

Personality Type and Drug Abuse among Iranian Young Adults: A Comparative Study

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Abstract: Nowadays it's more important; changing in youth tendency of traditional drugs such as opium to the designer drugs such as methamphetamine (Crystal) and early starting in early adolescence. The present study performed with aim to determine and compare of personality type in dependent and nondependent youth to designer drugs, and its relation to use and avoiding of designer drugs. This research was a cross-sectional study that performed among two groups youth of five areas in Isfahan city include; 183 dependent to designer drugs that referred to withdrawal camps and 207 nondependent designer drugs referred to Community level, should they have inclusion Criteria. The sample included 390 urban Isfahan Youth (The age range 18-29 years), who completed the self-report questionnaires of personal information and Rathus personality type. We used Chi-square test to analyze the hypothesis. Of total participants; 32.1% married, 64.6% single and 3.3% were divorced. 14.1% of brothers, 12.6% of fathers, 0.5% of mothers of participants had a history of drug abuse. Significantly personality type of the majority on dependent group (60.7%) was type A, and the majority of nondependent group (67.6%) was type B. According to the relationship of personality type A and drug abuse, we can prevent of drug dependence by education about modification inappropriate behavior patterns in these persons.

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1. Introduction

All countries are more or less involved with drug use as a social phenomenon and a contemporary health problem, especially in the age group 18-29 years [1] and due to the high rate of premature deaths caused, is about the importance and attention [2]. What is today requires further attention in Iran, is youth attitudes change to, industrial drugs such as ecstasy, Crack and amphetamine (Crystal) from traditional drugs like opium and cannabis [3]. Although there is different prevalence of abuse of industrial drugs, but early use of these drugs in early adolescence is more important [4-8]. A research has been reported prevalence of drugs abuse among American adolescents and young adults, respectively, 89.6 and 73.6 percent [9]. Although the exact prevalence of drug abuse in Iran is not available, but considering the different cultures in the country, very different prevalence rates have been reported. For example, the prevalence of ecstasy use among students in Rasht, have been reported 0.7 percent and the prevalence of Psychotropic substances use among

students in Shiraz have been reported 2.2 percent [10], Allahverdipoor et al, reported the prevalence of LSD use among substance dependents 4.8 percent [11], also Baroni et al, reported the prevalence of ecstasy use among young adults in Tehran 18.5 percent [12]. Industrial drug addiction, like any other social phenomenon has no single cause and personal characteristics of the users and social, cultural, familial, economic and political factors in a given country influence the attractiveness of a drug [13]. One of the personal characteristics is effective to propensity to drug abuse is personality that many studies revealed the different issues of that such as: person ideology, low assertiveness, weakness in decision making, curiosity and unawareness of drug abuse complications [3], low self-esteem [14], self-control weakness, sadness of defeat [13] and positive attitudes toward drug use [16,15]. Personality indicates a set of individual characteristics include fixed patterns of thoughts, emotions and behaviors [17]. One of the features of personality is personality types, Type A and B. Personality types, first

determined by Friedman and Rosenman (1974) while they research on the effects of psychological stress and cardiovascular diseases. They expressed type A personality as the complex emotional people. Individuals with this type of personality often have an aggressive mood and like achieve less time and may conflict with others for this. These individuals have characteristics such as: aggressive, active, ready to oppose, ambitious, chivalrous and having many standards and activities. In contrast, those with Type B personality has characteristics such as: feel less pressure, having regular rest and exercise, have lower standard and working slowly [19, 18]. In many studies has been observed significant relation between Type A personality and abnormal behaviors such as drinking alcohol [20], driving unsafe and aggression [22, 21]. In Heydari et al study [23] that the aim was to compare the characteristics of drug users and the general population in Hamadan, psychological distress between addicts was significantly higher than the general population, especially in younger people who have substance abuse and who have personality disorder. In addition, Jung et al (2005), in their study among patients with alcohol dependence divided them into three groups in terms of personality traits; people with personality Type A, the most severe pathology in alcohol consumption, people with personality type B has a mild pathology in alcohol consumption and Type C personality showed moderate pathology in alcohol consumption [20].

This study was conducted with regard to importance of type of personality and its relation with drug abuse in young adults that abuse industrial drugs and exploring the relation to predicting dependence and comparison with non-users personality traits.

