Research Article

Comparing Emotional Intelligence and Hardiness in Addicts and Non-Addicts

Anahita Nabiei

Department of Guidance and Counseling,
Faculty of Humanities, Science and Research University,
Kermanshah, Iran, Corresponding Author: behrooz.nik@gmail.com

ABSTRACT

The aim of the present study is to compare emotional intelligence and hardiness in addicts and non-addicts. Statistical population of this study is consisted of addicts and non-addicts in Kermanshah. Research samples include 80 addicts to drugs and 80 normal individuals. Sample volume of addicts was selected by using convenience sampling method and the second group of non-addicts were selected by using matching method, in a way that both the groups were matched in terms of the variables of age, education, the number of members and family income level. Then, they responded to Petrides and Furnham's emotional intelligence questionnaireand 50-items form of Kobasa's hardiness scale and collected data were studied by using statistical tests. Data analysis by using inferential statistics, for comparing emotional intelligence and hardiness was obtained by independent groups t-test and the relationship between researchvariables and addiction course duration was obtained by using Pearson's correlation test. Data analysis of paired samples indicated that there is a significant different between emotional intelligence and hardiness scores in addicts and non-addicts. Emotional intelligence score is equal to $p=0.008$ and for hardiness it is equal to $p=0.0001$. In a way that addicts to drugs have a lower emotional intelligence and level of hardiness comparing to the normal group. Also, all the dimensions of emotional intelligence (Optimism, understanding one's emotions as well as that of others, emotional control and social skills) in addicts are lower than non-addicts. While, optimism is equal to $p=0.008$ and the other subscales, understanding one's emotions and that of others, controlling emotions and social skills are equal to $p=0.001$ and the same applied to hardiness of individuals as well, which means that in all the dimensions of hardiness (commitment, challenge and control) addicts have obtained lower scores. While, for subscales of commitment, challenge and control we have $p=0.0001$. Other results of this study indicated that there is a negative and significant relationship ($r=-0.745$) between course duration of addiction and emotional intelligence and also, there is a negative and significant relationship ($r=-0.244$) between course duration of addiction and hardiness. Level of emotional intelligence and hardiness in addicts to drugs is lower comparing to normal people. In addition to this, results indicated that there is a significant relationship ($p<0.05$) between emotional intelligence and hardiness of addicts and normal people.

KEY WORDS: Emotional intelligence, hardiness, addiction

INTRODUCTION

Addictive drug abuse is considered a social, health, economic and cultural damage in most countries and has caused serious concerns as a destructive phenomenon. During the past few decades, the society of Iran has been seriously subjected to the threat of the issue of addiction as a biological, psychological and social disease. Duringthe period, the phenomenon of addiction is Iran has been turned into a big challenge and problem with alarming dimensions. Iran considering its population is the first consumer of

drugs in the world which indicates to the complexity of this issue in our land [1].

From Psychological perspective and as per the point of view of those working in Mental health provision network, the range of destructive effects of addiction to drugs is so much importantwhich is due to the fact that its Dire consequences not only affects the addict, but also it usually affect the wife, children, circle of friends, colleagues and others as well. Harmful social - economic dimensions resulting from this issue and problem is not hidden to authorities. However, regarding addressing this scourge affecting societies, various solutions have been used throughout the world, among which we can refers to considering drug abuse illegal in so many countries and also setting various rules and regulations for punishing drug abusers and exerting a number of controls on production, entrance, distribution, buying and selling and using drugs. However, always with increased diversity of addiction practices, the diversity of fighting with the phenomenon of addiction has increased as well, in a way that almost all those who are involved in fighting with drugsbelieved that alone they are unable to control addiction and issues related to it [2].However, in The process of dealing with the scourge phenomenonof addiction at three intervening levels, that are, preventingaddiction, detoxification and withdrawal from addiction and finally, Prevention of relapse to drug abuse, solutions focused on individual dimensions, such as increased information and awareness of people about the threats and harms of drugs, increased life skills such as decision making skills and problem solving and adaptability with other and controlling emotions beside other methods are so much effective. In this regard, one of the most important individual aspects in drug abuse is paying attention to emotions andappropriate application of them in human relations, understanding one's mood and that of others, having self-control and controlling one's

impulsiveness, empathy with others and positive use of emotions in thinking and understanding that are all manifests in emotional intelligence [2].

