

## Examining the Relationship Between Early Maladaptive Schemas and Perfectionism in Patients with Obsessive-Compulsive Personality Disorder

### Abstract

Early maladaptive schemas (EMSs) are the predictors of many personality disorders, resulting in the emergence of characteristics like negative perfectionism. The study was designed to examine the relationship between EMSs and perfectionism in patients with obsessive-compulsive personality disorder (OCPD). In the present descriptive correlational study, 70 patients with OCPD admitted to psychiatric and psychological clinics in Yasuj were selected using a simple random sampling method and completed Young Schema Questionnaire – Short Form and the Frost Multidimensional Perfectionism Scale (FMPS). Descriptive statistics and Pearson correlation tests were used in SPSS 25 to analyze the data.

The range of perfectionism scores of all patients with OCPD examined was between 80-124, and the patients examined had no favorable perfectionism status. The highest range of scores in the dimension of positive dimensions of perfectionism was for personal standards, with a 19-35 range of scores and a standard deviation of 27.99. In the negative dimension of perfectionism, worry about mistakes had the highest range of scores, 18-40, and a standard deviation of 30.40. Among the early maladaptive schemas (EMSs), entitlement/grandiosity (51.4 %), punitiveness (self-sacrifice) (34.3 %), and abandonment/instability (34.3 %) were the variables that had the highest percentage among the patients examined. A direct and significant relationship was found between EMSs and perfectionism ( $P > 0.001$ ,  $r = 0.54$ ).

EMSs can be the base of many cognitive disorders, such as perfectionism.

**Keywords:** EMSs, perfectionism, obsessive-compulsive disorder, schema, perfectionism.

**Yahya khoshnod motlagh<sup>1</sup>, Nasrin Dehghani<sup>2</sup>, Alireza Tamoradi<sup>3</sup>, Amin Haghgoo<sup>4</sup>, Seyed Majid Khaze<sup>5\*</sup>**

1 - Yahya Khoshnod Motlagh

Email : yahyakhoshnod@gmail.com

orcid:0000-0002-5868-7015

Yasuj University of Medical

Sciences, Yasuj, Iran

2- Nasrin Dehghani

Email : Nasrin.dehghani@yums.ac.ir

Orcid: 0000-0003-1293-4209

Yasuj University of Medical Sciences,

Yasuj, Iran

3- Alireza Tamoradi

Email : Alireza.tamoradi@gmail.com

Orcid: 0000-0003-4707-4704

Yasuj University of Medical

Sciences, Yasuj, Iran

4- Amin Haghgoo

Amin.haghgoo65@gmail.com

Orcid: 0000-0001-7765-1600

Yasuj University of Medical Sciences,

Yasuj, Iran

5- Seyed Majid Khaze\* ( corresponding author )

Email : Zainy532@gmail.com

Orcid: 0000-0002-1508-0395

Yasuj University of Medical Sciences,

Yasuj, Iran

### Introduction

Schema is an organized pattern of thinking and behavior that could be seen as a mental framework of pre-formed ideas (1) that creates a special vulnerability for various psychological disturbances and personality pathology (2). Here, the results of some studies indicate that the EMSs pave the fine base of many types of psychological problems, mental injuries, and personality disorders (3, 4). Demhari et al. indicated that among some components of maladaptive schemas are self-concept and behavioral problems of deaf and blind teenagers (5). Sohrabi et al. state that maladaptive schemas and ineffective attitudes are among the determining factors in the tendency of people to use drugs (6). The findings indicated an inverse relationship between optimism and self-esteem, which is one of the consequences of the primary dysfunctional schema with exam anxiety (7). Hence, the schema formed in the person's past determines the type of disorder. Anxiety schemas are composed of beliefs and assumptions about danger and the inability to deal with it (8). In this regard, Sharifinia et al. state that by correcting the EMSs, problem-solving methods could be enhanced in patients with personality

disorders and help them effectively and constructively face life issues (9).