2. Methods

A Cross-sectional study was conducted among young adults aged 18 to 29 years, both with history and without history of drug abuse in Isfahan city in Iran. Cluster sampling and simple random sampling was done in proportion to the size, among population without history of drug abuse in different areas in Isfahan city. Multistage sampling was done among population with history of drug abuse in addiction treatment camps. The minimum sample size was considered 175 in both groups. After receiving formal agreements, in each area of Isfahan an addiction treatment camp randomly selected and 50 substance dependent young adult were studied. Finally, 183 substance dependent participants and 207 participants without history of drug abuse were completed questionnaires. In both groups, all moral criteria, such as participants consent, agreements, and confidentiality of information and explain the purpose

of the research was considered. In this study, based on sampling methods and research variable (personality type), other variables assumed randomly distributed. Inclusion criteria included in non-dependent youth was no history of industrial drug abuse and no smoking (realizing that the participants are not substance dependent, was solely confide to self-reported answers), and in substance dependent young adults were included: a history of Industrial drug abuse. Inclusion criteria included in both groups, were included living in the Isfahan city, having a range between 18 and 29 years and consent to participate in the study.

Demographic data collection instrument and Rathus standard questionnaire for personality type A and B were used to gathering the dat. Demographic section were consisted of eleven questions and assessed marital status, education, parental education, describing the life status, type of drug abused and history of drug abuse among family members. Rathus type A and B questionnaire has 25 items and participants according to their mood and states have to answer yes or no. Yes answer had 1 score and no response had zero score. In this questionnaire, 13 score, the average score is considered. Higher than average scores tend to type A and lower than average tend to type B personality. Cronbach's alpha coefficient of the questionnaire treasure greater than 0.8 in Ganji study [24] and greater than 0.7 in Sarmy study [25]. The data were analyzed using SPSS version 18.0 and descriptive statistics were performed to examine the type of personality in the sample. Chi square test were used to compare relations between two groups in level of significance 0.05.

3. Results

Respondents ranged in age from 18 to 29 years, with mean age of 24.5 years. Only 6% of drug users group had an academic education, while more than 27% of non- drug users has; the chi-square test showed a significant difference ($P<0.001$). More than half of parents of drug users, were illiterate or elementary education, chi-square test showed a significant difference between parent education of two group ($P<0.01$). Approximately 70% of drug users, versus 89.3 % of comparison group, reported that their parents are alive, the chi-square test showed significant difference ($P<0.001$). In terms of the living status, 17% of drug users described their lives weak, whereas, the comparison group described 6.3%, this difference was statistically significant ($P<0/001$). This study was found no statistically significant difference between two groups married and unmarried ($P>0.05$). Additional information is presented in Table 1.

Table 1: Distribution of marital status, education level of the participants and their parents, the level and life status in two groups

Variables Groups	Level of education										P-Value
	Illiteracy		elementary		Diploma		Technician		Undergraduate		
	Num.	Per.	Num.	Per.	Num.	Per.	Num.	Per.	Num.	Per.	
dependent	7	3.8	64	35.2	83	45.6	17	9.3	11	6	X ² =84.78 P<0.001
Non-dep.	4	1.9	7	3.4	102	45.5	37	18.56	27.2		
	Level of participants' fathers education										
	Illiteracy		elementary		Diploma		Technician		Undergraduate		
dependent	54	29.5	65	35.5	54	29.5	8	4.4	2	1.1	X ² =17.86 P=0.001
Non-dep.	36	17.4	61	29.5	79	38.2	26	12.6	5	2.4	
	Level of participants' mothers education										
	Illiteracy		elementary		Diploma		Technician		Undergraduate		
dependent	65	35.5	65	35.5	48	26.2	4	2.2	1	0.5	X ² =17.28 P=0.002
Non-dep.	42	20.3	83	40.1	65	31.4	17	8.2	0	0	
	Life status (mother or father or both death)										
	Parents alive		Father death		Mother death		Parents death		Divorced		
dependent	130	71	37	20.2	3	1.6	11	6	2	1.1	X ² =26.62 P<0.001
Non-dep.	183	89.3	17	8.3	4	2	0	0	1	0.5	
	Life status description										
	Good		Almost good		Average		Weak				
dependent	31	17	56	30.8	64	35.2	31	17			X ² =15.43 P<0.001
Non-dep.	59	28.5	61	29.5	74	35.7	13	6.3			
	Marital status										
	Married		Single		Divorced						
dependent	60	32.8	114	62.3	9	4.9					X ² =2.93 P>0.05
Non-dep.	65	31.4	138	66.7	4	1.9					

Substance dependent group, reported most of their consumption of tobacco and opium (76.5%), and amphetamine (75.9%) (Table 2).

