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Study the Personality Traits and Mental Disorders among Non-Participants and Participant Addicts in NA Groups

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Abstract The present research started to study the personality traits and mental disorders among non-participants and participant addicts in Na groups with correlation-descriptive method. The statistical population included all addicts who subscribed to the welfare organization and withdrawal clinics of Na groups in Bandar Abbas. 89 people (77 men and 12 women) from the members of Na group and 54 people (40 men and 14 women) from the non-Na group were chosen by simple random sampling. Pearson correlation coefficient, correlation matrix, regression analysis and T test were used for data analysis. The results of regression with the stepwise method between personality traits and mental disorders of Na group addicts showed that the psychoneurosis personality traits predict 24% of the variance of the mental disorders in the first step. Psychoneurosis and extroversion variables predict 32% of the variance of mental disorders in the second step. Psychoneurosis, extroversion and agreeableness variables predict 34% of the variance of the mental disorder in the third step. Also, the results of regression by stepwise method between personality traits and mental disorders of non-Na group addicts showed that the psychoneurosis personality traits predict 16% of the variance of mental disorder in the first step. Meanwhile, psychoneurosis and agreeableness variables predict 21% of the variance of mental disorder in the second step. Moreover, the results showed that there is a significant difference between the psychoneurosis personality traits and mental disorders of participants and non-participants in Na group.

Keywords: personality traits, mental disorders, addicts, Na groups

Introduction

Drug use is one the most important problems of current era that has spread globally. The victims of drug use are added every day. The complications of drug use include: social, economic, cultural, domestic, mental and physical disorders and threaten the mankind health (Rahimi Movaghar, Sharifi, Mohammadi, Farhudian, Sahimi Izadian, Rad Goudarzi, Nejati Safa and Mansouri, 2000).Addiction is one of the factors that endangers the society and individuals' health.

Addiction is a complicated disease and normally its managing and controlling have its own complexity so that more than 90% of individuals experience the comeback after withdrawal (Burns and Grove, 2008). Detoxification only includes 3% of the whole therapy and the rest 97%

is a psychological dependence to the addiction (Burns and Grove, 2007). Detoxification by itself has not an important role in withdrawal and non-medical methods should be used in order to continue addicts' withdrawal (Bahrami, 2009). Of the non-medical methods in withdraw include: Reflexology, aromatherapy, hypnotism, behavior therapy, family therapy and attending 12-step sessions of unknown addicts (Burns and Grove, 2007). 12-step sessions of unknown addicts are comprised of international and non-profit community which is arose from the heart of society and is active in 131 countries in the world (Burns and Grove, 2008). The main core and heart of unknown addicts' sessions is 12 steps in order to get better that are applied within the sessions. 12-step program is based on following a set of principles and rules that are suggested in order to the recovery from addiction. This program is controlled by the people who were addicts and now they are recovered from addiction and the only requisite for membership is a desire to stop drug use (Bill, 2009). One of the reasons of these sessions' successfulness is anonymity of persons, help of clients to each other and sharing the experiences (Burns and Grove, 2008). "Just for today" is another important belief principle in the sessions of unknown addicts. Based on this principle, the participants tell themselves: I will concentrate my thoughts on my recovery; I live and will have a good day without using any drug "Just for today". Repeating this sentence will continue until the clients will be free from addiction for days, months and years and this is going to be continued (Vederhus et al. 2010).

Paying attention to the genetic, physical and individual aspects, mental background and social issues is necessary to the study and recognition of the phenomenon of addiction. So the individual, interpersonal, environmental and social factors can be pointed out as the effective factors on addiction and personality traits can be outlined among individual factors. Personality is a comprised unit and organized collection from constant characteristics which distinguishes one person from another or others. Also it can be said that, personality is a relatively stable model of traits, trends or features that give stability to the people's behavior (Fist and fist, 2008). Five factors are considered by spreading the theoretical approaches about the personality traits that include: Psychoneurosis, extroversion, flexibility, agreeableness and accountability (Costa and McCrae, 2003).