On the other hand, perfectionism is a personality trait characterized by setting extremely high goals and standards for oneself, along with overly harsh self-evaluations. At its best, perfectionism is a multidimensional trait, with psychologists agreeing that it has many positive and negative aspects. In its maladaptive form, perfectionism makes people strive for an unattainable ideal or unrealistic goal, often leading to depression and low self-esteem. On the contrary, adaptive perfectionism can motivate people to achieve their goals and make these people enjoy their efforts (10). Hence, perfectionism is divided into two types: positive perfectionism (normal, adaptive, normal) and negative perfectionism (abnormal, non-adaptive, neurotic, extreme) (11). In positive perfectionism, one's standards for performance are at a high level, and these goals are set logically and reachable. People enjoy trying to reach a goal more than the goal itself; they are flexible on the way to success and progress and accept their personal and situational limitations.

On the other hand, negative perfectionism results in self-destructive thoughts and behaviors, whose ultimate goal is to reach highly extreme and unrealistic personal goals (12). Regarding this, the results of Montazeri et al. showed that schema therapy reduces initial maladaptive schemas and perfectionism in patients with OCPD (13). Hence, the recognition of EMSs could result in treating symptoms of cognitive disorders such as perfectionism. For this reason, to treat OCPD patients as well as possible, it is necessary to have a detailed knowledge of the state of EMSs and the perfectionism of these patients. Thus, the study was designed to examine the relationship between EMSs and perfectionism in patients with OCPD.

### Materials and methods

This descriptive correlational study was carried out with the ethics code of IR.YUMS.REC.1399.019 in Yasuj in 2020, the sample was the patients with OCPD admitted to psychology and psychiatry clinics in Yasuj. Inclusion criteria were diagnosis of OCPD by a psychiatrist, age over 18 years, and informed consent to participate in the study. The exclusion criteria were unwillingness to continue the study, relocation or death, and absence of more than two sessions in the study group.

Morgan and Cochran's formula was used to estimate the sample size. The sample population with a definite diagnosis and referred for treatment was estimated to be around 85 people, so the total sample size was calculated as 70 people. Sampling was done using a simple random sampling method. In this study, the shortened form of the third edition of Young's Schemas Questionnaire and Frost's Multidimensional Perfectionism Questionnaire were used besides the demographic characteristics of patients' information. The demographic information questionnaire was prepared according to the sources and studies. It included contextual and influential variables in the study inclusion criteria, such as age, gender, marital status, level of education, and employment status.

In the present study, the shortened form of the third version of the Yang Schema Questionnaire (YSQ-S3) was used to detect EMSs. YSQ-S3, with 232 questions, was presented by Young in 2005. The short form of third version (the short form of Young's questionnaire) has 90 questions. In this questionnaire, the patients are ranked based on a six-point Likert scale (1=completely false, 2=almost false, 3=more true than false, 4=slightly true, 5=almost true, 6=completely true) based on the fact that they are rated on how well each question describes them. Schemas group the questions, 18 schemas are classified into five areas as follows: Self-management and dysfunctional area including schemas: failure to progress (questions 6, 24, 42, 60 and 78), dependency/incompetence (questions 7, 25, 43,

61 and 79), vulnerability to harm and disease (questions 8, 26, 44, 62 and 80), and confusion (questions 9, 27, 45, 63 and 81). The range of impaired boundaries includes the schemas: of self-control/insufficient self-discipline (questions 15, 33, 51, 69, and 87) and entitlement (questions 14, 32, 50, 68, and 86). The field of separation and rejection includes schemas: emotional deprivation (questions 1, 19, 37, 55, and 73), abandonment (questions 2, 20, 38, 56, and 74), mistrust (questions 3, 21, 39, 57 and 75), social isolation/alienation (questions 4, 22, 40, 58 and 76), and defect/shame (questions 5, 23, 41, 59 and 77). If the total score in each subscale is more than 15, that schema is imprinted in the person's mind. The area of being guided by others includes the following schemas: sacrifice (questions 10, 28, 46, 64, and 82), self-sacrifice (questions 11, 29, 47, 65, and 83), and seeking approval/getting attention (question 16, 34, 52, 70 and 88). The domain of over-vigilance and inhibition includes the following schemas: emotional inhibition (questions 12, 30, 48, 66, and 84), unfair standards (questions 13, 31, 49, 67 and 85), punishment (questions 18, 36, 54, 72 and 90), and pessimism/worry (questions 17, 35, 53, 71 and 89) (14). The validity and reliability of the EMSs questionnaire were examined on a sample of 579 people in two stages (first stage 394 and second stage 185). The reliability of the EMSs questionnaire using two Cronbach's alpha methods and split halves in the whole sample was 0.91 and 0.86, respectively, and among the girls, 0.87 and 0.84, and boys, 0.84 and 0.81. Factor analysis indicated that the extracted factors had high and satisfactory capability. The convergent validity of the questionnaire was examined with tools for measuring psychological helplessness, positive and negative effects, self-confidence, and cognitive vulnerability for the symptoms of depression and personality disorder. The correlation results for the six criteria were, respectively, 0.37, 0.34, 0.40, 0.39, -0.35, and -0.36, which are reported to be significant at the  $P < 0.001$  level (1).

