

Original Research

Predictability Of Obsession Based On Ego Strengths And Personality Structure Mediated By Coronary Anxiety

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Abstract:

Background: The aim of this study was to predict obsession based on Ego strengths and personality structure mediated by coronary anxiety.

Method: The present study was descriptive-correlation and structural equations. The statistical population of the study was 360 people (all patients referred to counseling centers in Hamadan) from which the statistical sample, 264 people, was selected randomly and cluster sampling. Data were collected using Madzley Obsessive Questionnaire (1977), Ego Baron Power Questionnaire (1997), Cronberg Personality Structure Questionnaire (2002) and Corona Alipour Anxiety Questionnaire (1398).

Result: The results of structural equations showed that the obsessive-compulsive disorder model based on Ego strengths and personality structure had a good fit with the mediating role of coronary anxiety. The direct effect of Ego strengths on obsession ($p < 0.01$, $\beta = -0.34$) and coronary anxiety ($p < 0.01$, $\beta = -0.36$) was significant. The direct effect of personality structure on obsession ($p < 0.01$, $\beta = 0.19$) and coronary anxiety ($p < 0.01$, $\beta = 0.31$) was also significant. The direct effect of coronary anxiety on obsession was also significant ($p < 0.01$, $\beta = 0.23$). The indirect effect of Ego strengths ($p < 0.01$, $Z = -0.05$) and personality structure ($p < 0.01$, $Z = 4.16$) on obsession was also significant. The results showed that Ego strengths and personality structure affect coronary anxiety and obsession.

Conclusion: Thus, one can expect to reduce coronary anxiety and obsession by increasing the amount of ego and balance in the personality structure.

Keywords: Obsession, Ego Strengths, Personality Structure, Coronary Anxiety.

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Introduction

In today's complex world, man faces many problems and has to fight for his life and survival and expose himself to great dangers. Among all these dangers, the occurrence of psychological problems is one of the major challenges of man in the modern age. Meanwhile, obsessive-compulsive disorder due to creating many problems in the fields of work, family, social, etc. causes discomfort and distress to patients with this disorder and their families [1]. Obsessions are repetitive and annoying thoughts that are constantly repeated and in most cases the person tries to relieve the stress caused by annoying thoughts by a series of actions including repetitive behaviors (such as washing hands, arranging, checking) or repetitive mental thoughts (e.g. Pray, count, repeat words in silence) neutralize. Various studies have been particularly involved in explaining the cause of obsessive-compulsive disorder, psychosocial factors such as personality factors and psychodynamic factors (including factors such as Ego strengths) [1].

Ego strengths indicates a person's capacity to cope with stress without experiencing crippling anxiety and is associated with a sense of competence and self-sufficiency in the personal and social spheres. Because the ego is responsible for managing the mental system, all psychological problems arise when the ego is unable to fulfill its responsibilities. The term Ego strengths refers to an individual's ability to deal effectively with competitive demands, empowering situations, and to function effectively despite the demands and expectations of these conflicting forces [1]; Therefore, the existence of a strong ego causes people to show less symptoms of psychological damage and to have sufficient endurance and capacity in the face of stress caused by stressful living conditions [2]. In addition to the power of the ego, personality and its factors can also affect mental disorders.

Personality refers to a set of basic characteristics that determine how a person normally behaves,