Rudgerz et al (2007) showed in Australia that the people who do not use alcohol or use it sometimes, have more psychological stress than permanent alcohol consumers, but the anxiety in excessive alcohol consumers is much higher than the others. Excessive alcohol consumers have higher amount in the most disorders. The non-alcoholic people or the temporal consumers have higher meaningful spread in dystimia, agro phobias and post-traumatic stress disorder rather than light alcohol consumers. A study showed that 76 % of men and 65 % of women suffer from a psychological disorder with the recognition of drug abuse or addiction. The prevalence of drug abuse or addiction was shown 16.7 % in the life span of more than 18 years in the epidemiology studies in the US in 1991. Evidence shows that the drug abuse is increasing among kids and adults below 18 years. Also the drug abuse and addiction is more common between men rather than women and it is more common between psychiatric patients (Kaplan and Sadock, 1998).

Therefore in this study this issue has been discussed: "Is there a meaningful relationship between the personality traits and mental disorders of the non-participants and addict participants in Na group?"

Methodology

The method of research is correlation-descriptive. The statistical population of this study is all addicts in welfare organization, withdrawal clinics and members of Na groups in Bandar Abbas. And they are divided into two groups: participants of Na groups and the people who have profiles but they are not the members of Na group. The samples of study were chosen with random sampling after total statistics, taking their address, place of treatment and according to the Morgan table. 118 people were members of Na group and 63 addicts were not the member of Na group.

Table 1. Distribution of Na sample group based on gender

Gender	Numbers	Percentage
Male	77	0.87
Female	12	0.13
Total	89	0.100

According to the above table, 77people (87%) of 89 sample were men and 12 (13%) people were women.

Table 2. Distribution of Non- Na sample group based on gender

Gender	Numbers	Percentage
Male	40	74.07
Female	14	0.26
Total	54	0.100

According to the above table, 40 people (74.07%) of 54 sample were men and 14 (26%) people were women.

Instruments of collecting data

a. Test (SCL-90-R)

This questionnaire is one the most widely used questionnaires in America that is used for screening in the world. In addition of using for psychiatric patients, this questionnaire can be used for the alcohol and drugs addicts, sexual impotence patients, cancer patients, heart failure patients, severe physical discomfort patients and the people who need consultation. Also, it has been used as a screening instrument especially in recruitment time. It should be quoted that this questionnaire cannot be used for the people with cerebral organic waste and mental retardation people and the results would not be valuable. This test includes 90 questions. The primary form of the test was introduced by Drogatis, Lipman and Kuri in 1973, then was revised based on clinical experiences and psychometric analysis and the final form was produced (Habib Vand, 2008).

b. NEO personality test

It was presented by Costa and McCrae in 1985 and developed in 1989. The normalization of the test was done by Hasan Haghshenas in 1999 in Shiraz in Iran. Two forms of NEO PI-R are produced by its first writers and are available in English language. S form of the test is produced for evaluating personality by self-reports and R form of the test is produced for evaluating personality by the report of another person. Both forms have 60 phrases which the answers are put on a 5-points scale. Both of these forms work separately for man, woman and all ages after maturity. R form of the test has effective performances especially in the cases that the need for the comparison of the results of person's S form test and more completion of the results is necessary. This test measures 5 personality factor which include: neurosis, conscientiousness, agreement, openness to experience and extroversion. Each one of them has 6 subtests (aspects). These factors are proved through a variety of assessment techniques including self-assessment questionnaire, objective tests and observers' reports. For each phrase of the questionnaire there is a 5-ratings grade that has 0 to 4 values from totally disagreed to totally agreed, but for some phrases this grading has 0 to 4 values from totally agreed to totally disagreed, respectively. To grading the Persian test, there is transparent talc that is fixed to the answer sheet by a tight paper clip. Order of questions in NEO PI-R test is in a way that each line of the answer sheet is intended for an index that includes 8 cases or answers to the phrase.

First of all, the researcher goes to the Welfare Organization to collect data. After self-introduction and the thesis topic, she gets the business license and withdrawal clinic addresses and goes there to identify samples of each group by random sampling method after collecting all addicts of Na and non- Na group. She will explain them to fill the questionnaire. The researcher has had the most cooperation with the samples in filling the questionnaire. Authentic articles, theses, books and other scientific resources are used in collecting library information.

The collected data is analyzed in two parts of descriptive and inferential parts in this study. Tables, average and standard deviation are used in the descriptive part. Pearson correlation coefficient, correlation matrix and T test are used in the inferential part.

