires was answered fully. From the number of 600 students in the initial sample, the number of 40 students whose scores in the scales were one standard deviation above the mean was selected. After thorough investigation, 30 respondents were recognized with the inclusion criteria, such as the absence of a history of psychiatric illness, no consumption of any specific psychiatric drugs, no history of drug abuse and

addiction, as well as willingness to participate in training sessions. These people were divided into two equal groups via simple random sampling (draw) and, then, experimental and control groups were also randomly assigned.

## Instrument

Addiction Potential Scale: One of the three subscales of Minnesota Multiphasic Personality Inventory-2 is the foreign version of addiction potential scale which consists of 39 items (Weed, Butcher, Mckenna & Ben-porath, 1992; cited in Zeinali, Vahdat & Easavi, 2008). In Iran, Zargar (2006) constructed addiction potential scale. Therefore, the Iranian scale of addiction potential is employed in this study to assess the readiness of addiction. The scale consists of 36 items with 5 lie detector items and each question is scored based on a continuum from zero (completely disagree) to 3 (strongly agree). It also contains two subscales of active and passive readiness. In active readiness, antisocial behavior, desire to use drugs, positive attitude to drugs, and sensation seeking took up the largest number of items, respectively. In passive readiness, the largest number of items belongs to lack of assertiveness and depression. The reliability of this scale was calculated via Cronbach's alpha and its coefficient was reported equal to .90. This value was obtained .91 and .75 for active readiness and passive readiness, respectively (Zargar & Ghaffari, 2009). Eshrati (2010) used this scale and reported the Cronbach's alpha coefficients of .70, .71, and .62 for the whole scale, active readiness, and passive readiness, respectively. Zargar (2006) calculated the validity of this scale via the criterion validity and construct validity. To assess the criterion validity of this scale, he administered this scale on a number of addicts referring to Ahwaz treatment center and, then, compared the mean scores of them with those of employees of a manufacturing company in Ahwaz. The results were suggestive of the availability of a significant difference in such a way that the addicts obtained significantly higher scores than the normal group. In the same way, the results of the comparison of the mean scores of the addiction potential between those who mentioned they had experienced drug use (from recreational mode to high dependency) and those who mentioned they had not experienced drug use indicated the existence of a significant difference. In terms of construct validity, the correlation coefficient between Iranian addiction potential scale and symptom checklist-25 was obtained .45 which was statistically significant.

## Procedure

Group emotional intelligence training that has been used in this study consisted of eight 90-minute sessions (2 sessions a week) which was conducted on the experimental group.

The general framework of the sessions has been extracted from Bar- On emotional intelligence model (cited in Cary, 2004), but the pattern of topics and

discussions of the sessions has been extracted from Goleman's Emotional Intelligence (Goleman, 1995, translated by Parsa, 2012). In addition, the researcher has sufficed mentioning the titles and summaries of sessions in order to observe brevity.

**Table 1: Description of emotional intelligence training sessions**

| Session | Title | Content of training sessions |
|---|---|---|
| 1 | Introduction, rules and regulations, definition of emotional intelligence and its difference with cognitive intelligence | Introduction of the members and their acquaintance with each other, the members' familiarity with the general framework of the sessions and rules of entry and exit (punctual presence at meetings and active participation in class discussions), signing contract, definition and description of emotion and its dimensions, the difference between feeling and emotion, definitions of emotional intelligence and its difference with cognitive or logical intelligence, and the reason for the importance of learning and regulation of emotions |
| 2 | Brain structure of emotion and naming and recognition of emotions | Specification of the brain structures of emotion and cognition, recognition and teaching of emotional words, teaching of the causative factors of emotion generation and its formation process, teaching how to recognize and express a good face using techniques such the story, attention to faces using mirrors, posters, and the images representing emotional load |
| 3 | Definition and enhancement of emotional self-awareness and perception of others' emotion | Definition of emotional consciousness, increase of emotional consciousness, emotional control (self-restraint), correct and appropriate expression of emotion, reconsideration of emotion and efficient use of it, and perception of others' emotions |
| 4 | Teaching empathy and active listening | Training active listening and empathy skills |
| 5 | Teaching problem solving with a focus on resolving emotional issues | Individual's actions before looking for the problem and its solution in the form of self-awareness, multiple steps of problem solving and teaching self-correction instead of correcting the behavior of others. |
| 6 | Recognition of troublesome conditions and responsibility | Identification of unpleasant emotions and feelings which cause trouble, explanation of emotions and feelings and sharing unpleasant experiences, use of self-talk and role-play techniques, and teaching responsibility towards sensation, speech, and behavior |

| Session | Title | Content of training sessions |
|---|---|---|
| 7 | Anger control and management training | What is anger? Is anger a positive or negative emotion? How much angriness (under what conditions) is beneficial and logical and when is it harmful and irrational? Why does anger persist and an angry person remains angry? How harmful is multiple or long-term anger? What are the most common causes of anger and irritation? What are the appropriate methods to express anger? What are the ways to deal with anger? |
| 8 | Stress management resulting from emotional situations and conditions, conclusion and administration of post-test | Review of previous sessions, training to recognize stress in selves and others, identification of improper ways of dealing with stress (aggression, isolation, etc.), training appropriate ways to reduce stress (relaxation exercises, writing for outflow). Note: At the beginning of each session, the gist of previous sessions was reviewed and, then, the new session began. |

## Results

The mean age of the experimental group was 20.87 years and that was 20.73 for the control group. Descriptive statistics pertinent to addiction potential are presented in the following table.

