

## Abstract

**Objective:** The aim of this study was to investigate the defense mechanisms and styles in substance users and abusers' families. **Method:** A descriptive research design was used for the purpose of the study. The sample consisted of 280 participants (70 persons in each group) from substance abusers' families, alcohol users' families, sedative users' families, and cigarette smokers' families who were selected by convenience sampling. For this purpose, Andrews' Defense Style Questionnaire (DSQ) was used to measure defensive mechanisms. **Results:** The highest average and percentage of immature mechanisms was found in drug users and alcohol users' families while the lowest percentage was found in sedative users' families. From among the immature mechanisms, denial was most frequently used by alcohol users' families while transition was least frequently used by substance abusers' families. **Conclusion:** Defense mechanisms change one's understanding of the self; therefore, immature defense mechanisms deter understanding reality, deprive one of the possibility of rational and effective defense, and reduce one's insight capacity and self-discovery.

**Keywords:** Defense Mechanisms, Defensive Styles, Drugs

# Defense Mechanisms in Substance Abusers' Families

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## Introduction

Social pathologies are diverse, relative, and variable phenomena. Aggression, crime, suicide, divorce, drug addiction, and prostitution are examples of social pathologies whose quantity and quality change based on time and space. Addiction phenomenon is one of the social pathologies, which is an underlying issue in relation with physical and mental health (Vaillant, 1994).

Addiction brings about biological, psychological, and social consequences. It is possible to regard addiction as a refuge, into which a failed person enters to protect him/herself from shortages, insecurity, and mental disorders. Addiction is a condition in which a person both physically and psychologically becomes dependent on a substance, comes with a strong need for the persistence in the use of that substance and is not able to stop using it voluntarily and willingly and, thereby, his/her tolerance decreases by the gradual consumption of that substance (Hashemi, Mohamadzadgan, Ghasem Baklou, Irani & Vakili, 2014). Addiction is a multi-dimensional behavior and different social, psychological, and biological components are involved in it. Family can be one of the factors contributing to the phenomenon of addiction (Ganji, 2013). When families are dealing with one of the relatives suffering from drug abuse, they experience significant pressure and may react to the issue by behaviors, such as responsibility acceptance, adoption of paternal approach, complete disconnection of the communications with the drug abuser, and withdrawal from the issue (Roskam, Zech & Nils, 2008). Substance abuse in a family member is a sign of inefficiency of interactions and dynamics of the family. This behavior is influenced by the permanent inefficiency of family dynamics (Zamani, Habibi asgar abad, Zamani, Jamshidnejad & Monajjemi, 2015). In these circumstances, the family as a unit adopts coping strategies and interactions and complex defense mechanisms to regain stability and balance, which may contribute to the chronicity of abuse. Awareness of these processes and interactions is of considerable importance in understanding the nature of the problem of drug abuse by family members (Sartorius, et al., 2008). In such a situation, assessment of the interactions between the drug user and other family members leads to the understanding of the role of inefficient family dynamics in etiology, the type of drug use, and its progression (Zamani et al., 2015).

Other factors affecting addiction can be named as impact of friends and peers is another factor (Sadok and Sadok, 2005), impact of the mass media (Ganji, 2013), and psychological variables. In fact, psychological variables are of special significance since psychologists believe that the effects of biological and social factors should be viewed through the lens of psychological needs (American psychiatric Association, 2013). Among the psychological factors associated with drug use, it is possible to refer to the defense mechanisms that unconsciously impress people's behavior. Defense mechanisms are the automatic regulating processes that are active to reduce cognitive dissonance and