Frost Multidimensional Perfectionism Scale (FMPS) was used to determine the degree of perfectionism of the samples in the pre-test, post-test, and follow-up phases. The test was developed in 1990 by Frost et al. based on the multidimensional model of perfectionism and included six components of worry about mistakes (9 questions), doubt about actions (4 questions); parental expectations (5 questions); parental criticism (4 questions); personal standards (7 questions) and organizational standards (6 questions). The questionnaire has 35 questions, two positive dimensions and four negative dimensions, whose positive dimensions include the subscales of personal standards and organization, and its negative dimensions are concern about mistakes, doubt about actions, parental expectations, and parental criticism (15). The scoring of the questionnaire is as follows: first, I must completely disagree with a score of 1; I disagree with a score

of 2; I have no ideas with a score of 3, I agree with a score of 4, and I agree with a score of 5. A higher score shows a person's tendency to be a perfectionist in the desired area. The overall perfectionism score is obtained by adding up the score of all 35 test statements. According to Frost et al. (1990, quoted by Stober, 1998), the organization subscale has a weak relationship with the entire questionnaire, and to obtain the total score of the questionnaire, the questions associated with this subscale, 2, 7, 8, 27, 29, and 31, should not be answered. However, in some Persian texts, it is stated that all the questions must be added to get the overall score, yet this is incorrect. The higher the score, the higher the perfectionism (16). The internal consistency coefficient for the whole questionnaire is 0.84, and for the subscales of worry about mistakes, doubt about actions, parental expectations, parental criticism, personal standards, and organization, respectively, 0.80, 0.63, 0.74, 0.66, 0.66, and 0.81. Moreover, the convergent validity of Frost's multidimensional perfectionism questionnaire has been reported according to the relationship with the appropriate positive and negative perfectionism questionnaire (17).

The researcher started sampling after approving and confirming the study and receiving the ethics committee code

and introducing himself and obtaining oral and written consent from the patient and giving assurance to the patient as well as explaining the goals and purpose of the study and how to conduct the intervention, and ensuring the freedom of entering or withdrawing from the study and keeping the patient's personal information confidential. The samples completed the demographic questionnaire and the Young Schema and Frost Perfectionism Questionnaire after conducting the MILLON-3 test of the samples by a psychiatrist and completing the demographic information questionnaire by the samples and the diagnosis of OCPD by the psychiatrist. The data was analyzed in spss 26 using descriptive statistics and Pearson's correlation coefficient as the variables had a normal distribution in the Kolmogorov-Smirnov test, considering a 95% confidence interval and a significance level lower than 0.05.

### Results

The results indicated that out of 70 patients with OCPD, 15 were men (21.4%) and 55 women (78.6%) with a mean age of 31±4.18 years were present in the study, and 61.4 of the patients had an education level higher than a diploma, and 50% were self-employed (table 1).

