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THE RELATIONSHIP BETWEEN PERSONALITY TYPE D WITH DEPRESSION, ANXIETY AND STRESS AMONG ADDICTED AND NON-ADDICTED INDIVIDUALS

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ABSTRACT

The purpose of this study is to evaluate the relation between personality type D, depression, anxiety and stress in addict and non-addict individuals in Sabzevar, Iran. This is a descriptive and correlation study. The participants of the study were addicted and non-addicted individuals and sample size was 220 people who 100 people were addicted and 120 other were non-addicted who were chosen randomly. Personality type D and depression, anxiety, stress (DASS -21) were used for collection data. Data analysis was performed by using Pearson correlation and stepwise regression. Results revealed that there is a significant and positive difference between addicted and non-addicted individuals' scores in personality type D, depression, anxiety and stress. Considering the high prevalence of personality disorders in addicts, it seems that psychiatric interventions in medical treatment centers of drug abuse, along with medicine therapy is absolutely necessary.

Keywords: *Personality Type D, Depression, Stress and Anxiety, Addicts*

INTRODUCTION

In the past decades, studies on the impact of Type D personality on physical and psychological problems have been improved. Type D personality is extracted from the word “Disturbed Character” first formulated in 1995 by Denollet. Type D personality is characterized by the two components of tending to experience more negative emotions (negative affectivity) and social inhibition of the emotions. Negative affectivity refers to the individual's tendency to experience negative emotions such as a depressed mood, anxiety, anger and feelings of hostility (Watson, 1984). People who score high on negative affectivity, they are not merely uncomfortable or restless, but they have a negative view of themselves; report more physical symptoms; tend to consider undesirable and harmful stimulants; run into the problems daily social practices; and view the world with signs of impending chaos and confusion (Denollet, 2000). On the other hand, emotional inhibition is defined as avoiding potential hazards guarantee social interactions such as disapproval or lack of reward by others (Asendorpf, 1993). People who score high on social inhibition while interacting with others, frequently feel anxious; tension, discomfort and insecurity in them are (Pedersen *et al.*, 2003). The researchers showed that Type D personality is generally a risk factor for adverse consequents of health, health-related quality of life and forms of distress, including anxiety, depression and post-traumatic stress (Denollet *et al.*, 2005).

Type D personality is in the relationship with increased risk of depression, social alienation and disorder in everyday social practices (Denollet, 1995), anger, anxiety, paranoia, weakness or loss of vital power, the development of cancer in men with cardiovascular disorders, higher mortality rates and higher rates of myocardial infarction (Denollet, 1995), and is independent from vital medical risk factors. Drug addiction is one of the key issues in each community and the most widespread health risk factors which can be investigated in terms of biological, psychological and social review (Asghari *et al.*, 2011). Addiction is a chronic, progressive and destructive disease which not only causes the addicted person to die, but also the damage to their family and society they live. It is a health and social disaster and a big issue with many aspects of economic, political, cultural, psychological, ethical and legal. So, to inform families about the end of addiction can effectively help in its prevention and inhibition.

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Drug addiction is one of the most important issues in any society and it is the most widespread health risk factor which can be investigated from the perspective of cognitive, psychological and social factors (Asghari *et al.*, 2011). Drug addiction is a chronic, progressive and destructive disease that not only can cause the death of an addicted person, but also can cause damage to his/her family as well as the society where he/she lives. It is a big sanitarian and social issue with multiple economic, political, cultural, psychological, ethical and legal aspects. Hence families' awareness about the outcome of addiction is considered effective in its prevention and containment.

One of the most fundamental topics in psychology is the people's personal properties. Because it is these properties which builds the basis and cornerstone of people's behavioral system (Lim *et al.*, 2011). The importance of addressing this issue clarifies certain aspects of the performance and people's behavior in different life situations. One of the obvious examples of this category is the impact of people's personality characteristics on their mental health (Karimi, 1996). One of the personality types which has been identified is personality type D, which this type is prone to coronary heart disease. In comparison with other personality types, people with personality type D are in growing risk of formation and growth of the mental and physical disorders. Researchers consider this type of personality as one of the pathological factors which may affect the health and longevity and it needs psychological and pharmaceutical treatments. Almost in all researches related to the addiction, personality characteristics have been mentioned as a factor which pushes the person toward addiction and the lack of personality growth is considered as an important factor as well.