to minimize sudden changes in internal and external reality through influencing the way threatening events are perceived (Vaillant, 2014). In addition, defense mechanisms are a way to compromise with unpleasant events and conflicts in this area so that the individuals will not be defeated. The methods used to reach compromise are called defense (Fist & Fist, 2012; Holmens & Bowlby, 1994). Although defense mechanisms are normal and are used by all the people, they may lead to obsessive behavior and neurosis if used excessively (Fist & Fist, 2012). Freud believed that personal defense style and the frequency of using defense mechanisms are the main variables for the recognition of personality, pathology, and the amount of adjustment (cited in Jamilian, Zamani, Darvishi & Khansari, 2013). In psychoanalysis system, defense plays an important role in mental health and each mental disorder is followed by specific maladaptive defense mechanisms (Bond & Perry, 2004). The studies conducted in this area suggest that immature defense mechanisms are effective in the field of drug addiction, substance abuse, and relapse because maladaptive mechanisms and styles are associated with many negative health indicators (Bagheri, Azadfallah & Fathi-Ashtiani, 2013; Akbari Zardkhaneh, Rostami & Zare'an 2008; Mahdi, Fahimi & Bayrami 2013; Abd Halim & Farhana, 2013; Abd Halim & Farhana, 2012; Torkaman et al., 2014; Ghamari, Rostami, Nader & Ilbeigi Ghale'ni, 2010; Zamani, Ahmadi, Moghanloo & Mirshekari, 2014).

In general, the defense mechanisms play an important role in tendency to drug use. Since the role of family defense mechanisms in drug addiction has not been studied and also considering the importance of defense mechanisms in recognizing the individuals at risk of drug use, the present study aimed to examine defense mechanisms and styles in the families of substance users, cigarettes and alcohol abusers, and sedative hypnotic drug users.

## **Method**

### **Population, sample, and sampling method**

The present study was a descriptive one with the aim of clarifying the relationship between phenomena and adding to the body of knowledge in the field of defense mechanisms. The statistical population of the study consisted of the individuals who met the diagnostic criteria for addiction disorders (narcotic opiates and opium, cigarettes, alcohol, and drugs) in Hamadan Province in 2014 and first half of 2015 according to the fifth edition of Diagnostic and Statistical Manual of Mental Disorders Psychiatric Association. Moreover, the families of these individuals were also included in the statistical population. The sample consisted of four comparison groups with the number of 280 people (70 persons in each group) from patients' family members. According to the observation of research ethics, convenience sampling method was used to select the participants from among the people accompanying the patients with addictive disorders in addiction treatment centers and private clinics of medical doctors and

psychiatrists. In this way, eligible persons were chosen as the sampling participants in case of agreement. Patients with such disorders as bipolar disorder, borderline personality disorder, and adjustment disorders were excluded. In addition, such variables as age and gender were controlled. The criteria for the inclusion of the participants in the sample were as follows: 1. Those accompanying patients (father, mother and wife) when referring to the centers, 2. No recent bereavement in the family. Ethical considerations included: 1. The use of convenience sampling method, 2. Participation in the study was optional for the participants. 3. The required information on the implementation of the project was provided. 4. The information obtained from the participants remained confidential.

### **Instrument**

Andrews, Singh & Bond's Defense Style Questionnaire (DSQ): Defensive Style Questionnaire Andrews, Singh and Bond (1993): This questionnaire measures defensive behavior via experimental evaluation of conscious derivations of defense mechanisms in everyday life. It has been constructed based on the hierarchical model of defenses and contains 88 items and examines 24 mechanisms. Bond & Perry (2004) identified four defensive styles in the level of defense mechanisms using factor analysis: 1) Maladaptive style, 2) Image-distorting style, 3) Self-sacrifice style, and 4) Adaptive style. Mature defense mechanisms include sublimation, anticipation, humor and suppression; immature defense mechanisms include rationalization, projection, denial, dissociation, devaluation, acting-out, somatization, autistic fantasy, splitting, passive aggression, displacement, and isolation; neurotic defense mechanisms include undoing pseudo-altruism, reaction formation, rationalization, and cancellation (San martini, Roma, Sarti, Lingiardi & Bond, 2004). They also examined the relationship between defense styles and four groups of mental disorders in normal subjects. Results were not satisfactory in separating research groups from each other and separating the normal subjects and patients based on defensive styles. Therefore, researchers revised Defensive Style Questionnaire and developed the 40-item Defensive Style Questionnaire consistent with the classification of the diagnostic evaluation based on Diagnostic and Statistical Manual of Mental Disorders, Third Edition. The newly developed questionnaire evaluates 20 defense mechanisms in three levels. For the Persian version of the questionnaire, Cronbach's alpha coefficients of .75, .73, and .74 were obtained for mature, immature, and neurotic defense styles on a student sample, respectively. These values were obtained .74, .74, and .72 for male students and .75, .74, and .74 for female students, respectively (cited in Besharat, 2007).

