





## Original Article

# The relationship between primary maladaptive schemas and metacognitive beliefs with addiction potential

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#### Abstract

**Introduction:** Recently, the cognitive basis of the etiology of addiction has attracted special attention. This study was conducted to determine the relationship between primary maladaptive schemas and meta-cognitive beliefs with addiction

Materials and Methods: The cross-correlation study, a multistage cluster sampling method was used and selected 300 peoples (180 girls and 120 boys) among high school students in Kermanshah city (2012-2013). Wells meta-cognitive beliefs questionnaire, Young primary Schema Questionnaire and addiction Potential Scale (APS) were measuring instruments. Results were analyzed using Pearson's correlation coefficient and regression analysis with SPSS 19 software.

Results: The results showed that there is a significant relationship between cognitive self-awareness, negative beliefs about the uncontrollability of thoughts, beliefs about the need to control thoughts and cognitive trust subscales with addiction potential subscale (P=0.001). However, there is no significant relationship between positive beliefs about worry subscale and addiction potential. Also, there was a significant relationship between primary maladaptive schemas and addiction potential (*P*=0.001).

Conclusion: According to the positive relationship between meta-cognitive beliefs and primary maladaptive schemas on increased addiction potential, counselors and psychologists can consider this item.

Keywords: Addiction, Belief, Maladaptive, Meta cognition, Schema

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#### Introduction

During the past two decades, numerous studies have been carried out on changing the intentional and objective-oriented behavior, especially about the addiction-based behaviors (1). Many including the personal, family and social factors are effective in the beginning, continuance and or returning after treating the addiction dependence (2). In the meantime, the religious role seems to be determinant in terms of encompassing all areas of human life and on the other hand as one of the intrapersonal aspects in mental health, the religious beliefs can pave the way in the field of promoting the person's mental health via manifesting in action and life style (3). Research findings have shown that

attaching to the religion is connected to the mental

and physical health (4-6). Studies have indicated that

religious attitudes and beliefs cause the reduced

psychological stress and risky behaviors prevention

religious groups or committed to performing the ritual, social and religious or have participated in the collective prayers passed more likely the treatment successfully (11). Researches (12,13) indicated that there is positive relationship between religiosity and spirituality with health outputs including the addiction

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such as smoking, alcohol and drugs. Religious indicators like membership in a religious sect, participation in religious rituals has reverse relationship with using addicted drugs and alcohol (7). Not only in the prevention discussion, but also in the treatment discussion, researches (8- 10) have shown that religiosity plays an important role in improving the addiction. Those subjects who have been a member in

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treatment. It is also known that (14) those adolescents who are not religious have reported more abuse compared to those religious adolescents. Another study on the risk-exposed women was carried out and showed that the women with higher level of religiosity have reported less use of illegal drugs (15). Studies also indicated that the highest rate of using tobacco, marijuana and other illegal drugs was observed among those persons who had less religious preferences (16). Additionally, attending the religious places and higher level of religiosity of parents had significant relationships with less use of the aforementioned drugs and the religious action of persons is a supportive factor against using alcohol, marijuana and cocaine (17).

One of the other important factors in rate of tendency to drugs is the parental styles. McCoby and Martin (18) revised the Baumrind's classic model. They believe that the parental styles are classified based on two characteristics expectation rate and responding rate. Expectancy points out that the parents expect experienced behavior from their children and responding indicates that the parents show affective warmth and acceptance and engage themselves in children's' actions. Based on this, three styles authoritarian, permissive and authoritative were introduced. In his study, Pellerin (19) showed that children of authoritative parents have more cognitive and social competencies, better psychological health feeling and exchange with others. Children of authoritarian parents show a lower standard in behavioral problems and drug abuse, together with the lower social competency and lower self-esteem and the children of permissive parents have higher social competency and self-esteem, but they suffer the lower progress motivation and less engagement with educational issues and high standard in behavioral problems and drug abuse.

Coombs and Landsverk (20) stated that the parentchild relationship is a rational area for studying the fact that why some children use drugs and why some others prevent using it. Abar, Carter and Winsler (21) in a research showed that the authoritarian parental style has a positive relationship with high level of self-regulating and educational performance and study skills among the students and has no significant relationship with behavioral problems such as alcohol and drug. Patock-Peckham and Morgan-Lopez (22) also found out that permissive parents are effective directly on the control trends (general and specific) and indirectly on the drugs and alcohol abuse among the children. Wood, Read, Mitchell and Brand (23) showed that the permissive parents cause the increased alcohol abuse. Another result showed that having the authoritarian parents has relationship with more rebellion among the adolescences and that is related to the alcohol abuse (24). In another research (25) it was specified that authoritative parental style of father and mother has a negative relationship with addiction potential; authoritarian parental style has a positive relationship with the addition potential and the permissive style has not relationship with the addiction.

