

## Mediating Role of Self-Control in the Effectiveness of Religious Beliefs on Addiction Tendency (Case Study: Tabriz University of Medical Sciences)

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Reza Abdi<sup>1</sup>, Fariba Poorjabbar Akhuni<sup>2\*</sup>

1 Department of Psychology, Faculty of Psychology and Educational Sciences, Azarbaijan Shahid Madani University, Tabriz, Iran.  
2 Faculty of Psychology and Educational Sciences, Azarbaijan Shahid Madani University, Tabriz, Iran.

### Abstract

**Background and Objectives:** Despite the large number of research and measures focusing on substance abuse tendency in Iran, the identification of factors preventing drug addiction and tendency is still a matter of fundamental importance. Regarding this, the present study was conducted to examine the mediating role of self-control in the effectiveness of religious beliefs on tendency to addiction.

**Methods:** The present cross-sectional correlational study was conducted on 300 students (i.e., 154 females and 146 males) of Tabriz University of Medical Sciences, Tabriz, Iran, selected through volunteer, convenience sampling technique. Data collection was performed using the long version of the Self-Control Scale by Tangney et al. (2004), Religious Commitment Inventory by Worthington et al. (2003), and addiction tendency scale. The data were analyzed in SPSS software using Pearson correlation and structural equation modeling.

**Results:** The findings revealed an indirect correlation between self-control and addiction tendency ( $r=-0.21$ ). Furthermore, there was a negative correlation between religious beliefs and addiction tendency ( $r=-0.16$ ). In addition to direct effect ( $B=-0.48$ ), the self-control was found to exert an indirect effect on the tendency towards addiction through the mediation of religious beliefs ( $B=-0.12$ ).

**Conclusion:** As the findings indicated, addiction tendency had a significant indirect correlation with self-control and religious beliefs. In this regard, as the participants' self-control and religious beliefs increased, their tendency to addiction decreased. Therefore, the findings of this study can assist the planners and policymakers to identify the factors affecting the tendency toward addiction.

**Keywords:** Self-Control, Religious beliefs, Addiction.

\* **Correspondence:** Should be addressed to Ms. Fariba Pourjabbar Akhuni. **Email:** Faribapoorjabbar0@gmail.com

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### Introduction

Today, the raising trend of drug abuse has grown into a major concern for all communities. Substance dependence and abuse have turned into a social issue (1). The relationship of drug abuse and addictive behaviors with other deviations, such as domestic violence, divorce, and transformation of contagious diseases (e.g., AIDS), increases the harmfulness of this practice and highlights the significance of giving a special attention to measures against this phenomenon.

There are preventive and predisposing factors encouraging and discouraging this practice. One of these preventive factors is religious beliefs, which have been mentioned as a barrier to substance dependence (2). Religious

obligations positively affect the substance abuse behavior through the institution of an ethical discipline, preparation of opportunities for acquiring skills, and provision of social laws (3). Religious values and beliefs are among the important elements of personality (4).

Accordingly, Miller et al. (5) reported that adolescents who did not have religious obligations were more prone to drug abuse than those with high religious commitments. Richard et al. (6) also showed that increased church attendance led to the reduction of alcohol and cocaine consumption. Moreover, Merrill et al. (7) demonstrated that factors, such as church attendance, high level of

religious thinking in family members, and frequency of religious discussion in the family, have a protective effect against drug abuse. Brown et al. (8) also revealed that religious belief is a factor protecting an individual from high-risk behaviors, such as smoking, as well as alcohol and cocaine consumption. Additionally, Nonmaker et al. proposed individuals' religious activity as a preventive factor against the use of alcohol, marijuana, and cocaine (9).