### **Results**

The descriptive statistics of demographic variables are presented in the following table for each group.

**Table 1: Descriptive statistics of demographic variables for each group**

<i>Group</i>		<i>Cigarette users and abusers' family members</i>		<i>Alcohol users and abusers' family members</i>		<i>Sedative abusers' family members</i>		<i>Drug abusers' family members</i>		<i>Chi square comparison</i>	
		<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>Chi square</i>	<i>Sig.</i>
<b>Relation with patients</b>	<b>Father</b>	17	24.29	9	12.86	8	11.43	5	7.14	3.94	.742
	<b>Mother</b>	8	11.43	11	15.71	21	30	2	2.85		
	<b>Wife</b>	42	60	47	67.15	12	17.15	59	84.29		
	<b>Husband</b>	3	4.28	3	4.28	29	41.42	4	5.72		
<b>Education</b>	<b>Illiterate</b>	48	68.57	27	38.57	41	58.57	37	52.85	2.642	.624
	<b>Below high school diploma</b>	14	20	31	44.28	18	25.71	16	22.86		
	<b>Above high school diploma</b>	8	11.43	12	17.15	11	15.71	17	24.29		

As it was observed, the groups were matched in terms of education and relation to the patient. Mean and standard deviation pertaining to the age were respectively 29.10 and 5.92 years (of cigarette use and abuse), 32.07 and 7.43 years (alcohol use and abuse), 26.64 and 6.07 years (sedative abuse), and 24.61 and 5.27 years (drug abuse). The results of analysis of variance indicated no significant difference between the groups ( $P > .05$ ,  $F = .42$ ).

The results of analysis of variance representative of mean scores in defense mechanisms are presented in the table 3 considering the four groups.

ANOVA and Tukey's test results indicated that the family members of cigarette users and abusers use more of immature defense mechanisms than mature and neurotic styles. In this regard, autistic fantasy and devaluation have taken up the most and least frequently used mechanisms, respectively.

The percentage of using mature defense mechanisms is extremely low compared to the other two mechanisms in such a way that the highest and lowest usage percentages belong to humor and sublimation, respectively. In neurotic mechanism, reaction formation and rationalization mechanisms are of the lowest usage. Similar to cigarette abusers' family members, alcohol users and abusers' family members largely use immature mechanisms. These individuals use most frequently denial mechanism and use least frequently acting-out mechanism.

The highest and lowest percentages were found in anticipation and suppression mechanisms, respectively. In the case of neurotic mechanisms, reaction formation and undoing held the lowest and highest usage. Sedative users' family members use a high proportion of immature mechanisms. These individuals mostly used the defense mechanism of denial and made the least use of passive aggression. The highest and lowest percentages of mature mechanisms were found in anticipation and sublimation. In the case of neurotic mechanisms, rationalization and undoing pseudo-altruism contain the highest and the lowest usage. In mature defense mechanisms, rationalization and undoing pseudo-altruism had the highest and lowest percentage. Drug users and

abusers' family members made the minimal use of somatization and the maximal use of rationalization within immature defense mechanisms. In terms of mature mechanisms, anticipation and suppression were the highest and lowest frequently used mechanisms. In the same way, in neurotic mechanism, reaction formation mechanism and undoing pseudo-altruism received the highest and the lowest score.

