

Comparing early maladaptive schemas and coping styles in drug dependent and non-dependent prisoners of Zahedan city, Iran

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ABSTRACT

Purpose: To compare early maladaptive schemas and coping styles in drug dependent and non-dependent prisoners of Zahedan city.

Materials and Methods: This was an ex post facto study. The population of the study consisted of all men prisoners of Zahedan prison in 2013. The participants were 240 prisoners among which 120 prisoners were selected by convenience sampling method and the rest by simple random sampling method. The variables were evaluated using Young early maladaptive schema questionnaire and Young coping style scale. The obtained data were analyzed by the independent t-test and Statistical Package for Social Sciences (SPSS) software version 16.

Results: There was a difference between drug dependent and non-dependent prisoners in terms of self-regulation, impaired performance and avoidance coping style.

Conclusion: Since avoidance behaviors are unadjusted procedures for dealing with difficulties, intervening in these behaviors would be appropriate therapeutically. Also, since coping styles strengthen early maladaptive schemas, therapeutic intervention in these behaviors can help to change these schemas.

Keywords: coping styles; early maladaptive schemas; prisoners; drug dependence; therapeutic intervention.

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INTRODUCTION

Addiction is a physical, psychological, social and spiritual disease which involves social, familial and psychological factors, on one hand, and biological and pharmacological factors, on the other hand.¹⁻³ Early maladaptive schemas are persistent throughout life and form the basis of an individual's cognitive structure.⁴⁻⁶ One of the theories regarding schemas is Young's early maladaptive schemas theory. In his theory, Young introduced fifteen schemas that occur as a result of failure to satisfy five important emotional needs, including the need for connection, and rejecting five key emotional needs, including the need for connection and being accepted, autonomy, competence and identity, freedom

to express normal needs and emotions, assertiveness, spontaneity and joy and internal orientation.⁶ A number of other studies have indicated that development of early maladaptive schemas in interpersonal interactions cause depression, loss of social interaction, inability to use social support and involuntary obedience.^{7,8}

Ryan and colleagues examined the relationship between opioid abuse and early maladaptive schemas and asserted that all 18 early maladaptive schemas with various levels were found in men and women addicts.⁹ Wang and colleagues¹⁰ and Dale and colleagues¹¹ demonstrated that addicts had more psychological trauma and maladaptive schemas compared to non-addicts. They indicated that disconnection and rejection maladaptive schema occur more in addicts.^{10,11}

Coping styles play significant roles in individuals' physical and psychological well-being.¹² Coping styles are defined as methods used to handle stressful situations¹³ and emotional and behavioral efforts are those which are applied to overcome, tolerate and decrease the effects of stressful events.^{14,15} Young introduced three main types of coping styles, i.e. overcompensation, avoidance and surrender.¹⁶ Ball demonstrated that avoidance responses were higher in drug dependent individuals compared to normal people, particularly those schemas that are related to denying emotional and unpleasant situations and avoiding them and also avoiding others.¹⁷

In their study, Van De Ven and colleagues indicated that the incidence of a disease in people who have poor and inefficient coping resources when exposed to mental pressures was higher than others. According to their results, people may use emotion-focused style (avoiding the source of the problem or distracting themselves from it) in stressful situations and prevent feelings when faced with difficulties. This may be an impediment to psychological adjustment in long-term, since it hinders direct and effective engagement with the problem and its solution. It interferes with intellectual integrity, physical health and creates emotional distress.¹⁸

In this regard, drug dependent individuals have more psychopathological symptoms resulting from early maladaptive schemas and inefficient coping styles, compared to non-dependent individuals. Moreover, criminals usually apply inappropriate coping styles, like avoidance, i.e. the immediate problem solving with little thought about the consequences and aggressive behaviors, for solving their issues.¹⁹

Early maladaptive schemas lead to psychological distress and adopting dysfunctional coping styles for dealing with turbulent emotions. Prisoners are people who achieve their goals through committing diversionary and illegal activities and are often involved in drug abuse. Since to the authors knowledge no study has examined the type of early maladaptive schemas and coping styles of drug dependent and non-dependent prisoners, this study was carried out to investigate whether there is a difference between early maladaptive schemas and coping styles of drug dependent and non-dependent prisoners in Zahedan prison, Iran.