In a study conducted on 12 to 16-year-old adolescents, Wales et al. found a negative correlation between religious beliefs and the use of alcohol and marijuana, as well as smoking. Accordingly, they reported that individuals with a stronger religious belief would use drugs to a lesser extent (2). Likewise, in the study of Merrill et al., the highest rates of marijuana and other illicit drug abuse were observed in people with weaker religious beliefs (10). In addition, the family church attendance and parents' higher level of religious beliefs were significantly associated with lower drug consumption. In another study performed by Klein et al., the women with a high level of religious beliefs were reported to be less likely to use illegal drugs (11).

It should be noted that religion as a large system, consisting of many plans to guide humanity, includes elements related to self-control. Religion provides certain ethical principles and rules to control oneself and refuse certain behaviors (12). On the other hand, it should be noted that self-control and religious beliefs may also interact with each other since religious beliefs may exert various effects on individuals with different levels of self-control in terms of preventing the adoption of behaviors against rules.

Sasman et al. showed an inverse relationship between low self-control and smoking, drinking alcohol, as well as using marijuana or other drugs (13). In a longitudinal study carried out by Adebradot and Ruffenson, it was demonstrated that students with more antisocial behavior had lower self-control and were at higher risk of drug and alcohol consumption (14). Furthermore, Savaudi introduced low self-control as a key factor in

drug abuse among the young people (15). Accordingly, in a study conducted on high school students, Al-Wahidpur et al. concluded that the adolescents with low self-control were at a high risk of drug abuse (16). With this background in mind, the aim of this study was to identify the mediating role of self-control in the relationship of religious beliefs with tendency to addiction

## Methods

The present quantitative, cross-sectional (correlational) study was conducted on 300 medical students (i.e., 154 females and 146 males) of Tabriz University of Medical Sciences, Tabriz, Iran, in 2017. The study population was selected out of 5,000 students studying at this university through volunteer, convenience sampling technique based on the researcher team equipment. The sample size was determined using Lin table at 95% significance level and 5% error.

The data were collected using the long version of the Self-Control Scale by Tangney et al. (2004), Religious Commitment Inventory by Worthington et al. (2003), and researcher-made addiction tendency scale. After informing the participants about the study objectives and obtaining their informed consent, they were asked to fill out the questionnaires. Twenty eight students responded incompletely to the questionnaires; therefore, their responses were excluded from the analysis, and replaced with 28 questionnaires filled out again. Data analysis was performed in SPSS software using Pearson correlation coefficient and structural equation modeling.

### Self-Control Questionnaire

The Self-Control Questionnaire was developed by Tangney et al. to measure self-control. This instrument has a long and a short version including 36 and 13 items, respectively. In the present study, the long version of this scale was employed. Six items of this research tool cover the interpersonal dimension of self-control, and the rest examine the individual dimension of this constructs. Tangney et al. reported a Cronbach's alpha

coefficient of 0.89 for this instrument (17), indicating a proper internal consistency.

**Addiction Tendency Questionnaire**

This Likert scale questionnaire entails 16 items evaluating the inclination to addiction in three dimensions, namely social, individual, and environmental aspects. This instrument was developed by the researchers based on some scientific resources, such as Farhad et al. (18). The face validity of the questionnaire was investigated by Mirhesami through distributing it among the students (19). In addition, the examination of the reliability of this tool rendered the Cronbach's alpha coefficient of 0.79.

**Religious Commitment Questionnaire**

The Religious Commitment Questionnaire was developed by Worthington et al. in 2003 and consists of 10 items measuring the religious commitment of individuals (20). The questionnaire includes two subscales of individual religious commitment and interpersonal religious commitment. This instrument is rated on a 5-point Likert scale ranging from totally agree to totally disagree. The reliability of this questionnaire has been confirmed by Cronbach's alpha coefficient ( $\alpha=0.93$ ) and test-retest method with a three-week interval ( $r=0.87$ ) (21).

**Result**

The results of correlational matrix between the research variables are tabulated in Table 1.