**Table 3: ANOVA results representative of mean scores in defense mechanisms for comparison groups**

Variable Defense		Cigarette users and abusers' family members		Alcohol users and abusers' family members		Sedative abusers' family members		Drug abusers' family members		Total	
		M	SD	M	SD	M	SD	M	SD	F	Sig.
Immature defense mechanisms	Rationalization	7.7	1.2	8.0	1.3	8.3	.9	9.7	1.3	.483	.378
	Projection	9.1	2.2	6.4	1.9	8.6	1.6	7.3	2.4	.654	.579
	Denial	8.8	1.1	9.9	2.3	9.7	2.4	6.4	2.2	2.857	.136
	Dissociation	6.5	2.3	7.2	1.0	8.9	3.2	8.9	2.4	3.198	.094
	Devaluation	4.6	2.5	7.9	1.1	6.9	2.5	5.9	1.2	.957	.0001
	Acting-out	5.9	1.0	5.5	2.5	7.4	2.4	3.6	1.9	1.739	.079
	Somatization	8.4	2.6	6.1	1.7	5.9	1.0	4.2	2.6	5.918	.943
	Autistic fantasy	9.7	2.5	6.5	1.5	7.9	2.5	7.9	1.6	3.713	.089
	Splitting	6.4	1.6	9.1	2.6	8.6	.3	5.6	2.9	1.971	.0001
	Passive Aggression	9.7	1.2	9.1	2.0	5.6	1.7	8.4	1.4	.167	.074
	Displacement	5.5	2.9	5.4	1.6	6.4	1.9	7.8	2.2	1.094	.0001
	Isolation	6.7	1.6	6.6	2.9	7.6	1.3	5.6	1.4	4.954	.656
Mature	Total score of immature	7.8	.9	6.9	1.4	5.9	.7	6.9	.5	5.413	.0001
	Suppression	3.6	1.0	3.3	1.2	3.6	1.5	3.6	1.2	2.981	.034
	Sublimation	1.4	2.0	3.6	1.1	2.3	1.3	4.4	1.2	2.210	.143
	Humor	4.0	1.0	4.6	1.1	4.6	.3	4.5	1.1	1.164	.067
	Anticipation	3.7	1.2	4.6	1.1	5.4	1.2	5.4	1.0	3.068	.429
Neurotic mechanisms	Total score of mature	3.4	.3	3.7	1.3	4.8	1.4	4.6	1.2	1.004	.512
	Undoing Pseudo-Altruism	7.4	2.5	6.8	1.6	4.7	2.3	6.8	2.6	2.471	.246
	Reaction Formation	8.5	2.6	9.7	3.0	7.6	2.6	9.6	3.6	1.946	.456
	Rationalization	5.9	3.5	7.6	2.4	8.3	1.3	8.7	1.5	4.240	.649
	Cancellation	7.6	2.6	6.4	1.4	7.6	2.4	8.6	2.3	3.689	.563
	Total score of neurotic	6.7	3.9	8.6	3.2	7.7	2.6	6.3	.9	6.165	.068

## Discussion and Conclusion

This study was an attempt to investigate defense mechanisms and styles in cigarette users and abusers, alcohol users and abusers, hypnotic sedative users and abusers, and drug users and abusers' families. The results showed that the individuals' families use more immature defense styles.

