

Investigation of Religious Attitudes and Impulsivity in Addicts and Normal Individuals

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Abstract

Background and Objectives: Addiction is a disaster with social and psychological aspects that if remaining untreated and neglected it results in terrible consequences. The present study aimed to compare religious beliefs and impulsivity in normal and addicted individuals in Tehran, Iran.

Methods: This descriptive correlational study was performed on a total of 100 normal and addicted individuals referring to drug rehabilitation centers in Tehran within January 2019 to February 2019. The study participants were selected through the convenience sampling method. Data collection tools included a demographic questionnaire, Religious Attitudes Questionnaire, and Barratt Impulsiveness Inventory. The data were analyzed using SPSS software (version 21).

Results: The findings of the present showed that the total mean scores of the addicts' religious attitudes and impulsivity factor were 57.87 ± 13.48 and 65.32 ± 11.93 , respectively. In addition, the total mean values of the normal individuals' religious attitudes and impulsivity factor were 13.74 ± 5.76 and 64.92 ± 6.87 , respectively. Moreover, there was a significant difference in the religious attitudes of the addicted and normal individuals ($t=3.24$; $P=0.002$).

Conclusion: Strengthening religious attitudes among drug users causes them to display behaviors related to their wellbeing and justify them leading to a significant improvement in their quality of life.

Keywords: Addicted, Attitude, Impulsive Behavior, Impulsivity, Religious.

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Introduction

Addiction is one of the psychological and social harms that can easily undermine the foundation of the individual, family, social, and cultural life of a country. Addiction has also caused many issues, including the deterioration of public health, increased mortality, family and social loss, lack of opportunities for education and profession, and judicial issues (1). Drug abuse is affected by individuals' attitudes about themselves and drugs. Psychologists suggest

that there is a significant association among attitudes, results, and behaviors. Furthermore, people behave based on the type of attitude they have toward drugs (2).

Studies have highlighted religiosity as an attitude to protect the tendency to use drugs (3). According to the evidence, it has been shown that individuals who are under their religious instruction (4) and believe in the value of religion are less likely to use drugs in their lives (5). Moreover, those who have taught their

children formal religious education are less likely to use drugs (6). The results of a study demonstrated that only 13% of ordinary people with religious beliefs were opioid users (7).

In a review carried out by Asghari et al. (8), there was a negative connection between religious attitudes and addiction. The results of another study showed that there is a significant difference between addicts and nonaddicted people in terms of religious attitudes, and addicted individuals had a lower level of religious attitudes (9). Religious orientations are important countermeasures to deviant practices due to their major impacts on individuals' lives. On the other hand, it is possible to avoid the development of harmful and deviant habits, such as readiness to become dependent on preventive people, by the enhancement of the spirit of self-control (10).

Based on the literature, there was a significant difference in religious attitudes between the two groups of addicts and normal individuals. Addicted people have a lower disposition to religion than nonaddicts. There was a marked disparity in quality of life between the two classes and their subscales. Addicted individuals have a lower standard of living than nonaddicts. For both addicted and nonaddicted men, there was a strong positive association between religious behaviors and quality of life (11).

Individuals are known to be impulsively addicted, and impulsive behaviors by nature entail a wide variety of acts to which little consideration is given, immaturely and rapidly, without the ability to concentrate on. In the absence of adequate preparation, complex behaviors arise which are particularly dangerous (12). A review of impulsivity studies showed that impulsivity and impulsive behaviors are at the core of many mental disorders, such as hyperactivity/attention deficit, personality disorders, learning disabilities, behavioral disorders, impulse control disorders, substance abuse, and suicidal behaviors (13-14).

The distinction between impulsiveness and impulsive behaviors with related words, such as overreaction, is that both behaviors are hasty, unplanned, thoughtless, and erroneous; however, in most reactions, instead of

emphasizing the speed of the reaction, the focus is on the intensity and length of time during which the reaction occurs (15). Sepahvand (16) clarified the readiness of addiction for social anxiety based on this disorder's unusual nervous pattern of impulsivity (considering the role of anger and impulsivity), in which impulsivity played a significant role.