Emotional intelligence is one of the constructs lack of which causes the people not to be aware of their emotions and as a result they make less effort for solving their problems with this feeling that they have no control over their life. Therefore, the results of research by Mayer and Salovey (26) shows that emotional intelligence is a kind of processing the emotional information which leads the life flow improve. As some researchers believe, low emotional intelligence is one the effective factors in beginning the drug abuse (27, 28).

In fact, those persons who have high emotional intelligence perceive the peers' pressure and can control their emotions and as a result show resistance against the drug abuse (29). Those persons with low emotional intelligence turn to drugs for encountering the negative emotions (30). Accordingly, they only have a vague perception of their emotions which they attribute to unrelated factors within their bodies or environment. Also, the research by Taylor, Bagby abd Parker (31) indicated that those drinking alcoholic beverages for fun and those addicted to alcohol have less emotional intelligence. Another research (32) showed that there is negative correlation between drug abuse and problem-solving component of the emotional intelligence components. Research carried out in Canada, Poland and USA indicate that about half of persons attached to drug and alcohol abuse have had less emotional intelligence and also it became clear that there is a negative relationship between emotional intelligence and addition acceptance and this study showed that persons engaged in drug abuse behaviors have had less emotional intelligence (33).

Based on the aforementioned literature and also since a few studies have been carried out in Iran concerning the relationship among the research variables, the present research is trying to investigate the simple and multiple relationships of the variables of parental styles, religiosity and emotional intelligence with addiction potential. Since the parental styles can be trained to parents and emotional intelligence can be taught to the children, and the religiosity is also trained via children cloning from parents and other educational institutes, this research has a high educational value.

#### **Materials and Methods**

The research method of this study is descriptivecorrelational. The statistical population of this research includes high school students of Ahvaz and the sample consists of 268 students. 6 questionnaires were excluded from the analysis due to imperfection and finally the sample volume included 262 which were selected by the multistage cluster sampling method. At first, 2 Education areas were selected randomly from among 4 areas and in the next stage 5 high schools were selected from each area and a class from each high school was selected as a sample volume. Research ethics was observed completely in this research in such a way that the participants were ensured from the information confidentiality and they filled the questionnaire with full satisfaction in a quiet atmosphere and without mentioning their names. The addiction potential, religiosity. parental styles and emotional intelligence scales were used for measuring the variables.

#### Research instruments

- Zargar's Addiction Potential Scale: This questionnaire is the Iranian addiction potential scale which has been constructed by Zargar (34) based on the social-mental conditions of Iranian society. The first factor, i.e. active potential is related to the antisocial behaviors, tendency to abusing drugs, positive attitude towards drugs and excitement, and the second factor, i.e. passive potential is related to lack of self-assertion and depression. Scoring each question is on a continuum from zero (completely disagree) to 3 (completely agree). Two methods were used for measuring the validity of this scale. Scale construct validity is calculated 0.45 through correlating it with 25-item scale of clinical symptoms SCL-25. It was significant in the level 0.01 and in the validity criterion the addiction potential questionnaire distinguished two addicted and non-addicted groups well. Reliability of this scale is computed by Cronbach's Alpha as 0.90 which is favorable (34).
- Aryan's Religiosity Measurement Scale: This scale is a self-report tool for measuring the rate of religiosity and include 20 questions and scoring on each question is done by a continuum from 1 (very low) to 5 (very high). Sum of scores of question 1 to 20 is considered as the person's religiosity rate indicator in this research via revising the questions 12 and 17. This scale was developed and prepared by Khadijeh Aryan (34). Aryan study (34) has been carried out on a sample of Allameh

Tabatabaei University students whose the reliability coefficient was obtained 0.92. in the present research, the reliability coefficient of this scale was calculated by Cronbach's Alpha method as 0.96 which indicates a good reliability of test.