thinks or feels [3]. One of the newest models proposed to describe personality is the theory of personality structure. The structure theory proposed by Frederick (2007) focuses on the description of personality structure. Personality structure in this theory is divided into three levels, which are neurotic personality, schizophrenic personality and borderline personality level [2]. Neurotic personality level, which is the healthiest level among individuals because at this level, people correctly discover reality and are able to distinguish between truth and untruth, and also have high defense mechanisms against challenges such as anxiety and stress. Psychotic personality level, which is a level in the personality of individuals that is associated with a lot of confusion. Personality at the psychotic level cause's people to lack an understanding of reality and in some cases may even be delusional. The borderline level of personality, as its name implies, is the level of personality that is located between the levels of neurotic and psychotic personality [4]. This personality disorder develops obsessive-compulsive disorder, leads to difficulty in decision making, impaired expression of emotion, and reduced intellectual activity. Another variable that can have a significant effect on obsession is the experience of anxiety in individuals. Anxiety is a natural emotion that every person experiences when facing a problem in the environment or making important decisions [5]. In general, global anxiety affects each person in a variable way. Recent evidence suggests that individuals who are kept in isolation and quarantine due to coronary heart disease experience a type of anxiety called coronary anxiety disorder. These recurring thoughts of anxiety are considered as a form of obsession, repetitive and boring thoughts draw one's attention to constant worries and obsessions; and causes frequent and passive focus on obsessive-compulsive symptoms [6]. People with coronary heart disease experience significant distress. In these circumstances, increasing the number of confirmed or suspected

cases, heavy workload, lack of personal protective equipment, excessive media coverage, and lack of special drugs and feeling of insufficient support increases the psychological burden among people. In these critical situations, the social and individual structures of life are disrupted. The turmoil of individual structures means that the individual's power of control as well as the predictability of life flow decreases. People feel that their control over the flow of life is reduced and this situation leads to a feeling of insecurity, which will lead to anxiety. Also, people in these situations are constantly exposed to danger, and this situation causes them to renew and re-stimulate their thoughts of fear and preventive behaviors to deal with it. In fact, for these people, the corona becomes everything they think about [6]. Thus, everyone seems to be in the shadow of people who have had OCD for years [7]. Narimani et al (2010) [8] On the other hand, disorder behaviors such as obsession can be an inappropriate behavior to reduce anxiety [8]. Given the organizing role of Ego strengths as well as the threefold structure of personality in the mental state of individuals, it can be expected that the ego manages their mental state by regulating emotions and cognitions. In fact, if there is a lack of ego management power in regulating emotions, the person who faces the pressures in the environment, using immature mechanisms or dysfunctional coping styles, try to distract, ignore stress, distract, or engage in inappropriate activities such as obsession. There have been few studies on the role of coronary anxiety and predictor factors such as Ego strengths. This study seeks to answer the question of whether obsession can be predicted based on Ego strengths and personality structure with the mediating role of coronary anxiety?

Research background

Zamaneh and their teammate (2015)[9] predicted the symptoms of obsessive-compulsive disorder in students based on parental perfectionism and coping styles. Descriptive-correlation method was used to

conduct the research. Based on the results, they predicted students' anxiety about mistakes, order and organization, rumination and high expectations of others, and problem-oriented coping style and practical obsessive-compulsive style in students. Parental personality traits such as perfectionism affect the formation and persistence of obsessive-compulsive disorder. People with symptoms of practical obsessive-compulsive disorder use less problem-oriented strategies that aim to solve problems in the environment, and more emotionally-focused strategies that may be associated with their pathology and the formation and exacerbation of obsessive-compulsive symptoms.

Mohammadzadeh and their teammate (2010) [10] investigated the relationship between obsessive-compulsive personality traits and personality patterns. According to their findings, obsessive-compulsive disorder and schizotypal traits in the nonclinical population showed a correlation with each other. The results of multivariate regression analysis according to their research showed that among the three components of schizotypal personality, components of paranoid suspicion / social anxiety as well as unusual perceptual experiences, have the most relationship with obsessive-compulsive disorder. Among the four components of obsessive-compulsive disorder, the components of lack of control over mental activities and pollution had the power to predict schizotypal personality; and their final result showed that there are common components between obsessive and schizotypal features. Sarason (1993)[11], in their research on the role of cognitive insight, responsibility and metacognitive beliefs in obsessive prediction, using Pearson correlation coefficient and stepwise regression, concluded that the relationship between cognitive insight and the component of self-thinking with obsessive. There is a significant positive relationship between metacognitive beliefs and its components with obsession. The results of stepwise regression showed that among the

components of metacognitive beliefs, the components of negative metacognitive beliefs about thoughts, positive worry beliefs and negative metacognitive beliefs have the highest share in obsession, respectively.

