

Comparing of Early Maladaptive Schemas between Healthy and Addicted Men

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Article information	Abstract
<p>Article history: Received: 4 May 2011 Accepted: 25 May 2011 Available online: 16 Oct 2012</p> <p>Keywords: Early maladaptive schemas Addicted Over 20 years Kerman</p> <p>*Corresponding author at: Department of Rehabilitation Administration, Tehran University of Medical Sciences, Tehran, Iran. E-mail: soltaninejad.ali@gmail.com</p>	<p>Background: Early maladaptive schemas are self-defeating emotional and cognitive patterns that develop early in life and repeat during the life cycle. They may cause a lot of psychological disorders including anxiety, depression, and drug abuse. Regarding to the importance of the prevention and treatment of addiction and regarding to obscurity of schemas about addiction, we compared the schemas of addicted and non-addicted men.</p> <p>Materials and Methods: In this cross-sectional study, 205 addicted and non-addicted men were selected in the city of Kerman through cluster sampling. To collect information, a questionnaire with acceptable validity and reliability consisting of demographic information and early maladaptive schemas was used. Data analysis was performed with SPSS-17 software.</p> <p>Results: Totally, 96 addicted and 106 non-addicted men with a mean age of 33.3 ± 9.8 years participated in the study. There were significant differences between early maladaptive schemas in two groups of addicted and non-addicted men ($p=0.001$). Logistic regression analysis showed that enmeshment, emotional deprivation, and vulnerability to harm or illness maladaptive schemas can predict addiction ($p=0.001$).</p> <p>Conclusion: According to this study, the most important schemas for addicted men are emotional deprivation, self-sacrifice, emotional inhibition, unrelenting standards, entitlement, insufficient self-control/self-discipline, and disconnection as well as enmeshment, vulnerability to harm or illness, and emotional deprivation predictor schemas that require special notion from related institutions and addiction therapist for addiction rehabilitation and prevention.</p> <p>Copyright © 2012 Zahedan University of Medical Sciences. All rights reserved.</p>

Introduction

Early maladaptive schemas are self-defeating emotional and cognitive patterns that develop early in life and repeat during the life cycle [1]. Schemas yield from conversations between parents and the child, gradually taking place in his/her mind and systematically but inefficiently dominating his/her life [2]. Maladaptive schemas, as cognitive infrastructures, lead to the formation of illogical beliefs including cognitive, emotional, and behavioral components; and when activated, they release levels of excitement and directly or indirectly lead to psychological distress such as depression, anxiety, occupational inability, substance abuse, interpersonal conflicts, etc [3].

Addiction is the frequent consumption of a substance from which withdrawal causes discomfort symptoms and cravings to reuse, eventually bringing about physical and psychological destruction.

This term has now been replaced with the word dependence which is defined as repeated use of a drug or chemical with or without physical dependence [4]. The United Nations Office on Drugs and Crime has estimated the number of drug abusers 15-64 years old at about 200 million people worldwide. The number of drug users in Iran is estimated close to 1.8 to 3.3 million people with narcotics as the most used material [5].

The researches done by Lotfi, Ketabi et al., Wang et al., and Dale et al. showed that addicts had more psychological damages and maladaptive schemas compared to non-addicts. Their results suggested that disconnection and rejection largely occurred in addicts [6-9]. Brummet proposed that persons with defectiveness, dependence and impulsivity schemas are more likely to consume substances [10].

Petrocelli showed that about 76% of personality damages and addiction variance can be explained by emotional deprivation, dependence/incompetence, entitlement/ grandiosity, enmeshment/undeveloped self, and failure schemas. He showed that these schemas had correctly predicted 60% of samples with personality damage [11]. Bamber and McMahan showed that schemas can predict high levels of occupational burnout and psychiatric damages [12]. In a research on 196 people in a psychiatric hospital, Welburn showed that early maladaptive schemas are the most powerful predictors of psychological symptoms such as anxiety, depression, paranoid and drug abuse [13]. Kirsch, in his research on early maladaptive schemas, self-esteem and changes in depression and anxiety in young adults during residential substance abuse treatment, concluded that there is a significant relationship between self-esteem, maladaptive

schemas overall score, and the severity of depression and anxiety during the first 5 weeks of addiction treatment, and these indicators are important indices for addiction treatment [14]. Since combative and preventive approaches to substance abuse have not been complete during past decades, the impact of maladaptive schemas and evaluation of their various aspects on the formation of addiction have remained obscure, and since mental health promotion plays an important role in the prevention of drug addiction, the researcher attempted to examine the maladaptive schemas in addicts and non-addicts with the hope to help addiction planners and therapists to prevent addiction