**Table 2: Descriptive statistics pertinent to addiction potential for each group and test stage**

| Test stage | Group | Mean | SD | N |
|---|---|---|---|---|
| Pre-test | Experimental | 57.07 | 6.94 | 15 |
| | Control | 57.87 | 6.10 | 15 |
| Post-test | Experimental | 44.93 | 6.05 | 15 |
| | Control | 57.80 | 6.90 | 15 |

MANCOVA test (multivariate analysis of covariance) should be employed to investigate the efficacy of teaching emotional intelligence. One of the assumptions for using this parametric test is homogeneity of regression slopes. The analysis results indicated that this assumption has been met (P>.05, F=1.12). The other assumption of this test is the equality of error variances. Levene's test results suggested the satisfaction of this assumption (P>.05, F=2.43).

The results of univariate analysis of variance are presented in the following table.

**Table 3: Results of MANCOVA test representing the effectiveness of emotional intelligence training in addiction potential**

| Sum of squares | Mean square | F | Sig. | Eta Squared |
|---|---|---|---|---|
| 1145.13 | 1145.13 | 34.614 | .0005 | .57 |

As it is observed in the above table, teaching emotional intelligence is effective in reducing and improving addiction potential ($\eta^2$=.57, P<.001, F=34.614).

## Discussion and Conclusion

The aim of this study was to determine the effectiveness of emotional intelligence training in addiction potential among male students. The results showed that the group under intervention gained a significant reduction in addiction potential scale. Therefore, it can be concluded that emotional intelligence training is effective in reducing addiction potential among male students. The findings of this study are consistent with the results of the studies done by Dunn (2004), Khan Mohammadi et al (2009), Grillo (2010), and Mousavi, Iravani, Nikbakht, Yazdi & Movahedi (2012). Emotional intelligence training along with learning how to identify, recognize, and distinguish emotions, increase of emotional self-awareness in selves and others, learning to review and revise emotions, training to control a variety of pleasant and unpleasant emotions, learning active listening and empathy, providing the conditions for the creation of new relationships, and the maintenance of past effective relationships leads to the reduction of addiction potential. Humburg (1992, cited in Jana'abadi, 2009) believes that those who participate in emotional literacy courses are likely to confront fewer problems in areas such as peer pressure, smoking, drug use, and other types of addiction. This emotional ability causes them to get safe and strong against pressures, impulses, and the imminent disabilities.

To explain each of the points mentioned above, Jana'abadi (2009) showed that there is a significant negative relationship between emotional self-awareness and addiction potential among senior high school students. To account for this finding, one can argue that the knowledge, relation, and cause of emotions can be obtained through teaching emotional self-awareness and also information about whyness and howness of excitation in various situations will be reached. This emotional self-awareness causes a person who is angry or sad, for example, or has other unpleasant emotions to be mindful of his/her own emotions and not to unconsciously go for drug use for immediate relief and peace.

In addition to the role of self-awareness in explaining the effectiveness of teaching empathy and establishing new relationships along with the maintenance of past effective relations in reducing addiction potential, it can be stated that one of the great advantages of emotional intelligence is the avoidance of isolation and loneliness in addicts (Dunn, 2004). This means that the establishment of new relationships and maintenance of past effective relations through empathy and communication skills provide the conditions for avoiding isolation and tendency to addiction and prevent people from drug use.

To interpret the point that how it is possible to prevent addiction via control of anger and impulse control (as a component of emotional intelligence), Haji

Hassani, Shafiabadi, Pirsaqhi & Kianipour (2012) found aggression correlated with addiction potential among female students. This means that impulse and anger control training can cause one to appease basic and strong emotions and not to tend to smoking and drug use as a temporary and immediate relief. To account for this finding, one can argue that those with high excitation feel higher degrees of frustration and anger and are more likely to use drugs to cope with such emotions when placed in a problem solving position (Haji Hassani et al., 2010). For this reason, people are prevented from drug use, drug abuse, and purposeless immediate decisions via learning how to control impulses, especially high anger and irritation in the form of emotional intelligence training.

To justify the fact that emotional intelligence training leads to the reduction of addiction potential, one can argue that addicts and people with tendency to drug use turn to non-constructive problem solving styles such as frustration and avoidance and use less of creative problem solving styles such as creativity, confidence, and trust in confrontation with emotional situations, stress, and life problems (Saber, Mousavi & Salehi, 2011). Emotional intelligence training along with learning how to solve emotional problems with more creativity and greater confidence, and teaching how to look at emotional issues in a multidimensional approach releases individuals from stress, helplessness, frustration, aggression, and unpleasant emotions and gives them the lesson that emotion-based solution, avoidance, helplessness, frustration, aggression, and tendency to drug use are not appropriate solutions, but this is the perfect and purposeful problem solving that prevents them from tendency to drug use and addiction. In general, emotional intelligence training and control and management of the positive and negative emotions in selves and others provide the conditions for the prevention of drug abuse and addiction and lead to the reduction of addiction potential. The present study was limited to male students of Shahid Chamran University of Ahwaz; therefore, caution and care should be exercised in generalizing the results to other students. It is recommended that follow-up be considered in future research due to the infeasibility of conducting any follow-up in this study.

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