Frederick et al. (2018)[2] in a study entitled Reducing self-fear by improving concerns about obsessive-compulsive disorder in obsessive-compulsive disorder using a hierarchical linear regression model, They concluded that reducing fear with FSQ treatment significantly reduced VOI obsession and the obsessive-compulsive subscale, and that there was a link between self-fear in psychological disorders such as OCD.

Elena (2020)[12] by researching personality endurance, self-concept among people with obsessive-compulsive disorder, concluded that despite having a disturbed personality, people with OCD increase the likelihood of identity and prominence in the identity of their mental illness. However, as symptoms increase, the results show that people are more likely to experience a decrease in the severity of their personality disorder. Compared to those who suffer only from OCD, the number of reported symptoms is lower for people with OCD and other anxiety disorders.

Research method

The present research was applied in terms of purpose and descriptive-correlation and structural equations in terms of design. The statistical population of the study was 360 people (all patients referred to counseling centers in Hamadan) from which the statistical sample, 264 people, was selected randomly and cluster sampling.

Madsley Obsessive-Compulsive Disorder Questionnaire: This questionnaire was developed by Zadok (1396) [1] to research the type and scope of obsessive-compulsive disorder. This questionnaire consists of 30 items, with correct and incorrect answers (scoring 1 and zero). This scale includes the components of control, wash, slowness / repetition, and skepticism. The overall score includes the sum of the scores of all items. On this scale, a score

above 15 is considered as the cut-off point. On this scale, scores above the average (15) are considered obsessive scores. The questionnaire, in its initial validation at Madzley Hospital, distinguished 50 obsessive-compulsive patients from 50 psychiatric patients. The content analysis of this questionnaire identifies four components: verification, cleanliness, slowness and obsessive suspicion. The reliability of this test was obtained by Rachman and Hodgson (1980) with the retest method of 0.89; in the present study, the reliability of Cronbach's alpha method was 0.77.

Ego strengths Measurement Tool: The Ego strengths Scale was developed to assess overall psychological adjustment. This questionnaire was originally adapted in 1953 from the revised form in MMPI-II. This scale has 52 two-choice questions (yes-no) which are administered in pen, paper and group and the scoring, analysis and analysis is scored as yes-no and is scored as one and zero. The range of scores is between zero and 52, the cut point is 26 and higher scores indicate higher ego strength. The retest coefficients in men and women were 0.80 and 0.82, respectively.

Kernberg's Personality Organization Inventory(IPO): Designed and validated by Zamaniha (2015) [9], the questionnaire contains 37 answer packets based on a five-point Likert scale (from 1 completely false to 5 completely true).The questionnaire assesses three subscales of reality testing, first psychological defenses, and identity confusion of personality organization. In Kronberg's model of personality organization, the sum of the three factors of the first psychological defenses, identity confusion and reality testing, indicates the overall vulnerability of the personality (psychotic personality) and the sum of the scores of the first two dimensions of psychological defenses and identity confusion is the general criterion of borderline personality. In the overall scoring analysis of the scale, the score of all questions is added together and the lower limit is 37 points, the cut-off point is 111 and the upper limit is 185

points, the higher scores indicate the overall vulnerability of the personality. In Iran, the factor structure, validity and reliability of this questionnaire have been studied by Al Behbahani and Mohammadi (2007). Validity coefficients were calculated for the whole list and dimensions of the first psychological defenses, identity confusion and reality testing, 0.90, 0.82, 0.68 and 0.91, respectively. In the present study, Cronbach's alpha for the whole scale was 0.87.