**Table 1. The distribution of the frequency of demographic nominal qualitative variables of patients with OCPD**

Qualitative variables	Variable levels	Total	
		Frequency	Percentage
Gender	Males	15	21.4
	Females	55	78.6
Marital status	Single	46	65.7
	Married	24	34.3
Educational	Sub-diploma	13	18.6
	Diploma	14	20
	Higher than diploma	43	61.4
Employment status	Government job	24	34.3
	Self-employed	35	50
	Still studying	11	15.7

**Table 2. Examining the status of the distribution of the dependent variable of perfectionism and its subscales in patients with OCPD**

Dependent variable	Dispersion index	
	SD	Range

Perfectionism		101.59	80-124	
Perfectionism subscales	Positive dimensions of perfectionism	Personal standards	27.99	19-35
		Organizing	25.21	18-30
	Negative dimensions of perfectionism	Worry	30.40	18-40
		About mistakes	9.47	6-12
		Doubts about deeds	19.17	14-25
		Parental expectations	14,79	8-20

As shown in table 2 The range of perfectionism scores of all patients with OCPD was between 80-124, and the patients examined had no favorable perfectionism status. In the positive dimensions of perfectionism, the highest range of scores was associated with personal standards, with a range of scores

between 19-35 and a standard deviation of 27.99. In the negative dimension of perfectionism, worry about mistakes had the highest range of scores between 18-40 and a standard deviation of 30.40.

**Table 3. The frequency distribution and comparison of the status of EMSs of patients with OCPD**

EMSs		Variable status	Total		
Spheres	Type		Frequency	Percentage	
<b>Disconnection and rejection</b>	Emotional deprivation	Has	13	18.6	
		Does not have	57	81.4	
	Abandonment/instability	Has	24	34.3	
		Does not have	46	65.7	
	Mistrust/ misbehavior	Has	16	22.9	
		Does not have	54	77.1	
	Social isolation/alienation	Has	15	21.4	
		Does not have	55	78.6	
	Defect/shame	Has	14	20	
		Does not have	56	80	
	<b>Impaired self-and management performance</b>	Failure to progress	Has	12	17.1
			Does not have	58	82.9
Dependence/incompetence		Has	11	15.7	
		Does not have	59	84.3	
Vulnerability to harm and disease		Has	13	18.6	
		Does not have	57	81.4	
Undeveloped self/trapped		Has	14	20	
		Does not have	56	80	
<b>Impaired limits</b>	Entitlement/grandiosity	Has	36	51.4	
		Does not have	34	48.6	
	Insufficient self-control/self-discipline	Has	11	15.7	
		Does not have	59	84.3	

<b>Other modalities (being guided by others)</b>	Obey (sacrifice)	Has	15	21.4
		Does not have	55	78.6
	Punitiveness (self-sacrifice)	Has	24	34.3
		Does not have	46	65.7
	Approval seeking /getting attention	Has	16	22.9
		Does not have	54	77.1
<b>Over-vigilance</b>	Emotional inhibition	Has	14	20
		Does not have	56	80
	Stubborn criteria/extreme troubleshooting	Has	23	32.9
		Does not have	47	67.1
	Punishment	Has	17	24.3
		Does not have	53	75.7
	Pessimism/worry	Has	13	18.6
		Does not have	57	81.4

Based on Table 3, among the EMSs, entitlement/ grandiosity (51.4%), punitiveness (self-sacrifice) (34.3 %), and

abandonment/instability (34.3 %) were the variables that accounted for the highest percentage of the patients examined.

**Table 4. Correlation matrix of EMSs and perfectionism**

Variables	1	2
EMSs	2	0.54*
Perfectionism	0.54*	1

\*P < 0.001

Table 4 showed The correlation matrix indicates a statistically significant and direct relationship between EMSs and perfectionism (r=0.54, P>0.001).

## Discussion

Personality disorder makes it hard or impossible for people with various personality disorders to face and overcome life challenges. The study was carried out to examine the relationship between EMSs and perfectionism in patients with OCPD. The results indicated that the range of perfectionism scores of all patients with OCPD examined was 80-124. The patients examined had no favorable perfectionism status, which is in line with the results of Hashemi Golestan et al. (18), Dumitrescu et al. (19), Ansari et al. (20). Mansouri Jalilian et al. (21). All the above studies stated the perfectionism state in the patients examined unfavorable, so that Hashemi Golestan et al. showed that the patients examined have an unfavorable state of perfectionism and this perfectionism can affect other personality aspects of the people and thus needs treatment and follow-up. Bazdar et al. stated that the perfectionism of the patients is not favorable, which could affect emotional communication and other aspects of personality and hence requires to be followed up (4).