- c) Buri's Parental Authority Questionnaire: This questionnaire was developed by Buri in 1991 based on the model proposed by Baumrind in 1971 and includes 30 items which is scored from 0 to 4 (35). Every 10 questions measure a style. Buri (35) reported the reliability of this scale by retest method 0.81, 0.86 and 0.92 for permissive style, authoritarian style and authoritative respectively. The questionnaire's diagnosis validity showed that the authoritarian style has a reverse relationship with permissive and authoritative styles and dominance of father also has a reverse relationship with permissive and authoritative styles (35). In Iran, Esfandyari (36) also reported the reliability of this questionnaire by retest method and 0.73 for permissive 0.81, 0.77 authoritarian style and authoritative style, respectively and the test internal validity was also approved by 10 psychological and psychiatric experts.
- d) Shatte's Emotional intelligence Scale: This questionnaire is a 33-item test which has been developed by Shatte et al. (37) based on Saloy and Meer intelligent model. The test questions measure components of emotional intelligence three including emotions adjustment, productivity of emotions and emotions assessment in a 5-degree Likert from 1 (completely disagree) to 5 (completely agree). Emotional intelligence scale, though saturated by the aforementioned components, only a general score was obtained for the emotional intelligence whose range is 36 to 165 (37). Internal consistency of test questions has reported based on the Cronbach's Alpha coefficient from 0.84 to 0.90 (37). In the Persian form of this Cronbach's Alpha scale, the scale questions were calculated in a sample consisting of 135 students as 0.88 (38).

#### Results

In this section, descriptive and inferential information required for research hypotheses are given. Table.1 indicates number of sample, mean and standard deviation of the research variables.

Table.2 shows the Pearson correlation coefficients for variables of parental styles, religiosity and emotional intelligence with active and passive addiction potential

As seen in Table. 2 there is a positive significant relationship between permissive and authoritarian parental styles and active potential. That is, the

permissive and authoritarian parental styles make the active addiction potential increase. There is a negative significant relationship between emotional intelligence, authoritative parental styles and religiosity with active addiction potential. There is also a positive significant relationship between authoritarian parental styles with passive addiction potential and there is a negative significant relationship between emotional intelligence and religiosity with passive addiction potential. On the other hand, no relationship was observed between permissive and authoritative styles and passive addiction potential.

In order to investigate the fact that how scores of parental styles, religiosity and emotional intelligence can predict the scores of active and passive addiction potential, step-by-step regression method was used. Table No.3 shows the results of step-by-step regression analysis for predicting the active addiction potential based on the variables of parental styles, religiosity and emotional intelligence.

Table 1. Number, mean and standard deviation of research variables

Variable	Mean	SD	Lowest score	Highest score
Permissive style	17.63	6.62	2	40
Authoritarian style	16.83	6.83	3	38
Authoritative style	27.59	7.01	9	68
Religiosity	20.34	15.78	0	78
Emotional intelligence	13.93	5.26	0	27
Active addiction potential	103.7	27.41	45	181
Passive addiction potential	78.55	11.86	31	134

Table2. Matrix of Pearson correlation coefficients for variables of parental styles, religiosity and emotional intelligence with active and passive addiction potential

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Variable	1	2	3	4	5	6	
Permissive style	-	-	-	-	-	-	
Authoritarian style	.501*	-					
Authoritative style	.316*	161	-	-	-	-	
Emotional intelligence	097	120	.073	-	-	-	
Religiosity	071	101	.201**	.083	-	-	
Active addiction potential	.368**	.234**	130*	250**	391**	-	
Passive addiction potential	.80	.272**	306	132*	219**	.409**	

**Table 3.** Step-by-step regression for predicting the active addiction potential based on the variables of parental styles, religiosity and emotional intelligence

parental styles, rengiosity and emotional intempence							
Prediction model	R	$\mathbb{R}^2$	F	В	β	T	P
Religiosity	.391	.153	48.08	521	391	.6.9	0.001
Permissive style	.519	.269	48.78	.813	.341	6.49	0.001
Emotional intelligence	.552	.304	38.5	109	189	-3.67	0.001
Authoritarian style	.579	.331	32.6	.389	.166	3.26	0.001
Authoritative style	.592	.338	28.25	341	152	-2.76	0.001

As seen in this Table 3, from among the research variables, religiosity, permissive style, emotional intelligence, authoritarian style and authoritative parental style are respectively significant predictors for active addiction potential and determined about 34% of its variance. Table No.4 indicates the stepby-step regression analysis for predicting the

passive addiction potential based on the variables of parental styles, religiosity and emotional intelligence.

In the meantime, on the basis of information of Table 4, among the research variables, authoritarian and religiosity styles are significant predictors for passive addiction potential and determine about 11% of its variance.