Corona Anxiety Inventory: Abdul Maleki et al, (1398) [13] have prepared and validated this scale with the aim of assessing the level of anxiety caused by Covid-19 in Iran. The tool consists of 18 questions and is scored in a 4-point Likert scale (from never to forever). The tool also has two subscales, psychological symptoms (questions 1 to 9) and physical symptoms (questions 10 to 18). Scores range from zero to 18, and higher scores indicate more anxiety than corona. In the study of The method of implementation was that after obtaining the necessary permits from the university, the list of counseling centers in Hamadan was received from the Welfare Organization and the provincial center of the Psychological System Organization and by referring to the counseling centers of the referring people, a number of people who have similar and close characteristics were selected to participate in the research. Inclusion criteria: age over 18 years - conscious consent to participate in the study - no severe psychological problems and exclusion criteria included dissatisfaction. The collected data were analyzed using Pearson correlation statistical methods and structural equation modeling with spss22 and lisrel 8.8 software.

Result

264 people (210 women and 54 men) participated in the present study. The mean age of men was 36.52 and the mean age of women was 34.28 years. Pearson correlation and structural equation analysis were used to analyze the data. Before performing the analysis, the assumptions of structural equations including

distribution normality, error independence and multiple alignment were checked. To assume that the research variables were normal, the Kolmogorov-Smirnov test was used, the results of which showed that the distribution of scores of all variables was normal ($P > 0.05$). The camera-Watson test was used to evaluate the independence of errors, which showed no correlation between errors ($W = 1.71$, range between 1.5 to 2.5 is acceptable). Inflation variance (VIF) and tolerance (VIF) were used to evaluate the multiple alignment between the predictor variables. The results showed that there is no alignment between the variables (VIF amplitude less than 10 and tolerance higher than 0.1). Another assumption is the establishment of a linear relationship between independent and dependent variables, which was examined by Pearson correlation, the results of which are reported along with the mean and standard deviation of the variables in Table 1,2.

Table 1: Average, standard deviation

Variable	average	Standard deviation
Ego strength	30.55	6.08
Character structure	52.25	6.94
Corona anxiety	33.90	7.68
Obsession	16.73	5.25

** $P < 0/01$, * $P < 0/05$

Table 2: Correlation between research variables

Variable	1	2	3	4
Ego strength	-			
Character structure	-0.36**	-		
Corona anxiety	-0.50**	**0.49	-	
Obsession	** -0.47	**0.23	**0.27	-

As can be seen in Table 3, the relationship between Ego strengths and personality structure ($r = -0.36$ and $P < 0.01$), coronary anxiety ($r = -0.50$ and $P < 0.01$) and obsession

Table 3. Fitness indicators for the developed model

Fit indicators	X ²	df	X ² / df	GFI	IFI	NFI	CFI	RMSEA
after correction	12.51	47	2.58	0.92	0.96	0.94	0.95	0.052
	1							

($r = -0.47$ and $P < 0.01$) there is a negative and significant relationship. There is a positive and significant relationship between personality structure with coronary anxiety ($r = 0.49$ and $P < 0.01$) and obsession ($r = 0.23$ and $P < 0.01$). There is a positive and significant relationship between coronary anxiety and obsession ($r = 0.27$ and $P < 0.01$). To test the research hypotheses, the fit of the model was investigated. Accordingly, in order to evaluate the proposed model, the Structural Equation Model was used. In the first stage, to investigate the relationships of latent variables from the overall fit of the model and then the regression weights of the measurement models and coefficients related to structural relationships (direct and indirect effects) were analyzed.

Figure 1. Relationships between Ego strengths and obsessive-compulsive personality structure mediated by standard coronary anxiety