During recent decades, it has been shown that the level of cognitive intelligence of people alone cannot guaranteetheirsuccess in the long run and throughtheir lives, but, other characteristics are necessary and required for establishing appropriate human relations and success in life which is known as emotional intelligence [3].

Another factor which is effective and influential on addiction is hardiness. Hardiness refers to a set of characteristics which act as a source of resistance in the face of stressors in life. Numerousevidences indicate that hardiness has a positive relationship with physical health and with reducing stress outcomes, it increases physical health in people .

The present study tries to further clarify this field with studying the difference between emotional intelligence and hardiness in addicts and non-addicts and take another step toward finding a solution for this huge social issue.

RESEARCH METHODOLOGY

Study as a research process is a systematic activity that contains two conditions in its most correct form [4]. 1)Accurate control, a condition which prevents the effect of irrelevant and intervening factors. 2) correct sampling, a condition which gives generalizability to research findings.

FULL METHODOLOGY DESCRIPTION

This study is mainly considered to be a field study. In this study, questionnaire was sued for collecting data. Also, for collecting research literature, bibliographical studies and reliable internet sources were used.

STATISTICAL POPULATION, SAMPLING METHOD AND SAMPLE VOLUME

Statistical population of the present study is consisted of all addicts referring to medical

centers and non-addicts in Kermanshah. Final volume of participants of both the groups is equal to 160 individuals (80 addicts and 80 non-addicts) who were selected by using voluntary and convenience sampling method. In a way that after obtaining permit from research and science university of Kermanshah, with referring to Milad Drug addiction treatment center, individuals who have referred to this center as addicts were interviewed and after that, in case of being interested, research questionnaire was presented to them and were asked to respond to the questions carefully and this step was completed in 2 months. Also, the sample of 80 normal individuals were selected from individualsaccompanying patients and they were tested on a voluntary basis. For correct collection of information and data from participants, the questionnaire of those individuals who weren'tinterested in participating in this study or haven't responded to all the questions was eliminated. Also, for selecting normal individuals in this study (control group), first as per the mentioned variables in the form of personal details (age, education, economic status, employment and ...) They were matched with the first group and then research questionnaires were made available to them.

RESEARCH INSTRUMENT

Questionnairesused in this study are presented below:

Petrides and Furnham's emotional intelligence questionnaire

Short form and version of this questionnaire is consisted of 30 questions with 7-scale options from completely agree (1) to completely disagree (7). In this questionnaire, there are no correct and false answers and items 2, 4, 5,7, 8, 10, 12, 13, 14, 16, 18, 22, 25, 26, 28 are scored reversely. Total score of the test is calculated from the total obtained scores in each item. In normalization of the 30-item form of the questionnaire in Iranian samplewhich is performed by Marani (2003), analysis of data factors has led to the extraction

of the four factors of (optimism, understanding one's emotions and that of others, controlling one's emotions and social skills). With analyzing the questionnaire, it was shown that internal consistency reliability coefficient of this questionnaire by using Cronbach's alpha method is equal to 0.81. Also, it was indicated that all the items of the questionnaire has a good positive relationship with total score of the questionnaire. This test was tested for its validity by experts in this field and therefore, the test was standard and has a good validity.