Materials and Methods

This research is a cross-sectional descriptive study aiming to compare the maladaptive schemas in addicts and non-addicts men of more than 20 years old of the city of Kerman, selected through random available sampling; 125 addict men over 20 years who referred to withdrawal centers and 125 non-addicted men to any substance were selected from various areas of the city through cluster sampling. In this study, attempts were made for both groups to be homogeneous in terms of demographic variables. Also, to observe ethical principles, the subjects signed a written consent under full awareness that their information will remain confidential.

Finally, the data relating to 109 non-addict individuals and 96 addicted men were eligible to analysis. Data collection tools in this study were demographic information questionnaires and the Young schema questionnaire-short form (YSQ-SF) made by Young in 1998. This 75-item questionnaire assesses fifteen early maladaptive schemas based on findings made by Schmitt et al. These 15 schemas are; emotional deprivation, abandonment, mistrust/abuse, social isolation/alienation, defectiveness/shame, entitlement, dependence/incompetence, enmeshment, subjugation, self-sacrifice, emotional inhibition, unrelenting standards, insufficient self-control/self-discipline, and vulnerability to harm and illness. Each item is rated into six scales (from “completely untrue of me” for number 1 to “it describes me perfectly” for number 6). High scores of a specified subscale showed more likelihood of a maladaptive schema for that person. The validity of the Young schema questionnaire-short version was reviewed by Sadoughi *et al.* and was estimated about 87% [15]. The reliability of (YSQ-SF) scale was studied by Ahi et al. through Cronbach's alpha and was reported 96% for the total test and higher than 80% for all subscales [16]. The central tendency and dispersion indices, mean differences, and logistic regression analysis of the collected data were analyzed by SPSS-17 software.

Results

Two hundred and five people participated in this study; 96 were addicts and 109 were non-addicts. The mean age of addicts was 34.78 ± 10.36 and the mean age of non-

addicts was 33.03 ± 9.21 . Their addictions were: opium 43, opium syrup 4, heroin 14, crystal 2, hashish 2, glass 4, and drugs combination 26 persons, and one person was addicted to other substances. The results of the independent *t*-test showed that the mean differences of all 15 maladaptive schemas between the two groups were quite significant; thus, the scores of this schemas were higher in the addict group ($p=0.0001$) (Table 1).

Logistic regression analysis showed that the vulnerability to harm or illness, enmeshment, and emotional deprivation schemas are the only schemas that have the power to predict addiction. The data analysis showed that 43-58 percent of addiction variable changes are explained by these 3 variables. This regression model correctly predicted 79% of people who were addicted, 87% of people who were not addicted and in total, 83% of the participants. This model was significantly valid. ($p=0.0001$) (Tables 2, 3 and 4).

Table 1. A comparison of the mean, standard deviation, and range of maladaptive schemas in addicted and healthy men

Emotional deprivation	Addict Mean \pm SD	Healthy Mean \pm SD	p-Value
Rejection	4.22 \pm 1.46	2.22 \pm 1.18	0.0001
Mistrust/ abuse	3.99 \pm 1.45	2.75 \pm 1.3	0.0001
Social isolation/ alienation	3.71 \pm 1.30	2.23 \pm 1.00	0.0001
Defectiveness/ shame	3.51 \pm 1.45	1.84 \pm 1.01	0.0001
Failure	3.29 \pm 1.44	1.64 \pm 0.76	0.0001
Incompetence/ inadequacy	3.14 \pm 1.5	1.86 \pm 1.06	0.0001
Vulnerability	2.89 \pm 1.35	1.69 \pm 0.93	0.0001
Enmeshment	3.23 \pm 1.44	1.66 \pm 0.78	0.0001
Subjugation	3.23 \pm 1.31	1.97 \pm 1.03	0.0001
Self sacrifice	3.27 \pm 1.34	1.83 \pm 0.85	0.0001
Emotional inhibition	4.25 \pm 0.94	0.94 \pm 1.15	0.0001
Unrelenting standards	4.03 \pm 1.22	2.71 \pm 1.18	0.0001
Entitlement/ grandiosity	4.36 \pm 1.13	3.78 \pm 1.01	0.0001
Insufficient self-discipline	4.08 \pm 1.16	3.26 \pm 1.14	0.0001
Emotional deprivation	4.10 \pm 1.19	2.76 \pm 1.07	0.0001