Many studies have shown that impulse behaviors greatly vary between normal individuals and addicts (17-18). In addition, drug abuse and impulsivity were closely related (19). In a study carried out by Khanjani et al. (11), there was a significant difference between the addicted and normal groups in sensation seeking. Based on the literature, it was also observed that addicted individuals had problems with the perception and management of emotions and control of impulses in comparison to the control group (20).

Addiction, as social harm, will never be completely eradicated; however, it can at least be controlled with prudence, thought, and sincere effort (11). In fact, the level of religious involvement tends to be inversely associated with depression, suicidal behavior, and drug misuse (21-22). Although several studies have shown a protective effect of religious involvement against mental illnesses, the potential mediators of this relationship have been rarely investigated (23). It is important to note that this complex relationship among religiosity, impulsiveness, mental illness, and suicidal behavior could be bidirectional; accordingly, as mental illness might impair religious involvement, religiosity through multiple mechanisms could diminish the expression of mental illness and impulsive behaviors and dissuade an individual from suicide (24).

Caribé et al. recently observed a negative association between religiosity and impulsivity. By the investigation of healthy individuals and psychiatric inpatients attempting suicide with substance abuse, they have proposed religiosity as a possible mediator of the association between impulsivity and mental health (23). Paula showed that internalizing symptoms were significantly influenced by an interaction

between religiosity and impulsivity. Religiosity acted as a protective factor against internalizing symptoms only for participants with high impulsivity. The results of studies suggested a moderation role of religiosity in the association of impulsivity with internalizing symptoms (25). Given the role of public and mental health, numerous experts have stressed the need to carry out further studies on addiction. Therefore, the present study aimed to examine the components of religious attitudes and impulsivity in drug users and normal population.

Methods

This applied descriptive-comparative study was performed on 100 normal and addicted individuals referring to drug rehabilitation centers in Tehran, Iran, within January 2019 to February 2019. The sample size of the present study was obtained according to Morgan's Table. The study participants were selected through the convenience sampling method. Afterward, the researcher referred to the rehabilitation centers. Several centers were randomly chosen by balloting from all city regions as clusters that almost covered all parts of the city. The number of subjects selected from each center was proportional to the number of clients and sample size.

In order to collect the data, the researcher went to the chosen centers on different days of the week and selected the normal and addicted individuals who referred for receiving health care services. The inclusion criteria of the present study included the age of over 18, male gender, and no history of mental disorders, which was investigated by examining addicts in the camps. The exclusion criteria were unwillingness to participate, no possibility of attending other clinical interviews, psychiatric comorbidities, and incomplete questionnaires. In addition, normal individuals at these clinics and normal people accompanying addicts filled out the study questionnaires. The researcher provided sufficient information to the participants. They completed the questionnaires without any obligation. The data were analyzed in SPSS software (version 21) using descriptive

analysis and t-test. In this study, a p-value of less than 0.05 was considered statistically significant.

Hamilton Rating Scale for Depression

Psychologists and psychiatrists not involved in the data analysis assessed the depression severity of the patients using the Hamilton Depression Rating Scale (the version with 21 items; Persian version, including psychometric indices) (26). The rating scale consisted of 21 items asking about the symptoms related to depression, including low mood, suicidality, irritability, tension, loss of appetite, loss of interests, and somatic symptoms. Scores were also categorized into 0-7 (no depressive symptom/remission), 8-17 (mild depressive disorder), 18-24 (moderate depressive disorder), and $25 \geq$ points (severe depressive disorder) (Cronbach's $\alpha=0.88$) (26).