Most of the studies in this area have focused on comparing addicts and healthy subjects and no research similar to the current study was found. Thus, there was not the possibility making accurate comparisons. However, the findings of the current study are roughly consistent with the research findings obtained by Bagheri et al. (2013); Zardkhaneh Akbari et al. (2008); Mahdi, et al (2013); Abd Halim & Farhana (2013); Abd Halim & Farhana (2012); Torkaman et al. (2014), and Ghamari et al. (2010). These researchers concluded that immature defense mechanisms are effective in tendency to drug addiction, substance abuse, and relapse. Ahmadi, Najafi, Hosseini Almadani & Ashuri (2012) compared defense styles and personality traits between addicts and non-addicts and showed that the addicts obtained higher scores than the normal group in terms of immature and neurotic defense styles, personality traits of neuroticism and extraversion. To justify the findings of this research, one can argue that defense mechanisms are the automated psychological processes that protect people against anxiety and make people aware of psychological pressures and internal and external threats. People who extremely use immature defense styles for coping with stress and emotional conflicts in life usually have lower mental health (Mahdi, et al., 2013). Mental disorders not only lead to the inefficiency of mental patients, but also severely affect their families and performance. This influence is observable in various aspects of mental health and social and economic performance, reduces well-being of families in total, and imposes a huge pressure on them. Hence, it can be claimed that mental disorders and a lack of mental health are deemed among the main concerns of the families with addicted members (Zamani et al., 2015). Here, the other family members undergo major objective and subjective stress. The amount of such stress depends on the type of relationship between members, such as spouses, children, or parents; age; gender; quality of the relationship with the patient before illness; and the coping strategies they use. Since defense mechanisms change self-knowledge, immature defense mechanisms become a barrier to understanding reality, wane the possibility of rational and effective defense, and reduce the capacity of insight and individual exploration. In addition, people with immature defense styles are more willing to employ inefficient solutions to resolve their conflicts. It can cause them to remain in difficult relationships and can even exacerbate the severity of injury. That addicts' families do not encounter such problems may be one of the reasons for the excessive use of immature defense mechanisms in such families (Vaillant, 1999; Nickel & Egle, 2006; Sartorius et al., 2008). Defense mechanisms, in fact, distort the realities of people's lives and the amount of this distortion is higher in immature and neurotic defense styles than in mature defense styles. Since such defenses distort unpleasant realities, it becomes to some extent easy for these individuals to tolerate and cope with the conditions. Therefore, it is possible that the families with addicted members use immature mechanisms to cope with the situation (Brad, 2004). Defenses such as denial, compensation, reaction formation, and rationalization used by families with

addicted members not only leave the problem unsolved in the families but they occasion mental fatigue through the increase of defensive stress. These people try to negate the available situation by resorting to the denial mechanism and try to justify their wrong actions and behaviors through the use of rationalization mechanism. Therefore, a vicious circle is created, which leads to the stabilization of these defenses. In fact, these individuals try to reduce the harmful effects of their problems even temporarily since they are not able to solve the problems. As a result, they become more and more inclined to inefficient mechanisms (Rinn, Desai, Rosenblatt & Gastfriend, 2002; Bokhan et al., 2013). Furthermore, these defense mechanisms are among the most important elements of personality that allow people to cope with the vicissitudes of their lives. However, the main issue is that people with addiction and their families are not able to properly use defense mechanisms in stressful situations and, thereby, they move towards malicious acts and behaviors (Torkaman et al., 2014; Gijssbers, 2008). In general, it can be stated that defense mechanisms are the psychological techniques that people use to protect themselves from fully experiencing the bad situation, to deal with reality, to maintain their own image, and to reduce emotional-affective psychological distress. These mechanisms are used primarily to reduce turbulence so that people can be protected from harm; however, the excessive use of these mechanisms is not recommended since they gradually lose their benefits and become some part of inefficient behavioral pattern. The use of these defense mechanisms in the families of addicted individuals wanes the feeling of guilt and distress in these people, which is considered another reason for the use of these mechanisms by these patients (Abd Halim & Farhana, 2012). Thus, it is essential to consider psychological factors influencing this phenomenon, such as defense mechanisms of addicts and their families due to the effects and consequences that the phenomenon of addiction imposes on the family and society and with regard to the importance of the role of psychological factors. The sample of this study was limited to Hamadan Province; therefore, the generalizability of the results to other communities should be taken with caution. More research should be conducted in this regard since the psychological state of the families with addicted members is less studied. It is also recommended that other factors affecting this ruinous phenomenon be studied in other research projects.

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