Results

The collected data from average and standard deviation of personality traits and mental disorders' questionnaire of Na and non -Na groups of addicts is used to analyze the descriptive data.

Table 3. The study of personality traits' average and standard deviation

Variable	Average	Standard Deviation
Psychoneurosis	22.46	6.4
Extroversion	21.42	4.7
Flexibility	19.90	3.7
Agreeableness	22.4	3.9
Accountability	28.80	6.4

The average of psychoneurosis, extroversion, flexibility and accountability according to table 3 are 22.46, 21.42, 19.90, 22.4 and 28.8, respectively. According to the results, the highest average

belongs to accountability component and the lowest average belongs to the flexibility component.

Table 4. The study of mental disorder’s standard deviation and weighted average

Variable	Average	Standard Deviation
Physical Complaint	1.04	0.9
Obsession-Compulsion	0.99	0.8
Sensitivity in interpersonal relationship	0.97	0.8
Depression	1.03	0.9
Anxiety	0.95	0.8
Aggression	1.05	0.8
Phobia	0.85	0.8
Paranoid Thoughts	0.94	0.9
Psychosis	0.81	0.8

The average of physical complaint, obsession, and sensitivity in interpersonal relationship, depression, anxiety, aggression, phobia, paranoid thought and psychosis according to table 8 are: 1.04, 0.99, 0.97, 1.03, 0.95, 1.05, 0.85, 0.94, and 0.81, respectively. According to the results, the highest average is related to the aggression component and the lowest average is related to the psychosis component.

According to the main hypothesis of research, there is a meaningful relationship in mental disorders and personality traits of participants and non-participants addicts in Na groups. Pearson correlation coefficient and correlation matrix are used to analyze this hypothesis.

Table 5. Variances analysis and statistical characteristic of regression between personality traits with mental disorders of Na group addicts through stepwise method

Steps	Variables	R	R ²	F	p <	β	p<	
First	Psychoneurosis	0.49	0.24	40.7	0.0001	0.496	6.3	0.0001
Second	Psychoneurosis	0.56	0.32	28.8	0.0001	0.493	6.6	0.0001
	Extroversion					0.269	3.6	0.0001
Third	Psychoneurosis	0.58	0.34	21.5	0.0001	0.447	5.8	0.0001
	Extroversion					0.224	2.9	0.004
	Agreeableness					0.176	2.2	0.02

According to the table 5, the regression between personality traits with mental disorders of Na group addicts proceeded up to 3 steps. F ratio and significance level suggest the variable’s meaningful effect of psychoneurosis on regression equation in the first step. The obtained regression effect (F=40.7) is meaningful in significance level (0.0001) in this step. Calculated determination coefficient is based on this variable (0.24). It means that this variable predicts 24% of the variance of the mental disorders’ variable.

Table 6. Variances analysis and statistical characteristic of regression between personality traits with mental disorders of non- Na group addicts through stepwise method

Steps	Variables	R	R ²	f	p<	β	T	p<
First	Psychoneurosis	0.40	0.16	23.8	0.0001	0.400	4.8	0.0001
	Psychoneurosis	0.46	0.21	17.4	0.0001	0.254	4.3	0.0001
Second	Agreeableness					0.247	3.05	0.003

According to table 6, the regression between personality traits with mental disorders of non-Na addicts group proceeded up to two steps. F ratio and significance level suggest the variable's meaningful effect of psychoneurosis on regression equation in the first step. The obtained regression effect (F=23.8) is meaningful in significance level (0.0001) in this step. Calculated determination coefficient is based on this variable (0.16). It means that this variable predicts 16% of the variance of the mental disorders' variable.

Table 7. Studying the difference of personality traits grades among participants and non-participants in Na groups

Features	Group	Number	Average	SD	t	DF	P
Psychoneurosis	Na	89	21.4	5.7	-2.4	141	0.01
	Non-Na	54	24.09	7.1			
Extroversion	Na	89	21.1	4.4	-0.86	141	N.S
	Non-Na	54	21.8	5.2			
Flexibility	Na	89	19.7	3.9	-0.54	141	N.S
	Non-Na	54	20.1	3.4			
Agreeableness	Na	89	22.6	4.1	0.92	141	N.S
	Non-Na	54	22.05	3.5			
Accountability	Na	89	28.6	6.4	-0.57	141	N.S
	Non-Na	54	29.2	6.5			

According to table 7 and significance levels, T values are equal to: -2.4, -0.86, -0.54, 0.92 and -0.57, which are obtained in (N.S, 0.01) levels respectively. And they would be acceptable if they are less than 0.05. So this value becomes meaningful in psychoneurosis feature (p<0.05). This means that there is a significant difference between the psychoneurosis feature of participants and non-participants of Na group.