MATERIALS AND METHODS

This was an ex post facto study. The population of the study consisted of all men prisoners of Zahedan prison in 2013 (277 drug dependent and 2097 non-dependent prisoners). The study sample included 240 prisoners

among which 120 prisoners were selected by convenience sampling method and another 120 prisoners by simple random sampling method. Drug dependent prisoners were identified by experts working at the prison's healthcare center and addicts' triangular clinic. All were under intensive care.

To collect data, after coordinating with the prison authorities, the objectives of the study were explained to the chosen prisoners. After obtaining the prisoners' consent, two questionnaires of Young early maladaptive schema questionnaire and Young coping style scale were distributed among two groups of drug dependent and non-dependent prisoners. They answered these questionnaires individually. For those who were illiterate, questionnaires were read by the researcher and others were asked to complete the questionnaire accurately. The obtained data were analyzed using the independent *t*-test and Statistical Package for Social Sciences (SPSS) software version 16.

Young early maladaptive schema questionnaire

In this questionnaire 75 items were developed by Young to assess 15 early maladaptive schemas. These schemas are emotional deprivation, abandonment/instability, mistrust/abuse, social isolation/alienation, defectiveness/shame, failure to achieve, dependence/incompetence, vulnerability to harm or illness, enmeshment/undeveloped self, subjugation, emotional inhibition, insufficient self-control/ self-discipline, unrelenting standards/hyper-criticalness, entitlement/grandiosity. Each question is scored on a scale point (1 = absolutely true and 6 = absolutely false).

In this questionnaire, every five questions evaluate one schema. If the mean of each subscale is more than 2.5, that schema will be considered insufficient. The reliability and validity of this scale have been evaluated in several studies.²⁰ Schmidt and colleagues examined the alpha coefficients of each early maladaptive schema that were 0.83 and 0.96, respectively. Test-retest coefficients in non-clinical population were 0.50-0.82.²⁰ Standardization of this questionnaire in Iran was done in Tehran University. Internal consistency of this questionnaire using Cronbach's alpha was 0.97 in women and 0.98 in men.²¹ In the current study, Cronbach's alpha for each schema was obtained. For emotional deprivation it was 0.84, for abandonment/instability 0.76, for mistrust/abuse 0.83, for social isolation/alienation 0.71, for defectiveness/shame 0.80, for failure to achieve 0.83, for dependence/incompetence 0.82, for vulnerability to harm of illness 0.87, for enmeshment/undeveloped

self 0.79, for subjugation 0.78, for self-sacrifice 0.76, for emotional inhibition 0.72, for insufficient self-control/self-discipline 0.75, for unrelenting standards/hyper-criticalness 0.74, and for entitlement/grandiosity 0.72.

Young-Rygh avoidance inventory questionnaire

This questionnaire has 41 questions that examine avoidance coping strategies. Each item is scored from 1 to 6. This questionnaires' avoidance strategies are not thinking deliberately about unpleasant issues, drug abuse, denial of illness, having radical control and logic, suppressed anger, psycho-physical symptoms, isolation and social alienation, denying memories, avoiding sleep/lack of energy, creating distraction by engaging in various activities, calm yourself (through eating, shopping, etc.), passive retention of unpleasant emotions, passive distraction, daydreaming and avoiding unpleasant situations. High scores indicate that an individual mostly applies avoidance strategies.¹⁷ Its Cronbach's alpha coefficient was 0.50. These coefficients for its subscales were 0.23 and 0.76, respectively.²² This questionnaire was implemented by Yazdandoost and colleagues on students and its reliability was 0.79 using split-half method.²³ In this study, Cronbach's alpha for avoidance coping style was 0.88.