Table 1. Correlational matrix of self-control, tendency toward addiction, and religious beliefs

Variable	Mean	SD	Self-control	Tendency toward addiction
Self-control	14.42	3.35	1	
Tendency toward addiction	13.29	3.85	-0.21*	1
Religious beliefs	14.62	3.43	-0.23	-0.16*

\*at the significant level of 0.05

The findings revealed an indirect correlation between addiction tendency and religious beliefs. In this regard, the respondents' tendency to addiction reduced by the enhancement of their religious beliefs. Furthermore, there was an indirect relationship between self-control and addiction tendency,

so that the individuals with lower self-control had higher tendency toward addiction.

The structural equation model of the research was designed using Amos software (Figure 1).

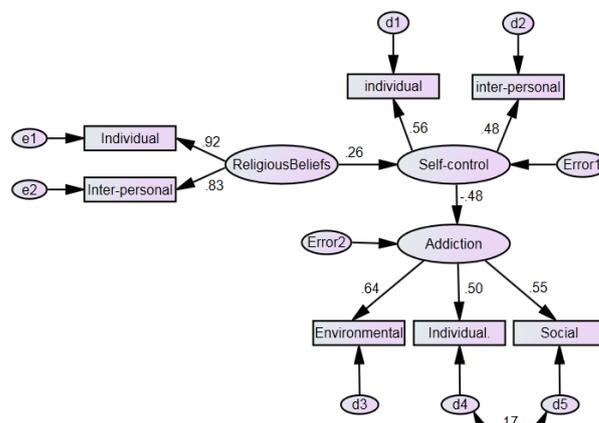


Figure 1. Structural equation modelling of the study variables

In this model, each of the independent and dependent latent variables, namely religious beliefs and self-control variables, respectively, consisted of two dimensions, and addiction tendency was composed of three dimensions.

The standard beta coefficients indicated the effect of religious beliefs on respondents' tendency to addiction. As the findings revealed, religious beliefs affected respondents' self-control (0.26); in this respect, the respondents' self-control increased with the enhancement of their religious beliefs. On the other hand, self-control was found to exert an effect of 0.48 on respondents' addiction tendency. Furthermore, religious beliefs positively influenced (-0.12) the participants' addiction tendency through the mediation of self-control.

The squared factor load of each of these dimensions shows the extent each of the indicators explains the latent variables (i.e., religious beliefs, self-control, and addiction tendencies). In terms of religious beliefs, individual dimension had the largest share in making this variable. Furthermore, interpersonal dimension made the largest contribution to structuring the self-control variable. Additionally, the environmental dimension played the greatest role in building the variable of addiction tendency.

Table 2 demonstrates some of the most important fit indices and their interpretation in

Table 2. Fit indices of the model and interpretation of the acceptable indices

Fit index	Obtained value in the model	Acceptable value	Interpretation	Acceptability status
Goodness of fit index	0.93	0 (lack of fit) to 1 (perfect fit)	A value close to 0.95 indicates acceptable model fit	Acceptable
Adjusted goodness of fit index	0.90	0 (lack of fit) to 1 (perfect fit)	A value close to 0.95 indicates acceptable model fit	Acceptable
Root mean square error of approximation	0.04	0.05<	A value close to 0.95 indicates acceptable model fit	Acceptable
Tucker-Lewis index	0.93	0 (lack of fit) to 1 (perfect fit)	A value close to 0.95 indicates acceptable model fit	Acceptable
Normed fit index	0.91	0 (lack of fit) to 1 (perfect fit)	A value close to 0.95 indicates acceptable model fit	Acceptable
Relative Chi-square (CMIN/DF)	3.11	1-5	A value of <1 is indicative of a poor fit, and a value of 5> represents the need for correction	Acceptable
Parsimony normed fit index	0.55		<0.50 or 0.60	Acceptable
Parsimony comparative fit index	0.54		<0.50 or 0.60	Acceptable

the designed model. In general, most of the fit indices of the model were acceptable. Therefore, the designed model could partially fit our data to the theoretical model. In other words, our model showed that our empirical data could be partly covered by theories.