Religious Attitudes Questionnaire

In the present study, Serajzadeh's Muslim Religiosity questionnaire designed based on Glock and Stark model was used to measure religious attitudes (21). This questionnaire with 26 items includes four subscales of religion, namely beliefs (items: 1-7), experiential (items: 8-13), consequential (items: 14-19), and ritual (items: 20-25) dimensions. The items were scored based on a 5-point Likert scale, (i.e., Strongly agree; Agree; Undecided or Not understood; Disagree; Strongly disagree). Moreover, the scores of 4-0 are allocated to every item; however, scoring the items 7, 14, 16, 17, and 19 are reversed (0 to 4).

As an individual's score increases in a dimension, the severity of the individual's religious attitudes in that specific dimension becomes stronger (22). Serajzadeh reported the validity and reliability of this tool using the Cronbach's alpha coefficients as 0.61 and 0.78, respectively (21). In the present study, Cronbach's alpha coefficients were estimated at 0.87.

Barratt Impulsiveness Inventory version 11

This questionnaire was developed by Professor Ernest Barratt (27). The structure of the items represents the dimensions of hasty

decision-making and lack of foresight. This questionnaire consists of 30 items evaluating three factors of cognitive impulsivity, motor impulsivity, and nonplanning impulsivity. The items have been formulated in a multiple-choice format, and the highest possible score of the scale is 120.

The scores within the range of 52-71, higher than 71, and lower than 52 show normal limits of impulsivity, extremely high impulsivity, and excessively controlled individuals or participants not answering the items correctly, respectively (28). Based on the evidence, the Persian version of the Barratt Impulsiveness Inventory enjoys desirable validity and reliability. Ekhtiari et al. (28) used this inventory for addicts and nonaddicts; accordingly, in the healthy group, Cronbach's alpha coefficients were reported as 0.48, 0.63, 0.79, and 0.83 for the nonplanning, motor, and cognitive subscales and total score, respectively (28). In the present study, the total Cronbach's alpha coefficients was estimated at 0.73.

Result

In this study, the mean age of the participants was reported as 30.49 ± 5.27 years. Most (91.8%) of the study subjects had a diploma, and the majority (66.6%) of the cases were reported with a history of addiction for 1-5 years.

As it can be observed in Table 1, the mean scores of the total religious attitudes of addicts and normal individuals are 57.87 ± 13.48 and 65.32 ± 11.93 , respectively. This finding indicated the higher levels of religious attitudes of normal individuals than those reported for the addicts. In addition, the averages of beliefs, emotional, consequential, and ritualistic dimensions of the normal participants were higher than those of the addicts.

As shown in Table 2, the total mean values of impulsivity scores for the addicts and normal individuals are 13.74 ± 5.76 and 64.92 ± 6.87 , respectively. This difference was indicative of the higher impulsivity scores of addicts in comparison to those reported for normal individuals. Even, the mean values of normal individuals' beliefs, cognitive, consequential, and ritual dimensions of the normal participants were higher than those reported for the addicts.

Table 3 tabulates a difference in the religious attitudes of the addicted and normal individuals ($t = -3.24$; $P = 0.002$), which is statistically significant ($P < 0.05$). The mean difference of the beliefs ($t = 2.9$; $P = 0.03$) and emotional ($t = -0.18$; $P = 0.001$) dimensions of the addicted and normal subjects was also significant ($P < 0.05$). These findings indicated that there was a significant difference between the addicted and normal individual's values and their emotional

Table 1. Mean, standard deviation, and minimum and maximum scores of religious attitudes of addicted and normal individuals

Variable	Group	Mean	Standard deviation	Min	Max
Beliefs dimension	Addicted	17.40	5.63	1	25
	Normal	20.36	4.12	7	25
Experiential dimension	Addicted	15.02	4.87	3	22
	Normal	18.70	3.87	12	24
Consequential dimension	Addicted	14.96	2.32	10	19
	Normal	15.04	2.32	9	18
Ritual dimension	Addicted	9.70	4	2	17
	Normal	11.22	7	2	24
Total scores of religious attitudes	Addicted	57.08	13.48	21	76
	Normal	65.32	11.93	45	85

Table 2. Mean, standard deviation, and minimum and maximum scores of impulsivities of addicted and normal individuals