Young overcompensation inventory questionnaire

This questionnaire includes 48 items that evaluate the overcompensation schema. This inventory is scored based on a 6-point Likert type scale. According to this questionnaire, overcompensation strategies include defectiveness/shame, mistrust/abuse; defectiveness/shame, failure to achieve, social isolation/alienation; emotional inhibition; abandonment/instability, vulnerability, negativity/pessimism, unrelenting standards; vulnerability, negativity/pessimism, unrelenting standards; unrelenting standards, subjugation; subjugation; dependence/ incompetence, mistrust/abuse; dependence/ incompetence, subjugation, undeveloped self; insufficient self-control/self-discipline, abandonment/instability, subjugation; insufficient self-control/self-discipline, abandonment/instability, entitlement/grandiosity; emotional inhibition, mistrust, self-sacrifice, subjugation. High scores indicate that the individual mostly applies overcompensation strategies.¹⁶ Cronbach's alpha coefficient for the questionnaire was assessed by Alfafos at 0.70.²² This coefficient in the current study for overcompensation coping style was 0.90.

RESULTS

In this study 84 prisoners (35%) were 22 to 30 years old, 42.9% were 31 to 39 years old, 19.6% were 40 to 48 years old and 2.5% were 49 to 57 years old. Fifty-four (22.5%) individuals were single and 186 (77.5%) were married. Considering their educational level, two individuals of the prisoners (8%) were illiterate, 24 (10%) had finished elementary school, 110 (45.8%) had finished junior high school, 77 (32.1%) had diploma, 11 (4.6%) had an associate degree, 15 (6.2%) had bachelor degree and one individual (0.4%) had a master degree. Regarding duration of staying in the prison, 226 (94.2%) were in the group of 0-3 years; 10 (2.4%) were in the group of 4-7 years and 4 (7.1%) were in the group of 8-11 years (**Table 1**).

The results of the independent *t*-test for comparing subscales of early maladaptive schemas in drug dependent and non-dependent prisoners indicated that there was a significant difference between drug dependent and non-dependent prisoners, considering impaired autonomy and performance. Therefore, the mean scores of drug dependent prisoners were significantly higher than those of non-dependent prisoners (**Table 2**). The mean scores of avoidance style of drug dependent prisoners were significantly higher than those of non-dependent prisoners (**Table 3**).

DISCUSSION

Our results indicated that the mean scores of impaired

Table 1. Demographic characteristics of studied prisoners of Zahedan prison.

Variables	Frequency	Percentage
Age (years old)		
22-30	84	0.35%
31-39	103	42.9%
40-48	47	19.6%
49-57	6	2.5%
Marital status		
Single	54	22.5%
Married	186	77.5%
Educational status		
Illiterate	2	0.8%
Elementary school	24	0.10%
Junior high school	110	45.8%
Diploma	77	32.1%
Associate degree	11	4.6%
Bachelor degree	15	6.2%
Duration of prison		
0-3 years	226	94.2%
4-7 years	10	2.4%
8-11 years	4	7.1%

Table 2. Results of the independent t-test in terms of subscales of early maladaptive schemas in the studied drug dependent and non-dependent prisoners.

Subscales of Early Maladaptive Schemas	Drug dependent	Non-dependent	t	P Value*
	Mean (SD)	Mean (SD)		
Disconnection and rejection	67.40 (25.30)	72.26 (22.06)	-1.58	.11
Impaired autonomy and performance	50.19 (20.69)	49.09 (14.89)	-2.26	.02
Impaired limits	27.31 (12.34)	28.49 (8.24)	-0.86	.38
Other-directedness	28.98 (9.42)	28.68 (8.27)	0.26	.79
Approval-seeking/recognition-seeking	92.16 (8.42)	92.46 (8.79)	-0.27	.78

* $\alpha = .05$ **Table 3.** Results of the independent t-test in terms of subscales of coping styles in the studied drug dependent and non-dependent prisoners.