KOBASA'S HARDINESS SCALE

For measuring hardiness, the scale for examining Personal Views was used. This scale was developed by Kobasa and is a 50-item questionnaire which is consisted of subtests of challenge (17 items), commitment (16 items) and control (17 items), which is designed based on a Likert's 4-points scale including, score 5 (not at all correct) to score 3 (totally correct). 39 items in the questionnaire have a reverse coding and a separate score is presented for each fo the three subscales and the unweighted average of these three scales is considered as total score for hardiness. This test has been translated by Ghorbani (1995) and its face and content validity has been tested and in case of necessity, required modification were made. Conducted studies indicated that the dimensions of hardiness (that is, control, commitment and challenge), have reliabilitycoefficients of 70%, 52% and 52%, respectively and this coefficient were calculated to be equal to 75% for hardiness as a whole characteristic.

DATA ANALYSIS INSTRUMENTS AND METHODS

For analyzing research data, SPSS 18 software as well as inferential and descriptive statistical methods were used. Independent t-test and Pearson's correlation were used in this study as well. Also, for obtaining secondary results,

Pearson's correlation coefficient was used as well.

DATA ANALYSIS

Research sample in this study is consisted of 160 individuals, that 80 of them (50%) are addicts and the other 80 individuals (50%) are non-addicts.

Age range of participants is presented in table 1. As we can see, age of individuals in both groups has been matched. As we can see the maximum age range is related to 25 years.

Table 1 - Age range of participants

Age (year)	Frequency		Frequency percentage
	Addicts	Non-addicts	
20	9	9	11.3
21	8	8	10
22	7	7	8.8
23	7	7	8.8
24	7	7	8.8
25	10	10	12.5
26	8	8	10
27	6	6	7.5
28	6	6	7.5
29	6	6	7.5
30	6	6	7.5
Total	80	80	100

As we can see, in table 2 also, maximum educational status is related to high school diploma.

Table 2 - Educational status of participants

Education	Frequency		Frequency percentage
	Addicts	Non-addicts	
Below high school diploma	23	23	28.8
High school diploma	38	38	47.5
Associate degree	14	14	17.5
Bachelor	5	5	6.3
Total	80	80	100

As we can see, in table 3, maximum range of emotional intelligence in addicts and non-addicts is between 111 to 120.

Table 3 - Emotional intelligence status of addicts and non-addicts

Emotional intelligence range	Addicts		Non-addicts	
	Frequency	Percentage	Frequency	Percentage
Lowest to 110	7	8.8	0	0
111 - 120	25	31.3	20	25
121 - 130	9	11.3	17	21.3
131-140	17	21.3	21	26.3

141 - higher	22	27.5	22	27.5
Total	80	100	80	100
	Average		Standard deviation	
Addicts	129.4		15.72	
Non-addicts	136.40		18.40	

As we can see in table 4, maximum range of hardiness in addicts is below 70 and 76-80 in non-addicts. Also, we can see that the status of hardiness average in addicts is equal to 83.39, while the same is equal to 70.11 in non-addicts.

Table 4- Hardiness status in addicts and non-addicts

Hardiness status	Addicts		Non-addicts	
	Frequency	Percentage	Frequency	Percentage
0 - 70	48	60	0	0
71 - 75	14	17.5	5	6.3
76 - 80	9	11.3	29	36.3
81 - 85	8	10	19	23.8
86 and above	1	1.3	27	33.8
Total	80	100	80	100
	Average		Standard deviation	
Addicts	70.11		6.91	
Non-addicts	83.39		6.65	

In the following section, inferentialstatistics are discussed and research hypothesis are studied.

INFERENTIAL STATISTICS

H1: There is a significant difference between addicts and non-addicts in terms of emotional intelligence.

Table 5 - Emotional intelligence status in addicts and non-addicts separately

Emotional intelligence	Quantity	Average	Standard deviation
Addicts	80	129.4	15.72
Non-addicts	80	136.4	18.4

In table 6, the assumption of variances being equal was proved by using Levene test. Therefore, research hypothesis is test with the assumption of variances being equal and as we can see in tables 4-6, t-value with freedom degree of 158 is significant statistically (dg=158, t=-2.684) and significance level is also smaller than 0.05 and therefore, null hypothesis indicating that there is no difference between addicts and non-addicts in terms of emotional intelligence is rejected and H1 is confirmed with 95% confidence level. Therefore, it can be concluded that emotional intelligence is effective in people's addiction, or it can be deduced that those individuals who are having lower levels of emotional intelligence, are more prone to addiction.