Variable	Group	Mean	Standard deviation	Min	Max
Cognitive impulsivity	Addicted	19.78	3.90	11	24
	Normal	17.32	3.90	11	29
Motor impulsivity	Addicted	25.96	3.91	15	35
	Normal	23.78	5.70	16	34
Nonplanning impulsivity	Addicted	28	3.53	22	36
	Normal	23.82	3.23	21	32
Total impulsivity	Addicted	73.74	5.76	43	79
	Normal	64.92	6.87	41	76

Table 3. Independent t-test for differences in the dimensions of religious attitudes of addicted and normal individuals

Variable	Group	Mean	Standard deviation	df	T	P
Beliefs dimension	Addicted	17.40	5.63	98	2.9	0.03
	Normal	20.36	4.12			
Experiential dimension	Addicted	15.02	4.87	98	4.1	0.001
	Normal	18.70	3.87			
Consequential dimension	Addicted	14.96	2.32	98	-0.18	0.88
	Normal	15.04	2.32			
Ritual dimension	Addicted	9.70	4	98	-1.31	0.19
	Normal	11.22	7			
Total scores of religious attitudes	Addicted	57.08	13.48	98	-3.24	0.002
	Normal	65.32	11.93			

Table 4. Independent t-test for differences in the dimensions of impulsivity of addicted and normal individuals

Variable	Group	Mean	Standard deviation	df	T	P
Cognitive impulsivity	Addicted	19.78	3.90	98	-3.54	0.001
	Normal	17.32	3.90			
Motor impulsivity	Addicted	25.96	3.91	98	2.92-	0.028
	Normal	23.78	5.70			
Nonplanning impulsivity	Addicted	28	3.53	98	-6.16	0.001
	Normal	23.82	3.23			
Total impulsivity	Addicted	73.74	5.76	98	5.21-	0.001
	Normal	64.92	6.87			

dimensions. In addition, there were differences in the consequential ($t=-0.018$; $P=0.88$) and ritual ($t=-1.31$; $P=0.19$) dimensions between the addicted and normal participants, which was not statistically significant ($P<0.05$). These results showed that no significant difference was observed regarding the mean values of the consequential and ritual dimensions between the addicts and normal individuals.

As it can be observed in Table 4, the difference regarding the mean values of total impulsivity between the addicted and normal individuals ($t=-5.21$; $P=0.001$) is statistically significant ($P<0.05$). The mean values of cognitive impulsivity ($t=-3.54$; $P=0.001$), motor impulsivity ($t=-2.92$; $P=0.028$), and nonplanning impulsivity ($t=-6.16$; $P=0.001$) for the addicts were significant ($P<0.05$). These findings indicated that there was a significant difference in the mean values of cognitive impulsivity, motor impulsivity, and non-planning dimensions between the addicts and normal people.

Discussion

According to the results of the present study, there was a significant difference in religious attitudes between addicted and normal individuals. However, the difference was not significant in terms of consequences and rituals. The findings of this study are

consistent with the results of studies conducted by Khoshtinat (29), Asghari et al. (8), and Jokar and Hashemi (30). Khoshtinat et al. indicated that there is a direct and significant negative relationship between practical commitment to Islamic beliefs and drug abuse tendency. Other results suggested that a safe lifestyle has a detrimental association with a predisposition to drugs. To explain this finding, it should be said that religious values could be observed to contribute to enhanced self-esteem, quality of life, and improved self-esteem.

Religious beliefs are among the factors that may play a role in preventing and mitigating mental illness and related problems, such as suicide, drug abuse, depression, and anxiety. The reinforcement of religious convictions at all stages of life is considered a preventive measure for the reduction of mental disorders (31). Indeed, lack of religious beliefs may be one of the factors predisposing a person to use drugs, and all these factors, in addition to substance abuse, can threaten the physical and mental health of an individual (32). The enhancement of religious commitment helps people build themselves a new identity by referring to a spiritual aspect of life. This form of attraction helps to avoid negative emotions. It also assists an individual in keeping hope (33).

