# THE COMPARISON OF EMOTIONAL INTELLIGENCE AND HARDINESS IN ADDICTS AND NON-ADDICTS

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**Abstract**
Substance abuse, also known as drug abuse, is a chronic phenomenon entailing many physical, psychological, social, familial, and economic damages so that the addicted person's social and individual actions are severely reduced. The main purpose of this paper is to compare the emotional intelligence and hardiness in addicts and non-addicts. The sample consisted of 80 drug addicts and 80 normal individuals. The sample size of addicts was determined using convenience sampling method in addiction treatment center of Kermanshah-Iran. Then, the cloning method was used to match the two groups based on the variables of age, education level, number of family members, and family income. The participants answered Petrides and Furnham's emotional intelligence questionnaire as well as Kobasa's 80-item hardiness questionnaire. Then the data were analyzed using statistical tests. The analysis of data showed that there is a significant difference between addicts and non-addicts in terms of emotional intelligence and hardiness so that the emotional intelligence and hardiness of addicts are lower than the normal group. Also, the level of all emotional intelligence components (optimism, understanding one's own and others' emotions, controlling emotions, and social skills) was lower in addicts compared to non-addicts. The same results were obtained regarding the individuals hardiness; in other words, the addicted participants obtained lower scores in all hardiness components (commitment, challenge, and control). The other results of this research showed that there is a significant and negative relation between the duration of addiction and emotional intelligence as well as between the duration of addiction and hardiness. Finally, it was concluded that addicts have lower emotional intelligence and hardiness compared to normal individuals; also, there is a significant relation between the emotional intelligence and hardiness in addicts and normal individuals ($p<0.05$).

**Keywords:** emotional intelligence, hardiness, addiction

## Introduction

In recent decades, it has been shown that the cognitive intelligence cannot lonely guarantee individuals' success in the long term and lifetime, but other characteristics, called emotional intelligence, are needed for human good communications and success in life (Goleman, 2001). Hardiness is one of the other factors affecting addiction. Hardiness is defined as a set of features acting as a source of strength in the face of stressful events. There are many evidences indicating that hardiness is positively associated with physical health and the reduction of stress leads to increase in individuals' health (Kobasa, 1991). The present research addresses the issue

of addiction through assessing the differences between addicts and non-addicts in terms of their emotional intelligence and hardiness. In fact, it is hoped that the study can take positive steps to address the problem of addiction. Opium or heroin is the drug that can be taken into account as horrific as chemical and mass destruction weapons. This drug is mass produced in Afghanistan and its international trade amounts to tens of billions of dollars so that the importance of this drug is commercially as much as the oil trade (Shosofdski, 2002). On the other hand, drug abuse has caused many social problems for communities and it has brought about the problem of addiction which can be considered as the greatest social problem in the present century. In this sense, Iran is facing more challenges, because it is located in the neighborhood of the two largest producers of drugs, Afghanistan and Pakistan known as Golden Crescent (Rezayi D., 2000). Nevertheless, a comprehensive definition of addiction has not provided in Iran yet. Anyhow, addiction is generally defined as abusing drugs with any compound that alters the brain function in the form of emotion, depression, irritability, abnormal behavior, anger, or impaired judgment and wisdom (Rahimi, 1997). Opiate addiction is the most common type of tendency to addiction. In fact, opiates include a class of compounds that are derived from the roots of poppy plant (Papaver Somniferum) and opium, morphine, and heroin are the most known among them (Rosenhan and Seligman, 2000). Regarding the tendency to drug abuse, the emotional dimension is an important aspect. Here, the emotional dimension means the ability of individuals to control emotions and use them in their relations with other individuals; in other words, emotional intelligence affects tendency to addiction or better to say that there is relation between emotional intelligence and tendency to addiction. In fact, emotional intelligence is defined as awareness of emotions and how this awareness influences interpersonal relationships and motivates individuals to use their internal forces to move on the path to success (Goleman, 1995). According to Bar-On model, emotional intelligence is considered as non-cognitive skills, qualifications, and abilities affecting individuals' environmental adaptability. In this model, the emotional intelligence includes not only interpersonal relationships, but also elements such as adaptability, stress management, and general mood (Bar-On and Parker, 2000). Always cognitive intelligence has been mentioned as a predictor of success in work and education, but now psychologists believe that emotional intelligence is important as cognitive intelligence and can contribute to prediction of academic success, career, and individuals' performance (Boyce, 2002).