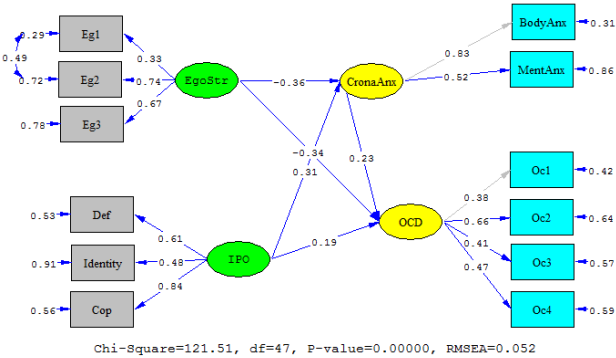
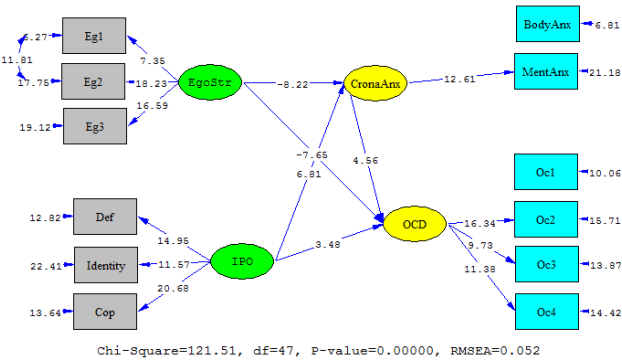


Figure 2. Relationships between Ego strengths and obsessive-compulsive personality

structure mediated by significant coronary anxiety



First, to determine the overall fit of the model, the fit index was considered. The model fit indices are presented in Table 3. For the X^2 / df fit index, values less than 3 are appropriate, and the closer it is to zero, the better the pattern will fit. For GFI and IFI, CFI, NFI, a value close to 0.90 and above is considered an acceptable good fit, which indicates that the model is good. In relation to the RMSEA index, values close to 0.05 or less indicate a good fit of the pattern and a value of 0.08 or less indicates a reasonable approximation error; A value higher than 0.10 indicates the need to reject the pattern. The fit indices presented in Table 3 indicate the optimal fit of the model.

Then, all the effects related to all the different paths in the structural equation model were investigated, the results of which are presented in Table 4.

Analysis of the data obtained from the research hypotheses through regression coefficients in the structural equation model in Table 4 shows that the direct effect of Ego strengths on coronary

Table 4. Coefficients of obsessive-compulsive disorder model based on Ego strengths and personality structure, mediated by coronary anxiety

	Direct route	Regression coefficient	Statistics t
The effect of Ego strengths on coronary anxiety		-0.36	-8.22
The effect of Ego strengths on obsession		-0.34	-7.65
The effect of personality structure on coronary anxiety		0.31	6.81
The effect of personality structure on obsession		0.19	3.48
The effect of coronary anxiety on obsession		0.23	4.56

T> 2.98 is significant at the level of 0.01 and t> 1.96 at the level of 0.5

anxiety ($p = 0.06$, $p < 0.01$) and obsession ($\beta = 0.036$, $p < 0.01$) was negative and significant. The direct effect of personality structure on coronary anxiety ($p = 0.01$, $\beta = 0.31$) and obsession ($\beta = 0.19$, $p < 0.01$) was positive and significant. The effect of coronary anxiety on obsession ($\beta = p < 0.23$, $p < 0.01$) was also

positive and significant. The Sobel test was also used to investigate the mediating role of coronary anxiety in the relationship between Ego strengths and personality structure with obsession, the results of which are reported in Table 5.

Table 5. Results of the mediating role of coronary anxiety in the relationship between

Predictive variable	Criterion variable	Mediator	Sobel's test (z)	P
Ego strength	Obsession	Corona anxiety	-4.05	0.01
Character structure	Obsession	Corona anxiety	4.16	0.01

The results of Sobel test in Table 5 show that the variable of coronary anxiety has a significant mediating role in the relationship between Ego strengths and obsession ($p = 0.01$, $Z = -0.05$). The coronary anxiety variable also has a significant mediating role in the relationship between personality structure and obsession ($p = 0.01$, $Z = 4.16$).