Among outstanding features of addicts, we can point out to features such as depression, feeling of tension, anxiety and insecurity, feeling of inadequacy and difficulty in building warm and long social relationships. In studies done in the field of etiology and drug dependency, psychological factors such as social and genetic, cognitive environment and theory of psyche dynamics have been pointed out. About 90% of drug addicts are suffering from a psychiatric disorder at the same time. The most common diagnosis of psychiatric disorders includes major depressive disorder, disorders caused by alcohol consumption, antisocial personality disorder and an anxiety disorder. And about 15 percent of drug addicts have tried to commit suicide at least once in their lifetime (Oroki *et al.*, 2011). Drug use dependence is one of the most common mental disorders which it generally affects person's mood. The epidemiology data illustrates that 53 percent of the drug consumers have a serious mental disorder (Dark, 2009). Surveys show that drug addicts have a paranoid thinking, depression symptoms, anxiety, stress and queasy thoughts and they also receive a lower score on the mental health crisis. As there have been few published studies or few studies presented in Congress about personality characteristics of Iranian drug addicts in Iran within these two previous decades and also because in this age, despite technological progress disorders such as depression, anxiety and stress are introduced as the most common diseases of the century. One of the most important and natural needs of human beings is to acquire peace, confidence and unfamiliarity with depression and anxiety which has been a fundamental component of human issues from the past. The scientific studies have shown that prevention of drug addiction is far easier than curing the addict him/herself. And prevention needs knowledge of personality, social and scientific aspects of drug addiction in order to support this target in an effective way. Therefore, due to the vital importance of this phenomenon and its effect on over-all growth we tried to conduct a comparative study of personality characteristics and its relationship with depression, anxiety and stress in addict and non-addict people.

Literature Review

Denollet (2002) and Pedersen *et al.*, (2004) have shown that Type D personality is a negative association with mental health conditions. Adults with type D personality experience more symptoms of depression and anxiety compared to non- Type D. They have also reported significantly more negative emotions and fewer positive emotions. Schiffer *et al.*, (2008) conducted a study on the patients with heart failure using regression analysis showed that Type D personality predicts psychological and physical status of the patient. Bulik (2006) in a study found that people with Type D personality show significantly more symptoms of mental disorders; more symptoms of psychological distress and a greater sense of perceived stress than non-type- D.

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MATERIALS AND METHODS

Methodology

The method of this study is descriptive (comparative type)

Participants

The participants of this study were addict and non-addict people in city of Qazvin.

Statistical Sampling and Sampling Method

In current study the simple random sampling method is used, based on the korseji formula and Morgan, sample size of 250 addict and non-addict people were selected. 125 of them were addicts and 125 other non-addicts. Through using simple random sampling the personality type D, depression, anxiety and stress questionnaire were distributed.

Instruments

Personality Type D Questionnaire

Personality type scale of Denowlet has 14 questions which has been categorized at 5 levels including **Never, a little, to some extent, much and very much** which in row were scored 1, 2, 3, 4 and 5. As mentioned before this scale has two sub-scales including negative emotions and social inhibition. Sub-scales of negative emotions includes questions 2, 4, 5, 9, 12 and 13, respectively and sub-scales of social inhibition included questions 1, 3, 6, 7, 8, 10, 11 and 14, respectively.

In terms of sustainability this scale is in a perfect level that in a retest in Belgium has achieved coefficient of 0/81 (AhmadpourMobarake *et al.*, 2007). In the present study Cronbach's alpha was used to ensure the validity which for the whole personality type D questionnaire, Sub-scales of negative emotions and social inhibition; coefficient of 0/86, 0/81 and 0/71 was achieved respectively.

Questionnaire for Depression, Anxiety and Stress

Stress, anxiety and depression scales were produced in 1995 by Laiobond and Laiobond. This scale has two forms; the short form has the 21 sub-phrases which evaluate each of mental structures "depression", "anxiety" and "stress" by 7 different phrases.

Long form of it includes 42 phrases that every one of the 14 phrases measures a factor or a mental structure. The short form of 21 phrase's validity has been ensured for Iranian population by Sahebi *et al.*, (2005).