Hardiness is one of the other factors affecting addiction. Hardiness is defined as a set of features acting as a source of strength in the face of stressful events. There are many evidences indicating that hardiness is positively associated with physical health and the reduction of stress leads to increase in individuals' health (Kobasa, 1991). Studies show that certain personality traits may affect the way of dealing with stress and reduce it. According to Kobasa, stress and psychological pressures have less effect on some people; hence, such people have higher levels of hardiness and this feature distinguish them from others. The sense of commitment causes these people to show a strong tendency to challenge in the face of psychological stress. In fact, they believe the change in life and consider it as an opportunity for growth. Also, the individuals with high levels of hardiness own three important characteristics including control, commitment, and challenge acceptance which make them strong against stress and psychological pressures (Besharatzadeh, 2007). There are a few studies on emotional intelligence in which the issue of addiction is addressed; also, in these studies only some components of emotional intelligence have been sporadically assessed. However, no comprehensive research has been done yet regarding the hardiness of addicts and the

comparison of hardiness between addicts and non-addicts. The present research compares the emotional intelligence and hardiness of addicts with non-addicts'. Since drug addiction and drug dependency are complex issues with many dimensions, fighting uncontrolled growth of addiction requires inclusive and wide efforts in different aspects such as personal, economic, cultural, religious, and educational dimensions. Individuals' emotional aspects also can significantly affect tendency to addiction and abuse treatment and recovery process. In this study, emotional intelligence has a special place, because it includes understanding, describing, receiving, and harnessing emotions as well as considering the fact that emotional intelligence determines individual's way of dealing with positive and negative life events. In other words, it can directly affect people's life, because life is full of pleasant and unpleasant events (such as marriage, getting a good job, or losing a family member or job) and the way of dealing with them can be determinative (Cirochi, 2001). Therefore, an optimal level of emotional intelligence can be instrumental in dealing with events so that the negative events cause the least psychological damages as well as it is possible to obtain the greatest benefits from positive events; thus, the emotional intelligence can significantly manifest itself in preventing and controlling destructive behaviors such as addiction. So studying the emotional intelligence of addicts and comparing its differences with the emotional intelligence of non-addicts is important to find solutions to control addiction.

On the other hand, since hardiness is another important feature with many positive consequences such as resistance to stress, it has attracted the researchers' attention and many studies are currently being conducted regarding the impact of hardiness on dealing with stressful situations (Malekzadeh, 2009). Therefore, measuring hardiness and training individuals to increase their hardiness level can reduce the tendency to addiction and make the abuse treatment and recovery process more successful.

**Research hypotheses:**

Hypotheses tested in this study are:

1- There is a significant difference between addicts and non-addicts in terms of emotional intelligence.

2- There is a significant difference between addicts and non-addicts in terms of hardiness.

3- There is a significant difference between addicts and non-addicts in terms of emotional intelligence subscales (optimism, understanding one's own and others' emotions, controlling emotions, and social skills).

4- There is a significant difference between addicts and non-addicts in terms of hardiness subscales (commitment, challenge, and control).

5- There is a significant relation between the duration of addiction and addicts' emotional intelligence and hardiness.