Table 8. Studying the difference of mental disorders' grades among participants and non-participants groups

Features	Group	Number	Average	SD	T	DF	P
Physical complaint	Na	89	0.80	0.71	-4.2	141	0.0001
	Non-Na	54	1.4	1.04			
Obsession-Compulsion	Na	89	0.77	0.70	-4.08	141	0.0001
	Non-Na	54	1.3	1.03			
Sensitivity in interpersonal relationship	Na	89	0.75	0.71	-4.06	141	0.0001
	Non-Na	54	1.3	1.02			
Depression	Na	89	0.55	0.75	-3.1	141	0.002
	Non-Na	54	1.3	1.03			

Anxiety	Na	89	0.85	0.66	-3.9	141	0.0001
	Non-Na	54	1.03	1.05			
Aggression	Na	89	0.85	0.7	-3.6	141	0.0001
	Non-Na	54	1.3	1.03			
Phobia	Na	89	0.65	0.66	-3.5	141	0.0001
	Non-Na	54	1.17	1.07			
Paranoid thoughts	Na	89	0.65	0.72	-4.9	141	0.0001
	Non-Na	54	1.42	1.12			
Psychosis	Na	89	0.56	0.58	-4.5	141	0.0001
	Non-Na	54	1.21	1.1			

According to table 8, all of the levels are below the acceptable value (0.05) based on obtained T-values (-4.2, -4.08, -4.06, -3.1, -3.9, -3.6, -3.5, -4.9 and -4.5) and observing significance levels (0.0001, 0.002, 0.0001, 0.0001, 0.0001, 0.0001, 0.0001, 0.0001, 0.0001). So the T-value has become meaningful ($p < 0.01$). This means that there is a meaningful difference between the mental disorders of non-participants and participants of Na group.

Conclusion

The regression results of personality traits and mental disorders of Na group addicts in the stepwise method show that the psychoneurosis personality traits predicts 24% of the variance of mental disorders in the first step. Extroversion and psychoneurosis variables predict 32% of the variance of mental disorders in the second step. Agreeableness, extroversion and psychoneurosis variables predict 34% of the variance of mental disorders in the third step. Regression results of mental disorders and personality traits of non-Na group addicts in stepwise method show that the psychoneurosis personality traits predicts 16% of the variance of mental disorders in the first step. And agreeableness and psychoneurosis variables predict 21% of the variance of mental disorders in the second step.

There is a meaningful difference between mental disorders of non-participants and Na group participants according to the obtained T-values for all mental disorders components. In other words, the grade average of mental disorders in non-Na addicts is more than Na-addicts. In a study, Tabatabaei et al (2010) pointed out that there is a meaningful difference between normal youths and youths who are addicted to industrial drugs and referred to the withdrawal camps in the mental disorders variable. It means that the average of addicts is more than normal people and youth addicts have more mental disorders than the normal people despite their membership in withdrawal camps and their benefit of services, which support the hypothesis result to some extent. The study results of Seraj Khorrami and Isfahani Asl (2008) can be pointed out to confirm the results of this hypothesis, which indicate non-Na addicts were the addicts with paranoid thought, depression signs, distress, obsession thought, low self-confidence and phobia. In his study, Chen (2006) expresses that the joy of life increases in the contributors of 12-step program of unknown addicts and the tensions of negative emotions (such as worry, depression and hostility) decrease. It means that Na people's grade average decreases, that is in the line of hypothesis results.

Generally, there is a meaningful difference between psychoneurosis personality traits of Na group participants and non-participants. Also there is a meaningful difference between mental disorders of Na group participants and non-participants. Psychoneurosis personality traits, extroversion and agreeableness can predict the mental disorders in Na addicts. Psychoneurosis personality characteristics and agreeableness can predict the mental disorders in non-Na addicts. And there is a meaningful difference between personality traits and mental disorders in Na and non-Na addicts.

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