Subscales of Early Maladaptive Schemas	Drug dependent	Non-dependent	t	P Value*
	Mean (SD)	Mean (SD)		
Overcompensation style	1.04 (26.79)	1.02 (23.71)	0.59	.55
Avoidance style	1.40 (34.12)	1.32 (32.65)	1.88	.05

* $\alpha = .05$

autonomy and performance of drug dependent prisoners were higher than those of non-dependent prisoners. This is in accordance with the results of Petrocelli and colleagues,²⁴ Brotchie and colleagues,¹⁰ Brummett,¹¹ Ryan and colleagues,⁹ and Wang and colleagues.¹⁰

Maladaptive schemas, as cognitive infrastructures, result in irrational beliefs and have cognitive, emotional and behavioral components. When they are activated, the level of excitement will increase and this, directly or indirectly, leads to psychological distress including distress, anxiety, inability to work, drug abuse and interpersonal conflict. Petrocelli and colleagues showed that 76% of variance in personality disorders and addiction can be determined by emotional deprivation, dependence/incompetence, entitlement/grandiosity, enmeshment/undeveloped self, and failure to achieve. They demonstrated that these schemas correctly determined 60% of people who had personality disorders.²⁴ Moreover, Brotchie and colleagues showed that alcohol dependent individuals had higher scores in vulnerability to harm or illness, subjugation and emotional deprivation.²⁵ Brummett reported that those who had defective, dependence and impulsive schemas were more likely to use drugs.²⁶ In a study Kirsch concluded that during the first five weeks of drug treatment, there was a significant relationship among self-esteem, overall scores of maladaptive schemas and depression and anxiety severity. These were important indicators of addiction treatment.²⁷

Examining the relationship between opioid abuse and early maladaptive schemas, Ryan and colleagues found that their drug dependent men and women had 18 early maladaptive schemas with various levels.⁹ Wang and

colleagues¹⁰ and Dale and colleagues¹¹ demonstrated that addicts, compared to non-addicts, had more psychological trauma and maladaptive schemas. Their results indicated that disconnection and rejection maladaptive schemas occurred more in addicts.^{10,11}

People with impaired autonomy and performance have constant problems in controlling themselves. They have inadequate tolerance to achieve their personal goals and are unable to prevent themselves from expressing their emotions and impulses.⁷ The results of Kozlov and Rokhlina's study agree with present study. They reported that drug dependent patients had higher levels of abnormal personality traits including impaired impulse control and irritability. These serious problems, especially self-control and self-discipline, may be due to impaired limits.²⁸ This is in line with the study of Roper and colleagues which showed that drug and alcohol dependent people have more severe insufficient self-discipline compared to non-alcohol dependent people. Therefore, it can be stated that maladaptive behaviors like being sociopath and addict are created as a response to a schema. Hence, they are raised by the schema itself.²⁹

In addition, our results demonstrated that the mean scores of avoidance coping style of drug dependent prisoners were higher than those of non-dependent prisoners. This finding is consistent with the results of Beasley and colleagues,³⁰ Siqueira and colleagues,³¹ Siqueira and colleagues,³² Ball and Cecero,³³ and Riso.¹⁷ Moreover, these results indicated that there was a significant difference between avoidance coping style of drug dependent and non-dependent prisoners. Therefore, the mean scores of avoidance coping style

of drug dependent prisoners were higher than those of non-dependent prisoners.