**Discussion**

The results of this study indicated a significant negative correlation between religious beliefs and addiction tendency. Accordingly, as the individuals’ religious beliefs increased, their tendency to addiction decreased. This finding is consistent with the results obtained by Wales et al. (2), Miller et al. (5), Richard et al (6), Merrill et al. (7), Brown et al. (8), and Nonmaker et al. (9), reporting the religious beliefs as an important barrier to addiction tendency.

In this regard, it could be argued that religion can affect the tendency toward addiction through the establishment of an ethical discipline. Religion introduces certain moral rules for self-control and chastity, such as the refusal to use alcohol and other substances. In addition, it facilitates spiritual experience that can strengthen moral obligations, which in turn prevents addiction. Religion can also prevent addictions by the skills and information that a person gains throughout his/her life.

Religion creates a system of meaning for individuals by covering such concepts as the purposefulness of life, positive self-esteem, and self-respect. This system of meaning can prevent risk-taking and sensation-seeking

behaviors, thereby reducing individual’s tendency toward substance abuse. Furthermore, participation in religious activities and groups can act as a coping skill against the stressors leading an individual toward addiction (12).

It should be noted that individuals behave in their daily lives based on their personal beliefs and views about others, themselves, and the world, which form a system of meaning for them. This system allows a person to understand the world around him/her, select the goal, and then act and behave based on the chosen goals. Religion can be a great resource for the individual’s system of meaning, because it determines the perceived sacredness. The components of the meaning system affected by religion include beliefs, affiliations, expectations, and goals, which act as the central point of individuals’ emotions and actions (22).

Therefore, it can be concluded that if a person has a high level of religious beliefs, his perception of the meaning of the world and him/herself is accompanied by a sense of worthiness and purposefulness. Regarding this, these individuals are less likely to undergo such actions as drug addiction that could harm their sense of worthiness or prevent them from the achievement of their goals.

The people with lower self-control seem less likely to think of the consequences of their behaviors (23) since they seek immediate satisfaction (24). As a result, these individuals do not consider the consequences of addiction, and just care about the immediate pleasure of

drinking alcohol or using substances. On the other hand, high-level self-control involves the elements of self-monitoring, planning, and emotional discipline, which can prevent substance abuse (25).

Rachlin believes that individuals with high self-control have a greater commitment (26); as an example, they commit themselves to refrain from drinking alcohol or consuming other substances. Therefore, it seems that if an individual with higher self-control levels obligates him/herself not to use drugs, he/she can more easily fulfill their commitment. However, people with a lower self-control level are likely to be less loyal to their obligation and can easily circumvent their commitment regarding using drugs.

Religious beliefs are among the factors that can be affected by a kind of social pressure that can make the individuals to refrain from expressing their inner feelings or encourage them to pretend to be more religious than they are. In this regard, one of the most important limitations of this research is the probable effect of the religious governance on individuals' response. To resolve this issue, experienced investigators were used to complete the questionnaires.

The participants were assured about the confidentiality terms; accordingly, demographic information of the participant was not inquired in the questionnaires. Despite the relationship of religious beliefs and self-control with addiction tendency, this relationship was found to be at a weak level that does not indicate a causal relationship. It is possible that this association is caused by other factors, the identification of which requires further research in this domain.

## Conclusion

According to the findings of this study, self-control and religious beliefs can have a protective role against the tendency toward addiction. Therefore, the policy makers are recommended to pay attention to the role of such factors as self-control and religious beliefs in their planning.

Efforts are also needed to promote the level of religious beliefs in students and strengthen

the religious and spiritual beliefs through the implementation of life skill training programs at universities. In addition, universities can play an important role in reducing students' addiction tendencies by holding conferences and lectures targeted toward informing them about the ways of strengthening self-control.

## Conflict of interest

There are no conflicts of interest regarding the publication of this article.

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