

# Investigating the Relationship between obsessions, Self-Esteem, and Rumination in People with Obsessive-Compulsive Disorder

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## Abstract

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**Purpose:** This study aimed to investigate the relationship between obsessions, self-esteem, and rumination in people with obsessive-compulsive disorder. **Method:** The present study is a descriptive, correlational study, and the statistical population of the study consists of all people with obsessive-compulsive disorder referring to treatment clinics in Tehran. Based on the Cochran formula, the sample size is estimated to be 230 people. Sampling was done by convenience method. The research data collection tools included Obsessive Beliefs Questionnaire (OBQ-44), Rosenberg Self-Esteem Questionnaire, and Nolen-Hoeksma and Morrow Rumination Scale (1991). Pearson correlation coefficients were used to analyze the data. Statistical calculations of the research were performed using SPSS statistical software. **Findings:** The research findings indicate that there is a negative and significant relationship between dysfunctional beliefs about responsibility, risk and threat assessment, and the need for reassurance and the self-esteem of people with obsessive-compulsive disorder. Also, there is a positive and significant relationship between dysfunctional beliefs about responsibility, risk and threat assessment, and the need for reassurance and rumination in people with obsessive-compulsive disorder. **Conclusion:** Practical obsessive-compulsive disorder is associated with intrusive thoughts caused by rumination and causes psychological damage to individuals' self-esteem.

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## Introduction

Obsessive-compulsive disorder is a common neurocognitive disorder in people that is characterized by two distinct types of symptoms: obsessive thoughts and compulsive behaviors. Intrusive thoughts and actions that are always repetitive and annoying, cause time wasting, create problems in the normal course of life, and disrupt the individual's relationships with others [1]. These are unwanted thoughts or intrusive cognitions that cause distress and compulsive behaviors. The main processes by which ordinary intrusive thoughts become obsessions are the

interpretation that an intrusive thought is highly significant, has personal meaning, and is threatening and catastrophic (2). In other words, obsession is a manifestation of a combination of perfectionism and the need for certainty, as well as the belief in the necessity of solving problems completely correctly and definitively. Symptoms in more than half of patients with obsessive beliefs begin suddenly after a distressing event (3). Rumination is one of the disorders that is significantly seen in obsessive-compulsive disorder patients.

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Ruminations are a set of passive thoughts that are repetitive, focus on the causes and consequences of symptoms, prevent maladaptive problem solving, and lead to an increase in negative thoughts. This type of thinking is observed in some emotional disorders such as depression, obsessive-compulsive disorder, generalized anxiety disorder, and post-traumatic stress disorder (4). Rumination disrupts the cognitive foundation of obsessive-compulsive and depressed patients and is associated with poor psychological adjustment and increased negative emotions such as anger and stress (5). In psychology and the psychoanalytic approach, obsessive-compulsive disorder is considered a psychological defense against feelings of anger and impulses based on and originating from childhood. Impulses and emotions that are never accepted and approved by the individual and that are not subject to an objective and practical response, at the same time cause severe anxiety and defensive reactions in the areas of thinking and behavior (6).

Rumination is defined as the persistent preoccupation with and thinking about an idea or topic. Rumination is a class of conscious thoughts that revolve around a specific and habitual axis and are repeated without immediate environmental demands attached to them (7). By increasing the recall of negative memories and reducing the individual's motivation to solve problems and issues, mental rumination intensifies negative mood and the individual's use of maladaptive coping strategies and negative attitudes toward life events and occurrences, which leads to various psychological problems (8). Among these problems is the reduction in self-esteem in individuals, which in turn can increase the scope of rumination and obsession in the individual.

Self-esteem is a feeling of competence and ability to cope with life's challenges and to consider oneself worthy of achieving happiness. Self-esteem is considered a judgment about an individual's worthiness that is reflected in the individual's attitudes toward themselves (9). Each person's self-esteem is based on a combination of objective information about themselves and the subjective values they place on that information. In fact, self-esteem is value-laden, meaning that the individual judges themselves and, with some carelessness, can be considered the ideal self, meaning what the individual aspires to be (10). According to studies, people who express themselves have achieved higher self-esteem, have gained more respect from others, have achieved more goals in their lives, have gained more personal understanding, and are in a position to effectively deal with mental trauma (11).