Discussion

After analyzing the data, it was finally found that the developed model had a good fit. There is also a direct relationship between obsession with Ego strengths, personality structure and coronary anxiety, as well as between coronary anxiety with Ego strengths and personality structure; And there is an indirect relationship between obsession and Ego strengths mediated by coronary anxiety, as well as between obsession and personality structure mediated by coronary anxiety. This means that people with high levels of Ego strengths show less coronary anxiety and,

as a result, less obsession; conversely, people with low scores on personality structure score higher on coronary anxiety disorder, resulting in higher obsessive-compulsive disorder. Findings of the study are consistent with the results of research by Frederick (2007) [2], Little Ravandi et al (1394)[14], Brooks and their teammate (2020) [15]. In explaining the relationship between Ego strengths and personality structure and obsession, we can first refer to the definition of obsession that obsessions are repetitive and annoying thoughts or behaviors that are actually people's reactions to anxiety. In most cases, the person tries to use these repetitive behaviors or repetitive mental thoughts to neutralize their stress, which is a nuisance of annoying thoughts. According to psychodynamic theories, since the ego is responsible for managing the mental system (Zamaniha, 2015)[9] and the power of the ego indicates the ability of the individual to withstand the stresses and problems she or he

faces [10]. As a result, all psychological problems arise when the ego is unable to fulfill its responsibilities and the ego of the individual is actually low [16]. On the other hand, according to Adam (2020)[6] definition of personality structure theory, instead of focusing on describing personality traits, she or he focuses on describing personality structure. In his view, personality structure refers to the internal pattern of organizing the mental processes that make up the matrix, as well as revealing traits and behaviors [17]. And the highest score in this personality structure is the level of psychotic personality, which is associated with many disturbances in the person. Personality at the psychotic level causes people to misunderstand reality. Thus, the person in this state of personality, as well as the problems raised in the field of low Ego strengths, if they are in a state of anxiety, such as the coronavirus crisis, will have a high score of coronary anxiety and this stress and anxiety can appear in a person in the form of obsessive behavior.

Sarason (2014) [11] can be used to explain the significant relationship between the coronary anxiety variable and the mediating role and relationship between Ego strengths and obsession which introduces anxiety as the most fundamental feature of critical situations that is due to the unpredictability of the future in these situations. And in coronary crisis situations, this anxiety is coronary anxiety disorder [7]. People with coronary heart disease experience significant distress and anxiety [15]. When a person is faced with these anxieties, in order to reduce their level, sometimes mistakenly, they choose disordered behaviors such as obsession as an inappropriate behavior [8]. Considering the organizing role of Ego strengths in the mental state of individuals, in that the ego manages their mental state by regulating the emotions and cognitions of individuals [6], the relationship between Ego strengths and the degree to which a person engages in coronary anxiety can be well explained. On the other hand, if there is a lack of Ego strengths in regulating emotions, a person

who faces pressures in the environment, Using immature mechanisms or dysfunctional coping styles, she or he tries to distract, ignore the stressor, distract herself, or engage herself or himself in maladaptive activities such as obsession. This explains the mediating role of corona anxiety between the relationship between Ego strengths and obsession. Also, in explaining the mediating role of corona anxiety in the relationship between personality structure and obsession, it can be said that Frederick (2007)[2] in her or his model divided personality into three levels based on internal defense systems, personality perception of identity and thematic relationships which include neurotic personality, psychotic personality, and borderline personality level. When a person is at the neurotic personality level, which is the healthiest personality level, he or she will have strong defense mechanisms in the face of challenges [6], as a result, a person is less likely to engage in both disorders such as obsessive-compulsive disorder and anxiety disorders such as coronary anxiety disorder. Based on the explanation given for the relationship between coronary anxiety and obsessive-compulsive disorder, the mediating role of coronary anxiety in the relationship between personality structure and obsessive-compulsive disorder can be well demonstrated.

Conclusion

In general, it can be said that people who have problems in terms of personality structure, are somewhat less able to establish coherence between real social criteria (reality testing) and also lack stability in their perception and that of others. These issues, in turn, activate the first psychological mechanisms that can affect the way we adapt to factors such as anxiety and obsession. On the other hand, the power of the ego indicates the strength and cohesion of the mental organization and can affect mental health threats such as anxiety and obsession.

It is suggested that the present findings be repeated on samples from other social classes as well as patients with schizotypal

personality disorder to clarify the role of anxiety and the relationship between personality structure and obsessive-compulsive disorder. It is suggested that the research be conducted in a wider geographical area or in other regions and in clinical samples and the results be compared.