Another finding of this study showed the difference between the mean of normal and addicted participants in cognitive, motor, and nonprogrammatic dimensions at a significant level. Therefore, according to the aforementioned finding, it is suggested that impulsivity is more common in addicts than in normal individuals. The results of the present study are consistent with the findings of studies carried out by Dustian et al. (34), Khabir et al. (35), Ghamar-Givi and Mojarad (36).

Ghamar-Givi and Mojarad have demonstrated that a lack of planning, motor impulsivity, and cognitive impulsivity are associated with addictive behaviors, and impulsivity can explain 20% of addiction behavior variance (36). Dustian et al. have indicated that the aggression and impulsivity variables are significantly capable of predicting readiness for addiction. In addition, 49% of the distribution of predicted readiness for addiction variable is based on the coefficient of determination of aggression and impulsivity variables together (36). Pour Rajabali Moafi et al. supported the mediating role of impulsivity in the relationship between abnormal personality dimensions and addiction readiness. As a result, abnormal personality dimensions directly and indirectly through impulsivity are effective in the tendency to use drugs (16).

A study carried out by Gunnarsson (37) examined psychological factors related to drug abuse in 18-year-old adolescents, and the results showed that the risk of drug abuse was associated with the traits of opposition and impulsivity. In explaining this finding, impulsivity can be considered a cognitive dimension; for example, irritability is associated with cognitive rupture, slow and weak decision-making process, and emotional instability (38). To explain this finding, considering external religious orientation, the religious object will satisfy the basic needs of the individual. (39).

Impulsive individuals have difficulty in controlling their impulses and high degree of risk, are vulnerable to substance abuse, and are more likely to participate in high-risk activities, such as drug abuse (36). Impulsivity, agitation, negative excitability, and high-risk activities can be regarded as common factors for negative

emotions (38). Individuals with impulsivity tend to respond to internal or external stimuli rapidly and without preparation and considering the negative consequences for themselves or others (40).

Cross-sectional studies showed that religiosity is related to greater self-control and personality traits, such as friendliness, conscience, and empathy (23). Many longitudinal studies indicated that religious families tend to have less impulsive and self-controlled children (35). Therefore, in adolescence, greater religiosity will positively develop personality traits in adulthood (36). However, other studies demonstrated that particular personality traits decide whether the individual is more or less religious (23). Nevertheless, the aforementioned results suggested that religious experience might reduce the expression of impulsivity leading to the reduction of suicidality.

Knowledge of religion uses a series of biases in attention and memory (e.g. minimal counterintuitive information) facilitating its learning. In this sense, if an individual grows up under a socially controlled set of values discouraging or punishing impulsive behaviors, certain habits are more likely not to develop. Religiosity can help with enhancing self-regulation for those with higher impulsivity, reducing the negative effects of impulsivity in everyday life, and thereby maintaining mental health (25-41).

Conclusion

Impulsivity and deterrence play a central role in the tendency to a variety of high-risk behaviors and drug abuse. Therefore, due to the growing tendency of young individuals toward addiction, it is necessary for families, communities, and schools to give sufficient attention to the formation of religious attitudes in individuals. Religious attitudes can play a defensive role in countering the tendency toward drug abuse. It is recommended to take measures by raising public awareness, educating individuals and families about their responsibilities, supporting the family of young individuals and adolescents, strengthening the foundations of faith, educating children, and introducing the effects of addiction to reduce

and eliminate the tendency to drug abuse.

The present study has limitations requiring to be addressed. The study was carried out using the convenience sampling method hindering the generalization of the findings. It is recommended to use a more valid sampling method, such as the accidental and stratified sampling method. The measures taken for the analysis were all intended for screening and do not reflect the underlying structures in full. There were also no interviews for the diagnosis of mental illnesses, only the self-report of the participants. In conclusion, in the investigation of addicted individuals, religiosity can be observed as a predictor of impulsivity effect on internalizing symptoms.

Conflict of interest

The authors declare that there is no conflict of interest.

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