Sub-scales of the depression comprises the following questions 3, 5, 10, 13, 16, 17 and 21; The sub-scales of anxiety comprises the following questions 2, 4, 7, 9, 15, 19 and 20; sub-scales of stress includes questions 1, 6, 8, 11, 12, 14 and 18, respectively.

DASS-21 scale diagnostic ability and screening symptoms of anxiety, depression and stress during the past week. This scale is to assess the adults.

However, the test is capable of screening and diagnosis in adolescence period but it is better to be used for people above 15. The responses are in multiple choice forms (never, a little, sometimes and always). They are scored as 1, 2, 3 and 4.

Laiobond and Laiobond (1995) in a large sample of 717 of students depression questionnaire with DASS scale showed a high correlation of ($r = 0/4$). The validity of this a questionnaire has been approved by MoradiPanah, Sahebi and Aghebati in Iran as well.

As in study done by MoradiPanah (2005), cronbach's Alpha of depression (0/94), anxiety (0/92) and stress (0/82) turned to be the mentioned numbers. In the present study the cronbach's alpha of depression, anxiety and stress were in row 0/90, 0/76, 0/75, and 0/76 respectively.

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RESULTS AND DISCUSSION

Findings

Table 1: Correlation matrix different dimensions of personality type D with depression, anxiety and stress

						Depression	Variables
						1	Depression
						0/69**	Anxiety
						0/75**	Stress
						0/89**	DASS-21
						0/71**	Negative Emotions
						0/78**	Social inhibition
						0/63**	Personality type D
						0/72**	

0/01p<***=

Results of table 1 shows that the depression dimension of the questionnaire (DASS-21) with negative emotions dimension in personality type D ($p = 0/000$, $r = 0/78$) with social inhibition ($p = 0/000$, $r = 0/63$) and with the scale of personality type D ($p = 0/000$, $r = 0/72$) have direct and significant relationship respectively. Also the anxiety dimension of the questionnaire (DASS-21) with negative emotions dimension in personality type D questionnaire ($p = 0/000$, $r = 0/71$) and with the social inhibition dimension ($p = 0/000$, $r = 0/67$) and with the scale of personality type D ($p = 0/000$, $r = 0/57$) respectively) have a direct and significant relationship. Then the stress dimension of the questionnaire (DASS-21) with negative emotions ($p = 0/000$, $r = 0/72$) and with social inhibition ($p = 0/000$, $r = 0/68$) and with the scale of personality type D ($p = 0/000$, $r = 0/59$) have a direct and significant relationship respectively. DASS-21 scale with negative emotions ($p = 0/000$, $r = 0/75$) with social inhibition dimension ($p = 0/000$, $r = 0/75$) and with the scale of personality type D ($p = 0/000$, $r = 0/78$) have a direct and significant relationship respectively.

Table 2: Step by step regression results of depression from personality type D

Sig	T	Beta	SD	B	Change	R	Variables
0/000	9/280	0/622	0/059	0/545	0/527	0/527	Negative Emotions
0/042	2/043	0/137	0/056	0/115	0/008	0/535	Social inhibition

According to the table 2 and in order to investigate the depression prophesy from personality type D, we have applied step by step regression. Results have indicated that both the negative emotions and social inhibition dimension have entered the equation and in row have explained 52/7 and 53/5 variance for the overall scores of depression. Social inhibition ($p = 0/042$ and Beta = 0/137) and negative emotions ($p =$

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0/000 and Beta = 0/622) had a significant and positive correlation with overall depression scores. Negative emotions and social inhibition was positive predictor of overall depression scores.

Table 3: Step by step regression results of anxiety from personality type D

Sig	T	Beta	SD	B		R	Variables
0/000	16/137	0/689	0/037	0/658	0/476	0/689	Negative Emotions

According to the table 3 and in order to investigate the anxiety prophesy from personality type D, we have applied step by step regression. Results have indicated that the negative emotions dimension has entered the equation and has explained 47.6 variance for the overall scores of anxiety. Negative emotions had a significant and positive correlation ($p = 0/000$ and $0/689$) with overall scores of anxiety. Negative emotions were the positive predictor for overall anxiety scores, respectively.