Most of substance dependent participants' fathers (16.9% vs. 8.7 %) were drug users (P=0.01). Drug abuse rate in brothers of substance dependent group was 24.6% versus 4.8% in comparison group and in their friends this rate was 15.8% versus 0%. This differences was statistically significant (P<0.001). Chi-square test not found significant difference between the rates of drug abuse among mothers in both groups (P> 0.05) (Table 3).

Table 2: distribution of drug types abused between dependents

Drug types	Num.	per
Cigarette	140	76.5
Opium	140	76.5
Crystal	139	75.9
Crack	110	60.1
Alcohol	110	60.1
Cannabis	89	48.6
Heroin	64	34.9
Ecstasy	48	26.2
Other	37	20.2

Table3: Distribution of drug abuse between participants' father, mother, brother, and friends

Variables Groups	Participants' father drug abuse								Chi-Square P-Value
	No				Yes				
	Num.		Per.		Num.		Per.		
Dependent	152		83.1		13		16.9		X ² =6.009 P=0.01
Non-dep.	189		91.3		18		8.7		
	participants' mother drug abuse								
	No				Yes				
Dependent	181		98.9		2		1.1		X ² =2.27 P>0.05
Non-dep.	2.7		100		0		0		
	Participants' brothers drug abuse								
	No				Yes				
Dependent	138		75.4		45		24.6		X ² =31.30 P<0.001
Non-dep.	197		95.2		10		4.8		
	Participants' friends drug abuse								
	Non		Less than half		Many		All		
Dependent	28	15.8	81	44.3	67	36.6	7	3.8	X ² =37.39 P<0.001
Non-dep.	0	0	15	7.2	71	34.3	121	58.5	

Personality type of 60.7% of drug users was type A, while 32.4% of comparison group had type A personality, the difference was statistically significant ($P < 0/001$) (Table 4).

Table 4: Distribution of personality types between two groups

P. types Groups	Personality types A/B				P-Value
	Type A		Type B		
	Num.	Per.	Num.	Per.	
Dependent	111	60.7	72	39.3	P<0.001
Non-dep.	67	32.4	140	67.6	
Total	178	45.6	212	54.4	

4. Discussion

One of the causes of industrial drug abuse, are individual factors. This study investigates the influence of personality type in youth Industrial drug dependency and comparison with non-dependent youth. The study showed that drug abuse in single participants was more than married and divorced them, but the difference was not significant. It is possible that married drug users began their use before marriage and it is necessary to be questioned more closely in future studies; so may help to resolve the ambiguity. Also there is no significant difference in Bagheri et al study [26], but Dan et al showed that Alcohol abuse in single people is more than married ones [27]. Participants in this study linked lower levels of education, which is referred to in other studies [14, 12]. Parents were also linked with lower educational levels that were comparable with the results of Fathi et al study [28]. The number of drug dependent fathers were more in dependent group, this relationship has been demonstrated in other studies [3, 29, and 30]. The rate of substance dependent brothers and unstable family status (include parents death or divorce) was more in dependent group, Selnow showed that drug abuse was more in whom one of their parents especially father was addict [31]. In this study the rate of drug use in the friends of dependent group was higher, that associated with other studies [11, 29, 32]. In the explanation of these relations we can say that this group of young adults are important as a high risk group for substance abuse and has priority in preventive interventions. There was no difference between two groups in terms of living status, but in Baroni study it was significant [12], that may be because of context of the study. In this study, instead of studying personality characteristics, we used standard tool for directly studying the personality type of youth as economically productive forces of society. Results showed that there is a significant difference between two groups in terms of personality type and about 61% of drug users were type A. Researchers conducted in Iran confirmed that

there is a relation between personality characteristics and drug abuse [33-35], but there is no study on relation between personality types and drug abuse that it's a strength of this study. However, this still requires further research, especially in the younger age group. Foreign researches have confirmed indispensable role of personality characteristics in the initiation and continuing of drug abuse [39-36].

5. Conclusion

This study was found no statistically significant difference between two groups married and unmarried that with regard to importance of effective role of family on prevention of high risk behaviors it is necessary to further studies and study of age of drug use initiation. Between two groups in terms of education was significantly difference. Also drug abuse between family members and friends is one of the important factors of tending young adults to drug abuse. Personality type is one of the most important aspects, affecting substance abuse. However, to investigate high risk behaviors factors, all aspects including demographic, social, economic, cultural, and psychological simultaneously must be evaluated. We suggest using Jessor problem behavior theory that covers all aspects of this issue. Behavior modification through education for example time management, anger control and thinking management, can prevent drug abuse related behaviors.

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