H2: There is a significant difference betweenaddicts and non-addicts in terms of hardiness.

Table 7- Hardiness status in addicts and non-addicts separately

Hardiness	Quantity	Average	Standard deviation
Addicts	80	70.11	6.91
Non-addicts	80	83.39	6.65

Table 8- T-test of independentgroups for comparison of hardiness in addicts and non-addicts

Hardiness	t-value	Freedom degree	Sig. level
With the assumption of equal variances	-12.37	158	.000

In table 8, equality assumption of variances was proved by Levene test. Therefore, research hypothesis is test with the assumption of variances being equal and as we can see in tables 4-8, t-value with freedom degree of 158 is significant statistically (dg=158, t=-12.37) and significance level is also smaller than 0.05 and therefore, null hypothesis indicating that there is no difference between addicts and non-addicts in terms of hardiness is rejected and H2 is confirmed at 95% confidence level.

Therefore, it can be concluded that hardiness is effective on people's addiction, or it can be deduced that those individuals who are having lower levels of hardiness, are more prone to addiction.

H3: There is a significant difference between addicts and non-addicts in terms of emotional intelligence subscales of optimism, understanding one's emotions and that of others, controlling one's emotion and social skills).

Table 9- Description of emotional intelligence subscales (optimism, understanding one's emotions and that of others, controlling one's emotion and social skills)

Variables		Quantity	Average	Standard deviation
Optimism	Addicts	80	32.28	3.93
	Non-addicts	80	34.14	4.6
Perceiving one's emotions and others	Addicts	80	31.52	5.18
	Non-addicts	80	34.12	4.6
Controlling emotions	Addicts	80	31.83	4.07
	Non-addicts	80	34.15	4.6
Social skills	Addicts	80	31.68	4.01
	Non-addicts	80	34.1	4.6

Table 9, presents average and standard deviation of each of the dimensions of emotional intelligence separately for addicts and non-addicts. As we can see, the averagerelated to each of the emotional intelligence subscales in addicts and non-addicts have a significantdifferent and this difference is incline toward non-addicts.

Therefore, it can be said that considering the table, average score of optimism in addicts is equal to 32.28 and equal to 34.14 in non-addicts, understanding one's emotions and others in addictions is equal to 31.52 and equal to 34.12 in non-addicts, controlling one's emotions in addicts is equal to 31.83 and in non-addicts equal to 34.15 and social skills in addicts is equal to 31.68 and in non-addicts equal to 34.1.

Table 10 - T-test for independent groups for comparison of emotional intelligence subscales (optimism, understanding one's emotions and others, controlling one's emotion and social skills) in addicts and non-addicts

Variable		t-test	Freedom degree	Sig. level
Optimism	With the assumption of equal variances	-2.648	158	0.008

Perceiving one's emotions and others	With the assumption of equal variances	-3.334	158	0.001
Controlling emotions	With the assumption of equal variances	-3.302	158	0.001
Social skills	With the assumption of equal variances	-3.537	158	0.001

As we can see from table 10, considering the t-value and significance level of p<0.05, there is a significantdifferences between addicts and non-addicts in terms of emotional intelligence subscales of optimism, understanding one's emotions and others, controlling emotions and social skills).

Therefore, it can be concluded that emotional intelligence of subscales in addicts is lower than in non-addicts.

H4: there is a significant difference between addicts and non-addicts in terms of hardiness subscales (control, commitment and challenge).