Moreover, study results indicated that among the EMSs, entitlement/grandiosity (51.4%), punitiveness (self-sacrifice) (34.3 %), and abandonment/instability (34.3 %) were the

variables that accounted for the highest percentage of the patients examined, and this is in line with the findings of Montazeri et al. (13), Salman Pour et al., Pourjabbar et al., and Eshaghi Moghaddam et al. (23). Pourjabbar et al. found that EMSs could increase the tendency to drug abuse and the subjects examined have high EMSs (22). Eshaghi Moghadam et al. concluded that the mean scores of EMSs in delinquent teenagers are higher than normal teenagers (23).

Another important result was the direct and significant relationship between EMSs and perfectionism that was in line with those of Salmanpour et al. (3), Pourjabbar et al. (23), and Bazdar et al. (4). In their study, Salmanpour et al. found that initial maladaptive schemas can be the basis of the undesirable perfectionism of patients and affect other aspects of the personality as well (3). Pourjabbar et al. found a positive relationship between EMSs and perfectionism; EMSs are the basis of undesirable perfectionism (22). Eshaghi Moghadam et al. stated a positive and significant relationship between EMSs and perfectionism, and this factor could result in the tendency of the subjects under study towards cognitive problems and challenges (23). Bazdar et al. stated a positive and significant relationship between EMSs and perfectionism and the desire for emotional divorce. The follow-up and treatment of EMSs play a significant role in correcting behavioral disorders (4). One of the limitations of the study was the lack of access to a full range of patients with obsessive-compulsive disorders in

psychiatry and psychology clinics in Yasouj because of the Covid-19 epidemic.

## Conclusion

Knowing the EMSs in people with OCPD seems necessary so that knowing these schemas could cure many cognitive and behavioral disorders among these people. Therefore, knowing the EMSs in patients with OCPD seems necessary, as treatment could be adopted more appropriately with proper recognition of the schemas.

## Conflict of interest

The author(s) of this article declare that they have completely avoided publishing ethics, including plagiarism, misbehavior, falsification of data, or double submission and publication, in relation to the publication of the presented article, and there is no business in this regard and the authors have not received any money for presenting their work. The responsible author and other authors declare the originality of the content of this form. This work has not been published elsewhere and has not been submitted to another publication at the same time. Also, all rights to use the content, tables, images, etc. have been assigned to the publisher.

## Ethics approval statements

All the processes of this research were carried out after the project was approved by the Research Ethics Committee of Yasouj University of Medical Sciences and the code IR.YUMS.REC.1399.019 dated 01/27/2019 was received.