**The literature**

In fact, there is no comprehensive study conducted on comparison of emotional intelligence and hardiness in addicts and non-addict in Iran and even outside Iran. Therefore, the present study is unique in this respect; anyhow, in the following, it is tried to provide the nearest research done in this field.

| Researcher | Year | The results |
|---|---|---|
| Nikbakht | 2006 | Individuals benefited from TC centers programs have higher emotional intelligence compared to the people who do not refer to the centers; in other words, the programs provided by these centers improve individuals' emotional intelligence. The research showed the positive impact of TC centers on improvement of drug abusers' |

| | | |
|---|---|---|
| | | emotional intelligence. |
| Salehi | 1998 | Drug addicts often have characteristics such as incompatibility, lacking a sense of responsibility, lack of security feeling, and the desire to be self-centered. |
| Nategh | 2003 | Addicts significantly show poorer performance compared to non-addicts in terms of solving problems. |
| Jafarizadeh | 2003 | Addicts apply focused coping strategies less than non-addicts while they apply ineffective or less effective strategies more. |
| Moein | 2011 | There is a significant relationship between hardiness and marital adjustment. There is a significant relationship between hardiness subscales (commitment, challenge, and control) and marital adjustment. The higher the hardiness is, the greater the marital adjustment will be. |
| Khodayi et al. | 2011 | There is a significant difference between addicts and non-addicts in terms of three personality factors. No difference was observed between addicts and non-addicts in terms of religiosity and extraversion. Also, there is a significant difference between addicts and non-addicts in terms of emotional intelligence of focus, distinction, and reconstruction so that addicts have lower emotional intelligence of focus, distinction, and reconstruction compared to non-addicts. |
| Trinidad et al. | 2004 | People with high emotional intelligence are better able to predict the needs of others. They realize peers' unwanted pressures and control their emotions better; as a result, they show more resistance against the drugs, but people with low emotional are intelligence generally drawn toward drugs to deal with their negative emotions. |
| Trinidad et al. | 2002 | Teens with low levels of emotional intelligence are more likely to smoke. |
| Yip and Martin | 2005 | The ability to manage emotions positively correlated with feelings of joy in addicts and non-addicts. Also, emotion management and accordingly emotional intelligence positively correlated with several domains of social acceptance. The emotional intelligence of addicts are lower than non-addicts'. |
| Acton | 2002 | Substance abuse increases with increasing parental rejection, association with pervert friends, low self-esteem, and ineffective social coping methods. Other studies also show the relation between substance abuse and low-level components such as poor impulse control, low sensation-seeking, low self-esteem, lack of behavioral inhibition, and non- conformity. |
| El-Ghonemy and Azzam | 2008 | Low emotional intelligence leads to weakness in solving problems and coping with negative emotions resulted from drugs abuse. |
| Richard Salvatore | 2013 | People with low hardiness are more prone to Internet addiction and waste of time. Such people are not stable and have lower emotional intelligence. |

## Methodology

This study is a casual comparative research according to its purpose and the field method was used to collect data through distributing questionnaire among the participants. In addition, library studies and internet valid resources were used to collect data.

### Population, sampling method and sample size

The research population consisted of all addicts referring to treatment centers of Kermanshah-Iran as well as non-addicts of the city. The final size of sample was 160 people who formed two groups including 80 addicts and 80 non-addicts. The sample size was determined using

convenience sampling method. In order to collect accurate data, the questionnaires of individuals who unwillingly participated in this study or did not answer all the questions were excluded from the study. Also, to provide normal individuals (control group), they were firstly matched with first group using cloning method and based on the variables of age, education level, number of family members, and family income; then, the questionnaires were distributed among them.

**Research tools**

**Petrides and Furnham's emotional intelligence questionnaire**

This questionnaire includes 30 items and responses were graded from completely agree (1) to completely disagree (3) in a seven-grade scale; also, there is no wrong or right answer and the items 2, 4, 5, 7, 8, 10, 12, 13, 14, 16, 18, 22, 25, 26, and 28 are inversely scored. The total score is calculated through summing the scores obtained for each item in the questionnaire. Four factors (optimism, understanding one's own and others' emotions, controlling emotions, and social skills) have been extracted from data analysis in the normalization of this questionnaire conducted by Marani (2003) in Iran. The questionnaire analysis shows that according to Cronbach's alpha, the coefficient of internal consistency reliability is equivalent to 0.81. In addition, all questions in the questionnaire are positively correlated well with the total scores. The validity of this test has been confirmed by experts; therefore, the test has been standard and it has acceptable validity.