References:

- [1]. Zadok, B. et al. Summary of Kaplan and Zadok Psychiatry. Translated by Farzin Rezaei. Dear publication.1396 .
- [2]. Frederick, C. Hypnotically facilitated treatment of obsessive-compulsive disorder: can it be evidence-based? Intl. Journal of Clinical and Experimental Hypnosis, 2007; 55(2), 189-206.
- [3]. Basharpour S, Eini, S. Predicting personality disorders based on the five-factor model of Zuckerman-Coleman alternative personality and ego power. Journal of Shahrekord University of Medical Sciences. 1395;19 (5) 93-84.
- [4]. American Psychiatric Association. DSM-5 Diagnostic and Statistical Manual of Mental Disorders. (Translation: Farzin Rezaei and their teammate). Tehran: Arjmand. 1398.
- [5]. Khanjani Z, Ismaili Anamaq B, Gholamzadeh M. The role of parenting styles in predicting anxiety thoughts and obsessive-compulsive symptoms in adolescents. Journal of Shahid Sadoughi University of Medical Sciences, Yazd, 1391; 20(1), 47-39.
- [6]. Adam, D. The hellish side of hand washing: how coronavirus is affecting people with OCD. Psychiatry, Psychology and Law,2020; 12(3), 85-92.
- [7]. Fineberg, N. A., Van Ameringen, M., Drummond, L., Hollander, E., Stein, D. J., Geller, D., & Rodriguez, C. I. How to manage obsessive-compulsive disorder (OCD) under COVID-19: A clinician's guide from the International College of Obsessive Compulsive Spectrum Disorders (ICOCS) and the Obsessive-Compulsive Research Network (OCRN) of the European College of Neuropsychopharmacology. Comprehensive Psychiatry. Public Health Emergency COVID-19 Initiative. 2020.
- [8]. Narimani M, Qasemi N, Mohammad A. The role of psychological factors in predicting binge eating disorder. School Psychology, 1393; 3(3): 86-105.
- [9]. Zamaniha Sh, Rahimi, M. Predicting students' obsessions based on parental perfectionism and coping styles, 4th International Conference on Management, Psychology and Humanities with Sustainable Development Approach, Shiraz. 2015.
- [10]. Mohammad Zadeh A. et al. the relationship between obsessive-compulsive disorder characteristics. 2010.
- [11]. Sarason, Erwin. j; Sarason. Pathological psychology: the problem of maladaptive behavior. (Translation: Davood Arab, Bahman Najjar, Mohsen Dehghani, Iran Davoodi). Roshd Publications. 2014.
- [12]. Elena M. Mental Illness Identity: A Look at the Self, Self-Concept, and Stigma Resistance Among Those Suffering from Obsessive Compulsive Disorder, A dissertation submitted to Kent State University College of Arts & Sciences in partial fulfillment of the requirements for the degree of Doctor of Philosophy. 2020.
- [13]. Abdul Maleki L. et al. the role of ego self-sufficiency and strength in secondary traumatic stress disorder of war veterans' spouses. Military care sciences.1398; 6(4): 267-275
- [14]. Little Ravandi M. et al.The Role of Attachment Styles, Quality of Subject Relationships, and Ego Power in Predicting Irritable Bowel Syndrome, Feyz, 1394; 19(3), 241-231.
- [15]. Brooks, S. K. et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. The Lancet. 2020; 395(10227), 912-920.
- [16]. Costa, P. T. & McCrae, R. R. How to Measure Personal Brand of a Business CEO.

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- Journal of Human Resource and Sustainability Studies, 2016; 4(4).
- [17]. Kashani Farahani, Z. A study of ego power, defense styles, and thematic relationships. Master Thesis. Faculty of Educational Sciences and Psychology. Al-Zahra University. and schizotypal personality patterns among students, Iranian Journal of Psychiatry and Clinical Psychology (Thought and Behavior), 1390;16(4), 490-495.