**Table 4.** Step-by-step regression for predicting the passive addiction potential based on the variables of parental styles religiosity and emotional intelligence

Significance	t	β	В	Predictive variable	Model	Criterion variable	
0.001	4.05	0.24	0.67	mistrust / abuse	R=0.62		
0.001	-2.28	-0.20	-0.67	Defectiveness / shame	R2=0.38		
0.02	2.21	0.14	0.36	Vulnerable to the disease	F=9.36	A 44: -4: 1	
0.001	6.61	0.33	2.38	Sacrifice	P<0.001	Addiction potential	
0.008	2.68	0.15	0.46	Eligibility / hauteur			
0.001	3.81	0.21	0.50	Cognitive trust			

## Discussion

The present study aims at investigating the relationship between parental styles, religiosity and emotional intelligence with addiction potential among the high school students. Based on the findings of this research, there is a negative significant relationship between religiosity and active and passive addiction potential. The results are consistent with the results of other researches (3-7.9) which have indicated that attachment to

religion has relationship with the mental and physical health and religious attitude and beliefs come together with reduced psychological stress and prevention of risky behaviors such as smoking, alcohol and drugs. Also, other researches (17) in similar results found out that person's religious action is a supportive factor against abuse of alcohol, marijuana and cocaine; having religious commitment and religiosity are effective factors in preventing the adolescents and youth addiction. This research results can play an important role in educational approaches. Parents know that being religious and transferring the religious commitment to their children can connect their future with mental and physical health and be considered as a supportive factor for keeping the children away from the social vulnerability related to drugs and tendency to drugs.

Also, based on the results of this study, there is a positive significant relationship between permissive parental styles and active addiction potential and there is a negative significant relationship between authoritative parental styles and active addiction potential. Meanwhile, there is a positive significant relationship between authoritarian parental styles and passive addiction potential. The results of this research are consistent with other researches' results (1.19.22-25.41.43).

On the basis of research by Pellerin (19), children of authoritative parents have higher cognitive and social competencies, better psychological health and exchange with others. Children of authoritarian parents show a lower standard in behavioral problems and drug abuse, together with the lower social competency and lower self-esteem and the children of permissive parents have upper social competency and self-esteem, but they suffer the lower progress motivation and less engagement with educational issues and have high standard in behavioral problems and drug abuse. Also, other researches

(1, 39) showed that the authoritarian parental style has a positive relationship with high level of selfregulating and educational performance and study skills among the students and has no significant relationship with behavioral problems such as alcohol and drug.

Additionally, in view of this finding that permissive parents are effective directly on the control trends (general and specific) and indirectly on the drugs and alcohol abuse among the children and in regard to strong research background about the educational value of parental style, paying attention to this discussion in the parent-child relationships should be contemplated. These

findings highlight that parents should be very diligent in their children's rights and cover the educational deficiencies by scientific method. Finally, based on the findings of present study, there is a negative significant relationship between emotional intelligence and active and passive addiction potential. Findings of this research are consistent with other researches (27-32,40,42). As Golman (27), Parker, Taylor, Istabrook, Shell and Wood (28) believe, low emotional intelligence is one of the effective factors in beginning the drug abuse. Also, in view of the research explanation by Trinidad and Johnson (29), Trinidad, Anger, Chu and Johnson (30) those persons who have high emotional intelligence perceive the peers' pressure and can control their emotions and as a result show resistance against the drug abuse. Those persons with low emotional intelligence turn to drugs for encountering the negative emotions. And with regard to the research by Akbar-Zardkhaneh and Javadi (33) which showed that there is a negative significant relationship between emotional intelligence and addiction potential, emotional intelligence is considered as one of the effective factors in addiction potential discussion. The important point to mention in the emotional intelligence discussion is the ability to train this construct. This matter is of high importance for educational affairs instructors so that, train them as clever in terms of emotional intelligence and play a role as one of the other supportive factors significant for children through providing children with training situations and creating an enriched atmosphere for them in order to prevent them falling into the trap.

It should also be noted that the present study encountered several limitations. First, since the present research is of type correlation, the causal inference should be done from the results with high caution.

At the end, it is suggested that the future researches willinvestigatethepersonality characteristics such as psychological headstrong, tolerance and selfassertion which seems to have considerable role in addiction potential. Gender is one of the limitations of this research.

One of the other limitations is that the sample has been taken from the high school students whose results should be carefully generalized for other groups. Also, the present study has been carried out on the literate persons and it cannot be generalized to the illiterate people. Based on this, it is suggested that the gender should be taken into account as an important variable in future researches and also this study should be carried out on the other groups for more generalization.

#### Conclusion

It seems that authoritative parenting style, religiosity and emotional intelligence are effective in reducing addiction potential among the high schools students.

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