Table 4: Step by step regression results of stress from personality type D

Sig	T	Beta	SD	B	R^2 Change	R^2	R	Variables
0/000	7/488	0/658	0/068	0/538	0/482	0/487	0/702	Negative Emotions
0/037	4/176	0/138	0/052	0/167	0/008	0/501	0/708	Social inhibition

According to the table 4 and in order to investigate the stress prophesy from personality type D, we have applied step by step regression. Results have indicated that both the negative emotions and social inhibition dimension have entered the equation and in row have explained %48.7 and %0.9 variance for the overall scores of stress. Social inhibition ($p = 0/033$, and Beta = $0/658$) and negative emotions ($p = 0/037$ and Beta = $0/138$) had a positive and significant correlation with the overall scores of stress. The negative emotions and social inhibition was the positive predictor of overall stress

Table 5: Step regression results of depression, anxiety and stress from the personality type D

Sig	T	Beta	S.D. Error	B	Change		R	Variables
0/000	10/955	0/678	0/143	1/570	0/606	0/608	0/779	Negative Emotions
0/028	2/390	0/149	0/137	0/328	0/009	0/615	0/784	Social inhibition

According to the table 5 and in order to investigate the stress, depression and anxiety prophesy from personality type D, we have applied step by step regression. Results have indicated that both the negative emotions and social inhibition dimension have entered the equation and in row and have explained 60/8 and 0/9 variance for the overall scores of stress, depression and anxiety. Negative emotions ($p = 0/000$ and Beta = $0/678$) and social inhibition ($p = 0/028$ and Beta = $0/149$) had a positive and significant correlation with overall scores of depression, anxiety and stress, respectively. Negative emotions and social inhibition were the positive predictors of overall scores for depression, anxiety and stress, respectively.

Discussion and Conclusion

The results of the study indicate that personality type D is a determining factor in depression, anxiety and stress (Shafie *et al.*, 2011). The results of the present study showed that the two dimensions of personality type D (negative emotions and social inhibition) were positive predictor for depression, anxiety and

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stress. The result of this study is in line with Dnowlt *et al.*, (2000) which demonstrated that personality type D is generally a risk factor for health, quality of life related to health and the different forms of distress, including anxiety, depression and stress.

It is also in line with Masoudnia (2011) which was done on university undergraduates and the result showed that students with a personality type D experienced more anxiety and symptoms of depression in comparison with other undergraduates with different personality types. This study also indicated that negative emotions were the predictor of depression, anxiety and stress which these results are also in line with Masoudnia (2011) in which negative emotions were predictor of general health and people who have more negative emotions, enjoy less public health in comparison with other people with different personality types.

Numerous individual, personality, family and social factors are involved in drug addiction. Personality assessment and determining the risky personality traits provides valuable information in clinical work, especially in the field of drug use and its treatment. In a modern life increased pressures and tensions from one hand and more complex understanding of human motivations and behaviors on the other hand have made personality property recognition as an important topic in psychology. Generally personality type is a label used to classify the characteristics of individuals in terms of their behavior. The objective understanding of the non-objective aspects of individuals has a great scientific benefit. These aspects somewhat determine the efficiency of mental talents as well as describing human behaviors in various life situations.

In a society with all kinds of economic, social and cultural transition, a feeling of hopelessness, depression, anger and hostility into peace and other psychological injuries threaten many of these teens and young adults that it can be the beginning of a variety of serious injuries, including the addiction.

Therefore, the adoption of ways in order to prevent the increase of the above mentioned components must be considered as one of the ways in addiction prevention and national drug control headquarters as well as officials should pay a lot of attention to the scientific dimension of demand reduction for drug use.

In General, the results of this study showed that personality type D (the negative excitement plasticity and social inhibition) is a risky factor to the people's health and it is very effective on the health of the public. Therefore, the practical findings of the present study in the field of health and medicine can be very important. By accepting negative outcomes of personality type D on the health of individuals, it seems essential to search strategies and mechanisms to help people with personality type D in order to reduce the negative effects of this type of experience. Due to the prevalence of personality disorders in addicts it seems that psychiatric interventions in drug use abuse treatment centers along with medicine therapy is quite necessary. The results of this research in the field of mental health and primary and secondary prevention is applicable. It is necessary to consult experts to have comprehensive evaluation of the underlying personality traits of the addicts before giving any consultation in order for the drugs to leave more and more enduring effects.

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