**Kobasa's hardiness test**

Hardiness has been measured by examining the personal views. The scale used for this assessment is a 50-item questionnaire one designed by Kobasa. The questionnaire items include three types of questions to assess hardiness subscales: 17 items about challenge, 16 items about commitment, and 17 items about control. Scoring the questionnaire has been done based on Likert scale in which the scores range from zero (not true at all) to 3 (completely true). 39 items of this questionnaire are inversely scored and a separate score has been provided for each hardiness subscale so that the non-weighted average of the three scales is considered as the total score of hardiness. The questionnaire was translated by Ghorbani (1995) and after modifications, its face and content validity was calculated. The studies show that the reliability coefficients of control, commitment, and challenge (hardiness components) are respectively equal to 70%, 52%, and 52%. According to the coefficients of these subscales, the coefficient of hardiness is reported equal to 75% (Majidian, 2004). To determine the population distribution (data normality), the Kolmogorov-Smirnov test was used. The level of significance was considered $P<0.05$. In the following, findings are firstly assessed, and then according to the hypotheses, the variables are compared using t-test for independent groups. Pearson correlation coefficient was used to obtain the relationship between the variables.

**Research findings**

The sample consisted of 160 individuals: 80 addicts (50%) and 80 non-addicts (50%).

Table 1: the emotional intelligence status in addicts and non-addicts

| Emotional intelligence | number | Mean | Standard deviation |
|---|---|---|---|
| addict | 80 | 129.4 | 15.72 |
| Non-addict | 80 | 136.4 | 18.4 |

Table 2: t-test for independent groups to compare the emotional intelligence of addicts with non-addicts'

| Emotional intelligence | t-test | Freedom degrees | The significance level |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Assuming the equality of variances | -2.684 | 158 | 0.008 |

In table 2, the assumption of variances equality has been proven through Levene's test. Therefore, assuming the equality of variances, the hypothesis is assessed. According to table 2, t-test with freedom degree of 158 is statistically significant and the significance level is lower than 0.05; hence, the null hypothesis is rejected and the researcher's hypothesis is confirmed at the 95% confidence level. Therefore, there is a significant difference between addicts and non-addicts in terms of emotional intelligence.

Thus, it is concluded that the emotional intelligence affects tendency to addiction so that individuals with lower emotional intelligence are more likely to be addicted.

Table 3: the hardiness status in addicts and non-addicts

| **Hardiness** | **number** | **Mean** | **Standard deviation** |
|---|---|---|---|
| addict | 80 | 70.11 | 6.91 |
| Non-addict | 80 | 83.39 | 6.65 |

Table 4: t-test for independent groups to compare the hardiness of addicts with non-addicts'

| **Hardiness** | **t-test** | **Freedom degrees** | **The significance level** |
|---|---|---|---|
| Assuming the equality of variances | -12.37 | 158 | 0.000 |

In table 4, the assumption of variances equality has been proven through Levene's test. Therefore, assuming the equality of variances, the hypothesis is assessed. According to table 4, t-test with freedom degree of 158 is statistically significant and the significance level is lower than 0.05; hence, the null hypothesis is rejected and the researcher's hypothesis is confirmed at the 95% confidence level. Therefore, there is a significant difference between addicts and non-addicts in terms of hardiness.

Thus, it is concluded that the hardiness affects tendency to addiction so that individuals with lower hardiness are more likely to be addicted.

Table 5: the description of emotional intelligence subscales (optimism, understanding one's own and others' emotions, controlling emotions, and social skills)

| **Variables** | | **number** | **Mean** | **Standard deviation** |
|---|---|---|---|---|
| optimism | addict | 80 | 32.28 | 3.93 |
| | Non-addict | 80 | 34.14 | 4.6 |
| understanding one's own and others' emotions | addict | 80 | 31.52 | 5.18 |
| | Non-addict | 80 | 34.12 | 4.6 |
| controlling emotions | addict | 80 | 31.83 | 4.07 |
| | Non-addict | 80 | 34.15 | 4.6 |
| social skills | addict | 80 | 31.68 | 4.01 |
| | Non-addict | 80 | 34.1 | 4.6 |

Table 5 shows the means and standard deviations of emotional intelligence components in addicts and non-addicts. As it observed, there is a significant difference between addicts and

non-addicts in terms of emotional intelligence subscales. In fact, the emotional intelligence subscales of non-addicts are higher than addicts'.