Mental health has two sides. On the one hand, it is the result of choosing and applying effective coping strategies that are consistent with change and stress and, on the other hand, it underlies a healthy psychological environment with the aid of which true understanding and accurate assessment of stressful situations are possible helping individuals to select an effective coping strategy. Various studies have examined the correlation between coping skills and health. The results demonstrated that emotion-focused coping style was associated with distress and anxiety, chronic illness, abuse chronic pain, drug and depression, and physical symptoms. Furthermore, problem-focused coping style was negatively related to psychological distress and was positively correlated with health promoting behaviors.³⁰

Some previously conducted studies have demonstrated that having negative perception of events and adopting negative coping techniques, such as anger and inability are much higher in drug users and cigarette smokers, compared to non-addicts or those who quit. Moreover, emotional coping methods are more common among cigarette smokers and avoidance coping methods are less common among them, compared to non-smokers.³¹ Other studies have considered avoidance coping methods, expression of anger and confrontation as risk factors for using drugs.³²

This study is not without limitations. The important limitation is lack of sufficient confidence in drug dependent individuals' responses. Additionally, since the study was conducted on a limited number of people, i.e. only prisoners of Zahedan prison, caution should be taken when generalizing the obtained results.

Some of the causes of vulnerability to drug abuse are high sensitivity to stress and the use of avoidance strategies which are employed to deal with stressful situations. Ignoring or denying unpleasant emotions reduces self-awareness of emotions and rejects current condition. Denying issues implicitly and avoiding confrontation with existing realities and ignoring them like any other avoidance response might relief an individual temporarily. However, in long-term they create more problems since the use of more avoidance responses prevent an individual from achieving a true understanding of a reality. Avoidance responses which avoid emotions and feelings can prevent the incidence of unpleasant emotions caused by dominant schemas and lead to further consolidation of these schemas which cause a disorder or lead to its continuation.

CONCLUSION

Therefore, since avoidance behaviors are unadjusted procedures for dealing with difficulties, intervening in these behaviors would be appropriate therapeutically. Coping styles strengthen early maladaptive schemas and therapeutic intervention in these behaviors can help to change them.

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CONFLICT OF INTEREST

None declared.

REFERENCES

1. Carroll KM, Onken LS. Behavioral therapies for drug abuse. *Am J Psychiatry*. 2005;162:1452-60.
2. Galanter M. Innovations: Alcohol & drug abuse, spirituality in alcoholics anonymous: Valuable adjunct to psychiatric services. *Psychiatr Serv*. 2006;57:307-9.
3. Franques P, Auriacombe M, Tignol J. Addiction and personality. *Encephale*. 2000;269:68-78.
4. Zhang DH, He H. Personality traits and life satisfaction: A Chinese case study. *Soc Behav Personal*. 2010; 38:1119-22.
5. Maltby J, Day L. Forgiveness and defense style. *J Genet Psychol*. 2004;165(1):99-109.
6. Thimm JC. Personality and early maladaptive schemas: A five-factor model perspective. *J Behav Ther Exp Psychiatry*. 2010;41:373-80.
7. Seligman MEP, Schulman P, Tryon A. Group prevention of depression and anxiety symptoms. *Behav Res Ther*. 2007;45:1111-26.
8. Csukly G, Telek R, Filipovits D, et al. What is the relationship between the recognition of emotions and core beliefs: Associations between the recognition of emotions in facial expressions and the maladaptive schemas in depressed patients? *J Behav Ther Exp Psychiat*. 2011;42:129-37.
9. Shorey RC, Stuart GL, Anderson S. The early maladaptive schemas of an opioid-dependent sample of treatment seeking young adults: A descriptive investigation. *J Subst Abuse Treat*. 2012;42:271-8.
10. Wang CE, Halvorsen M, Eisemann M, et al. Stability of dysfunctional attitudes and early maladaptive schemas: A 9-year follow-up study of clinically depressed subjects. *J Behav Ther Exp Psychiatry*. 2010;41:389-96.
11. Dale R, Power K, Kane S, et al. The role of parental bonding and early maladaptive schemas in the risk of suicidal behavior repetition. *Arch Suicide Res*. 2010;14:311-28.
12. Lazarus RS, Folkman S. *Stress, appraisal, and coping*. New York: Springer; 1984.
13. Morris EA, Brooks PR, May JL. The relationship between achievement goal orientation and coping style: Traditional vs. nontraditional college students. *Coll Student J*. 2003;37:3-8.