Table 2. A summary of the logistic regression model

Step	Test of Model Coefficient	Cox and Snell R Square	Nagelkerke R Square
1	199.388	0.336	0.449
2	173.578	0.415	0.554
3	166.274	0.435	0.581

Table 3. Variables that entered the regression equation

	B	Wald	df	p-Value	Odd Ratio
Emotional deprivation	-0.679	23.918	1	0.0001	0.507
Vulnerability to harm or illness	-0.655	12.640	1	0.0001	0.519
Enmeshment	-0.486	7.055	1	0.0001	0.615
Constant	5.008	55.732	1	0.0001	149.585

Table 4. Logistic regression modeling steps

Step	Variable	Sensitivity	Model p-Value	Improvement p-Value
1	emotional deprivation	77.1%	0.0001	0.0001
2	vulnerability to harm or illness	82%	0.0001	0.0001
3	enmeshment	83.4%	0.0001	0.0001

Discussion

Based on the results of this study, the mean maladaptive schema of addicts was quite significantly higher than non-addicted people. This suggests that addicts have more psychological and personality disorders than non-addicts. This difference was more in emotional deprivation, self-sacrifice, emotional inhibition, unrelenting standards, entitlement, insufficient self-control/self-discipline, and abandonment maladaptive schemas than other schemas. Our results were consistent with those of Ketabi et al., Dale et al., and Petrocelli et al [6, 8, 11].

They showed that addiction and psychological and personality damages are associated with maladaptive schemas and their maladaptive schemas were more than the people who had healthier psychological and social performances. Most of these investigations showed that the frequency of 5 schemas in the disconnection and rejection group were more than other groups, and most psychological and personality damages, including addiction, depression, anxiety, paranoia and repeated suicide behaviors have often disconnection and rejection group schemas. Dale et al. have pointed the disconnection and rejection schemas, and Brummet et al. emphasized on impaired autonomy and performance in addiction severity, in addition to the disconnection and rejection schemas [6, 10].

Our results are consistent with the disconnection and rejection domain and show that emotional deprivation and defectiveness/shame schemas play an important role in addiction severity. On the other hand, the results of the logistic regression analysis showed that enmeshment, vulnerability to harm or illness, and emotional deprivation maladaptive schemas are the strongest predictors of addiction. These results are consistent with the researches that showed mistrust/abuse, vulnerability to harm or illness, failure, emotional deprivation, self-sacrifice, insufficient self-control/self-discipline, enmeshment, defectiveness/shame, abandonment/instability, and social isolation/alienation affects addiction and can be potent predictors of addiction and psychological and personality damages. Based on the studies of Petrocelli et al. [11], Bamber et al. [12], Welburn et al. [13], and Kirsch [14], the first and second domains of schemas, i.e.

disconnection and rejection, and impaired autonomy and performance have important role in predicting addiction, as our results; however, in the researches mentioned above, vulnerability to harm or illness schema was not proposed, while this schema, included in the second domain, was a main predictor of our study. Since this schema, along with emotional deprivation and mistrust, has a significant relationship with antisocial personality disorder, it is essential to conduct further researches in this field.

According to the results of this study and other mentioned researches, it can be concluded that since psychological vulnerability and disorders like depression, anxiety, and paranoia are higher in addicts than ordinary people, judgment about the type of maladaptive schemas in addicts and attributing some of them to this population and also predictive schemas of addiction require more extensive researches in this field. Although the results of this study and understanding the relationship of addiction with schemas and its predictivity can be useful for preventing addiction and therapeutic strategies, regarding the existing limitations in this study such as limited resources, books, and performed studies in this area and the lack of cooperation of some objectives, and also in order to eliminate ambiguities and to reject confounding variables, we suggest that further research be conducted in treated addicts, addicts with minimum psychiatric symptoms, and addicted women and to analyze their schema and compare them with unwonted population.

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Authors' Contributions

All authors had equal role in design, work, statistical analysis and manuscript writing.

Conflict of Interest

The authors declare no conflict of interest.

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