Table 6: t-test for independent groups to compare the emotional intelligence subscales of addicts with non-addicts'

| **Variables** | | **t-test** | **Freedom degrees** | **The significance level** |
|---|---|---|---|---|
| optimism | Assuming the equality of variances | -2.684 | 158 | 0.008 |
| understanding one's own and others' emotions | Assuming the equality of variances | --3.334 | 158 | 0.001 |
| controlling emotions | Assuming the equality of variances | -3.302 | 158 | 0.001 |
| social skills | Assuming the equality of variances | -3.537 | 158 | 0.001 |

According to table 6, the values of t-test and the significance levels ($P<0.05$) show that there is a significance difference between addicts and non-addicts in terms of emotional intelligence subscales (optimism, understanding one's own and others' emotions, controlling emotions, and social skills).

Table 7: the correlation among the variables of emotional intelligence subscales, hardiness, and duration of addiction

| **Variable** | **1** | **2** | **3** |
|---|---|---|---|
| 1. emotional intelligence | 1 | | |
| 2. hardiness | **-0.304 | 1 | |
| 3. duration of addiction | **-0.745 | **-0.244 | 1 |

Table 7 shows the correlation between duration of addiction and emotional intelligence and hardiness. According to table 7, the following results are obtained:

1- There is a negative and significant relationship between duration of addiction and emotional intelligence; hence, the null hypothesis is rejected and researchers' hypothesis is confirmed.

2- There is a negative and significant relationship between duration of addiction and hardiness; hence, the null hypothesis is rejected and researchers' hypothesis is confirmed.

Thus, it is concluded that the relation between duration of addiction and emotional intelligence and hardiness is inverse; in other words, the longer the duration of addiction is, the lower emotional intelligence and hardiness will be.

**Discussion and conclusions**

The results show that the emotional intelligence of normal individuals is higher than addicts' and there is a significant difference between these two groups in this regard. The results of this study are consistent with the findings of studies done by Trinidad et al. (2004), Jonson (2002), Goleman (1995), and El-Ghonemy and Azzam (2009). According to the findings of this

research and the total score of emotional intelligence, the addicted individuals have lower emotional intelligence compared to non-addicts; in other words, such people have difficulties in understanding, processing, and managing emotions in interpersonal relationships. These weaknesses cause the addicts to lose their ability to analyze, make decision, and select the correct behavior in facing with stressful events of life, and as a result, they are drawn towards not compromised behaviors. In this regard, substance abuse can be considered as an immature defense mechanism on which the people with low emotional intelligence rely. Also, the results confirm the findings of the study done by Mayer, Salovey, and Caruso (2002). They showed that people with lower emotional intelligence obviously have higher tendency to illegal drugs and alcohol. Therefore, it is concluded that the drug abusers are weak in understanding their own and others' emotions. So they cannot be associated with the feelings of others and cope with their old and destructive feelings. As a result, they look for drugs to cope with their stresses and unknown comfort. Regarding the results of hardiness test, a significant difference was observed between addicts and non-addicts.

**Suggestions**

The findings of this study can be helpful for executive managers and policy makers who are active in the field of preventing addiction. So they can apply new training programs in treatment centers to increase the emotional intelligence and its components in addicts who refer to these centers. This can be regarded as a serious step in curbing addiction. Also, according to the findings of this study, consultants of treatment centers should provide strategies for addicts' family to help them to increase their emotional intelligence and hardiness. Also, it is recommended to develop programs to increase the emotional intelligence of children so that the children's social skills are developed and they can achieve the vision that is useful for all fields of their learning and growth. According to the significant differences between addicts and non-addicts in terms of emotional intelligence, it is recommended to study the impact of treatment process on increasing the levels of emotional intelligence.

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