14. O'Connor RC, O'Connor DB. Predicting hopelessness and psychological distress: The role of perfectionism and coping. *J Couns Psychol.* 2003;50:362-72.
15. Yi JP, Smith RE, Vitaliano PP. Stress-resilience, illness, and coping: A person-focused investigation of young women athletes. *J Behav Med.*2005; 28:257-65.
16. Young JE, Klosko JS, Weishaar ME. *Schema therapy: A practitioner's guide.* New York: Guilford Press; 2003.
17. Riso PL. *Cognitive schemas and core beliefs in psychological problems: a scientist-practitioner guide.* Washington, DC: American Psychological Association; 2007.
18. Van De Ven MO, Engels RC, Sawyer SM, et al. The role of coping strategies in quality of life of adolescents with asthma. *Qual Life Res.*2007;16:625-34.
19. Chubaty DE. *Victimization, fear, and coping in prison [PhD dissertation].* Winnipeg, MB: University of Manitoba; 2001.
20. Tian J, Baranoff J. Young schema questionnaire: Review of psychometric and measurement issues. *Aust J Psychol.*2007; 59:78-86.
21. Schmidt NB, Joiner TE, Young JE, et al. The schema questionnaire: Investigation of psychometric properties and the hierarchical structure of a measure of maladaptive schemas. *Cognitive Ther Res.* 1995;19:295-321.
22. Alfafos L. *The early maladaptive schemas and their correlations with the psychiatric symptoms and the personality accentuations for Palestinian students [PhD dissertation].* Hamburg: Humburg University; 2009.
23. Petrocelli J, Glaser B, Calhoun G, et al. Cognitive schemas as mediating variables of the relationship between the self-defeating personality and depression. *J Psychopathol Behav.* 2001;23:183-91.
24. Brotchie J, Meyer C, Copello A, et al. Cognitive representations in alcohol and opiate abuse: the role of core beliefs. *Br J Clinl Psychol.* 2004;43:337-42.
25. Brummett BR. *Attachment style, early maladaptive schemas, coping self-efficacy, therapy alliance and their influence on addiction severity in methadone maintenance treatment [PhD dissertation].* New York: Fordham University Press; 2007: 68-80.
26. Kirsch J. *Early maladaptive schemas self-esteem and changes in depression and anxiety in young adults' puring residential substance abuse treatment.* Widener University, institute for Graduate clinical psychology Pennsylvanian, ProQuest; 2009:35-45.
27. Kozlov AA, Rokhlina ML. Addictive Personality. *Zh Nevrol Psikhiatr Im S S Korsakova.* 2000;100:23-7.
28. Roper L, Dickson JM, Tinwell C, et al. Maladaptive cognitive schemas in alcohol dependence: Changes associated with a brief residential abstinence program cognitive therapy research. *Cognitive Ther Res.* 2010;34:207-15.
29. Beasley M, Thompson T, Davidson J. Resilience in response to life stress: the effects of coping style and cognitive hardiness. *Pers Individ Differ.* 2003;34:77-95
30. Siqueira LM, Rolnitzky LM, Rickert VI. Smoking cessation in Adolescents: the role of nicotine dependence, stress, and coping methods. *Arch Pediatr Adolesc Med.* 2001;155:489-95.
31. Siqueira L, Diab M, Bodian C, et al. The relationship of stress and coping methods to Adolescent marijuana use. *Subst Abus.* 2001;22:157-166.
32. Ball SA, Cecero JJ. Addicted patients with personality disorders: Traits, schemas, and presenting problems. *J Pers Disord.* 2001;15 :72-83.

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