Table 11 - Description of hardiness subscales (control, commitment and challenge)

Variables		Quantity	Average	Standard deviation
Control	Addicts	80	23.30	2.40
	Non-addicts	80	27.78	2.22
Commitment	Addicts	80	23.25	2.29
	Non-addicts	80	27.77	2.29
Challenge	Addicts	80	23.47	2.22
	Non-addicts	80	27.77	2.25

Table 12 - T-test of independent groups for comparison of hardiness subscales (control, commitment and challenge) in addicts and non-addicts

Variable		t-value	Freedom degree	Sig. level
commitment	With the assumption of equal variances	-12.26	158	.000
Control	With the assumption of equal variances	-12.43	158	.000
Challenge	With the assumption of equal variances	-12.15	158	.000

As it is seen in table 12, considering the t-value and significance level (p<0.05), there is a significantdifference between addicts and non-addicts in terms of hardiness subscales (control, commitment and challenge), which isequal to 23.30, 23.25, 23.47 for addicts and 27.78, 27.77 and 27.77, for non-addicts, respectively.

H5: There is a significant relationship between course duration of addiction with hardiness and emotional intelligence of addicts.

In table 12, it is seen that with increased addiction duration, emotionalintelligence and hardiness average reduces. As it is seen, highest emotional intelligence score with an average of 144.33 is related to addiction course duration of less than one year and lowest emotional intelligence with an average of 129.14 is related to addiction course duration more than 5 years.

Highest hardiness score with an average of 72.38 is related to addiction course duration of less than 1 years and lowest hardiness score with an average of 64.18 is related to addiction course duration of more than 5 years.

Table 12 - Status of emotional intelligence and hardiness of addicts based on addiction course duration

Variable	Addiction course duration	Quantity	Average	Standard deviation	Min. value	Max. value
Emotional intelligence	Less than 1 year	21	144.33	9.29	134	170
	Between 1 to 3	26	132.88	11.09	119	148
	Between 3 to 5	22	120.41	11.57	104	147
	More than 5	11	108.73	6.57	100	116
	Total	80	129.14	15.72	100	170
Hardiness	Less than 1 year	21	72.38	6.51	62	85
	Between 1 to 3	26	71.96	7.30	61	86
	Between 3 to 5	22	68.73	6.33	60	83
	More than 5	11	64.18	3.60	60	70
	Total	80	70.11	6.91	60	86

Table 13 - Correlation between variables of emotional intelligence, hardiness and addiction course duration

Variable	1	2	3
Emotional intelligence	1		
Hardiness	0.304**	1	
Course duration of addiction	-0.745**	-0.244**	1

Table 13, presents the correlation between addiction course duration wih emotional intelligence and hardiness. As it is seen:

1. The relationship between addiction course duration and emotional intelligence is negative and significant. Therefore, null hypothesis indicate that there is no relationship between emotional intelligence and addiction course duration is rejected and the opposite hypothesis is confirmed.

(R=-0.745 , P=0.0001 , N=160)

2. There is a negative and significant relationship between addiction course duration and hardiness, therefore, null hypothesis indicating that there is no relationshipbetween hardiness and addiction course duration is rejected and the opposite hypothesis indicating to the existence of a relationship between these two variables is confirmed.

(R=-0.244, P=0.0001 , N=160)

Therefore, it can be concluded that there is a reverse relationship between addiction course duration with emotional intelligence and addiction in addicts, that is, with increase course duration of addiction, level of emotional intelligence and hardiness in addicts reduces.

CONCLUSION

1st hypothesis: there isa significant difference between emotional intelligence in addicts and non-addicts.

Results obtained in this study indicated that emotional intelligence in normal individuals is relatively higher comparing to addicts and this difference is significant.

Based on findings in the study regarding the total score of "emotional intelligence", it can be said that those individuals who have been involved in drug abuse behaviors, have lower levels of emotional intelligence, that is, these individuals are facing difficulties in paying attention to emotional information, correct perception of these information, correct processing and desirable management of emotions in the depth of interpersonal relations. These difficulties cause them to lose correct behavior in the face of stressful situations, analysis ability, decision making and selection and cause them to move toward Maladaptive behaviors. In this concept, drug abuse, can be considered as an Immature defense mechanism to which individuals with low levels of emotional intelligence resort at the face of difficult situations.