## Funding

There is no funder for this article

## References

1. Yousefi N. Comparison of the Effectiveness of Family Therapy Based on Schema Therapy and Bowen's Emotional System Therapy on Divorce Tendency Among Divorce Applicant Clients. *Journal of Clinical Psychology*. 2011;3(3):53-64.
2. Shorey RC, Stuart GL, Anderson S. Differences in EMSs between a sample of young adult female substance abusers and a non-clinical comparison group. *Clinical psychology & psychotherapy*. 2014;21(1):21-8.
3. Salmanpour H FA, Salmanpour S, Ghasemzadeh A. The relationship of EMSs to perfectionism: A test of a causal model. *New Psychological Research Quarterly*. 2013;9(35):81-98.
4. Bazdar KH MS. An Investigation and Analysis of the Role of Initial Maladaptive Schemas and Negative Perfectionism in Predicting Emotional Divorce among Couples. *The Women and Families Cultural-Educational*. 2018;13(43):93-116.
5. Demehri F, Movallali G, Ahmadi V. A Study of Relationship between EMSs Self-Concept and Behavioral Problems among Deaf Adolescents and Adolescents with Visual Impairment in YAZD City. *Journal of Ilam university of medical sciences*. 2015;23(4):191-201.
6. Sohrabi F AY, Dostian Y. Comparison of EMSs and Dysfunctional Attitudes in Normal and Drug-Dependent Individuals. *Journal of Applied Psychological Research*. 2014;5(1):59-72.
7. Bagana E, Raciú A, Lupu L. Self-esteem, optimism and exams' anxiety among high school students. *Procedia-Social and Behavioral Sciences*. 2011;30:1331-8.
8. Ansell EB, Pinto A, Crosby RD, Becker DF, Añez LM, Paris M, et al. The prevalence and structure of OCPD in Hispanic psychiatric outpatients. *Journal of Behavior Therapy and Experimental Psychiatry*. 2010;41(3):275-81.
9. Sharifinia MH, Rahimi yeganeh z, Rahimi dastjerdi M. Predicting Inefficient Problem-Solving Methods based on EMSs in Drug-Dependent Individuals. *Research on Addiction*. 2021;15(60):231-52.
10. Ghabadizade S, Yosefi N, Ghadery F. The role of EMSs, coping styles, and cognitive emotion regulation strategies in predicting students' tendency to addiction. *Journal of School Psychology*. 2019;7(4):121-42.
11. zabihollahzadeh f, rashvand p, nemattavousi m. Comparing EMSs, emotional regulation and coping strategies in patients with multiple sclerosis and healthy people. *Rooyesh-e-Ravanshenasi Journal(RRJ)*. 2019;8(4):93-100.
12. Khalatbari J, Ghorbanshiroudi S, Hosseini I. An Investigation of the Relationship between Perfectionism and Feeling of Loneliness and the Life Quality of Medical Students in Guilan Province. *Journal of Educational Psychology*. 2011;2(1):117-31.
13. Montazeri MS MH, Neshat Dost HT, Abedi MR. the effectiveness of schema therapy on improving perfectionism and EMSs in a case with obsessive-compulsive personality: a single case study. *Journal of Psychological Studies and Educational Sciences*. 2016;12:53-70.
14. Ghiasi M, Molavi M, Neshatdost H, Salavati M. The Factor Structure of Farsi Version of Young Schema Questionnaire-S3 in Two Groups in Tehran. *Journal of Psychological Achievements*. 2011;18(1):93-118.
15. Stöber J. The Frost Multidimensional Perfectionism Scale revisited: More perfect with four (instead of six) dimensions. *Personality and individual differences*. 1998;24(4):481-91.
16. Hawkins CC, Watt HM, Sinclair KE. Psychometric properties of the Frost Multidimensional Perfectionism Scale with Australian adolescent girls: Clarification of multidimensionality and perfectionist typology. *Educational and psychological measurement*. 2006;66(6):1001-22.
17. Akhavan Abiri F, Shairi MR, Gholami Fesharaki M. The investigation of psychometric properties of Frost Multidimensional Perfectionism Scale (FMPS). *Shenakht journal of psychology & psychiatry*. 2019;6(1):87-106.
18. Hashemi Golestan NS, Aghamohammadian Sharbat HR, Moeenizadeh M. The Study of the role of incompatible schemas and personality traits in predicting student communication model with mediating perfectionism. *Medical journal of Mashhad university of medical sciences*. 2020;62(5.1):834-51.
19. Dumitrescu D, Rusu A. Relationship between EMSs, couple satisfaction, and individual mate value: An evolutionary psychological approach. *Journal of Cognitive and Behavioral Psychotherapies*. 2012;12:63-76.
20. P. A. Relationship between EMSs, love style and Couple Marital Relationship Patterns with quality of matrimony, Master's Degree. University of Razi: University of Razi; 2015.
21. A. MJ. The study of the role of EMSs, self-differentiation, perfectionism, and meta-cognition in the tendency to substance abuse: Razi University; 2014.
22. Pourjabar H, Asgharnejad farid AA. The relationship between maladaptive schemas, perfectionism, and self-expression with students' tendency to substance abuse. *Journal of Adolescent and Youth Psychological Studies*. 2020;1(1):25-35.
23. ESHAGHI MKSF, Abdollahi MH, Shahgholian M. Comparison of Early Maladjusted Schemas, Hidden Anxiety, and Cognitive Regulation of Emotion in Normal and Delinquency Juveniles. 2015.