2nd hypothesis: there isa significant difference between hardiness of addicts and non-addicts.

Regarding the results obtained in hardiness test, as it was mentioned in previous chapter in table 4-7, there is a significantdifference between hardiness of addicts and non-addicts.

These findings are consistent with the studies of Salvatore Richard Madhya (2013). Also, considering the fact that we know that addiction is a disease, these results can be consideredindirectly as consistent with the studies of [5], because, hardiness can act as a shield in front of stress which is the main reason for disease. Therefore, considering the fundamental role of stress in emergence of the disease of addiction, it can be recommended to reduce the level of stress in addict patients by using psychological treatment methods especially, Behavior therapy, cognitive therapy and strengthening social support network beside physical treatments.

3rd hypothesis: there is a significant difference between dimensions of emotional intelligence in addicts and non-addicts.

Obtained results in the previous chapter indicated that there is a significantdifference between all the dimensions of emotional intelligence in addicts and non-addicts, in a way that , the level of the dimensions of optimism, understanding one's emotions and others, controlling emotions and social skills is lower addicts comparing to non-addict.

The findings of this hypothesis is no consistent with the findings of any study directly, however, it can be said that these findings are indirectly consistent with the studies of Trinidad (2004), Uveitis and Martin (2005), Alghomani and a'zam (2008) and Besharat (2005).

In explaining these findings, it can be said that people dependent on drugs comparing to normal people have lower will power and self-confidence and feelings of Worry, anxiety and guilt is higher in them and lack of responsibility is also seen in them. Therefore, these characteristics might be rooted in their low level of emotional intelligence and finally, the problem of addiction can directly affect these issues and eventually, emotional intelligence and its dimensions including optimism, understanding one's emotions and others, controlling emotions and social skills also rather at a low level in these individuals.

4th hypothesis: there is a significant difference between the variables of hardiness (commitment, control and challenge) in addicts and non-addicts.

Results obtained for this hypothesis also indicated that there is a significant different between the dimensions of hardiness (commitment, control and challenge) in addicts and non-addicts and it was concluded that the level of the dimensions of commitment, control and challenge in addicts is significantly lower than in non-addicts. Consistentwith these findings, so far no study has been conducted, however, these findings can considered consistent indirectly with the findings of Ghorbani (1995) and Salvatore Richard Madhya (2013).

5th hypothesis: there is a significantrelationship between addiction course duration with emotional intelligence and hardiness in addicts.

Results of this hypothesis also indicated that with increased addiction course duration, the level of emotional intelligence and hardiness reduces in individuals significantly.

So far no study has been conducted with findings consistent with the findings of the present study, however, in explaining this, considering the destructive effect of addiction on brain cells and problems it imposes on human's body and mind, it can be expected that with increase addiction course duration, the level of emotional intelligence and hardiness reduces, which appears to be a rational conclusion.

REFERENCES

[1] Zakariaee, Mohammad Ali. (2005). Beyond a social problem. Journal of Hamrah. P.2.

[2] Chrillo, Stefano; Berni, Roberto; Cambiasso, Gianni and Maza, Roberto. (1996). Addictionto drugs in the mirror of Family Ties. Translated by Pirmoradi. Saeed. (2000). 2nd edition. Esfahan. Hamam publications.

[3] Golman, Daniel. (2003). Emotionalintelligence. Translated by Nasrin Parsa. 2nd edition. Tehran: Roshd publications.

[4] Delavar, Ali. (1987). Varioustypes of research: Experiments, studies, surveys and reviews. Quarterly journal of education (10),publicationsof ministry of education.

[5] Alipur, Ahmad; Sahraeean, Mohammad Ali; Ali Akbari, Mahnaz; Haji Aghababaee, Marziyeh. (2011). Relationship between perceived social support and hardiness with mental health and disability status in women suffering from MS. Journal of social and psychological studies, 3(110).