Mirdar-Harijani and Khamami (2023) compared intolerance of uncertainty and rumination between people with practical and normal obsessive-compulsive

disorder. The results of multivariate and one-way analysis of variance showed that there is a difference between intolerance of uncertainty and rumination in people with practical and normal obsessive-compulsive disorder. Based on the findings of this study, it can be concluded that there is a difference between intolerance of uncertainty and rumination in normal and disordered individuals, and this result can be a useful clinical finding for clinicians in this field (12).

Ahmadi et al. (2023) examined the mediating role of obsessive-compulsive disorder in the relationship between self-esteem and cyberchondria in students in their study. The results of structural equation modeling showed that the measured model of the study had a favorable fit with the conceptual model. Regarding direct effects, the results show that self-esteem has a direct relationship with cyberchondria and obsessive-compulsive syndrome. Also, obsessive-compulsive disorder has a direct relationship with cyberchondria. Regarding the indirect effect, the results showed that obsessive-compulsive disorder has a mediating effect on the relationship between self-esteem and cyberchondria. The results of the study showed that obsessive-compulsive disorder has a mediating role in the relationship between self-esteem and cyberchondria. Paying attention to this mechanism of influence can be effective in developing effective preventive and therapeutic interventions for cyberchondria (13).

Mousavi and Seyed Tabaei (2023) presented a study titled "Predicting Obsessive-Compulsive Disorder Based on Rumination and Distress Tolerance in the Coronavirus Epidemic." The results showed that the components of symptomatology, introversion, and blameworthiness have a positive and significant relationship with Obsessive-Compulsive Disorder ( $p < 0.05$ ). Emotional distress tolerance, the amount of attention to negative emotions when they occur, the subjective appraisal of distress, and regulatory actions to tolerate distress have a negative and significant relationship with obsessive-compulsive disorder ( $p < 0.05$ ). The results also showed that about 15.2% of the variance in obsessive-compulsive disorder is predicted by rumination dimensions (symptoms, introversion, and blame), distress tolerance dimensions (tolerance of emotional distress, the degree of attention to negative emotions when they occur, mental appraisal of distress, and regulatory actions to tolerate distress). It is concluded that obsessive-compulsive disorder can be predicted through rumination and distress tolerance in the coronavirus epidemic (14).

McKay et al. (2015) concluded in their study that cognitive behavioral therapy leads to a reduction in symptoms of obsessive-compulsive disorder and a

reduction in the importance of thoughts in this disorder [15].

**The Method of Research**

The research design is descriptive and correlational. The statistical population of the study consisted of 2215 people with obsessive-compulsive disorder referring to treatment clinics in Tehran, of whom 230 were selected as a convenience sample based on the Cochran formula. In this study, three questionnaires were used as data collection tools:

**Obsessive Beliefs Questionnaire:** The OCCWG has developed the Obsessive Beliefs Questionnaire (OBQ-44) as a tool to assess the role of cognitions in the etiology and maintenance of obsessions. The OBQ-44 includes dysfunctional beliefs about responsibility, assessment of danger and threat, and the need for reassurance and certainty. The total score for obsessive beliefs is obtained from the sum of the scores. The 44-OBQ has good internal consistency (0.92) and reliability coefficient (0.82) (16). In the present study, Cronbach's alpha coefficient for obsessive beliefs was calculated to be 0.78.

**Rosenberg Self-Esteem Questionnaire:** The Rosenberg Self-Esteem Questionnaire has 10 questions, of which 10 are 2-choice questions. The scoring of this 10-question test, which includes 2-choice questions (agree and disagree), is as follows: In the first 5 questions, the agree option is given a score of one and the disagree option is given a score of zero. In the last 5 questions, the agree option is given a score of zero and

the disagree option is given a score of one. Creed and Patton (2004) estimated the reliability coefficient of this test as 0.84. Bahloul and Rajabi (2007) reported the reliability coefficient of this questionnaire in Iranian adolescents and young adults as 0.84, and the internal consistency of this test was obtained from 0.72 to 0.87. In this study, the reliability of this questionnaire was calculated as 0.75 using Cronbach's alpha (17).

**Ruminative Response Scale (RRS):** This questionnaire is a 22-item scale designed by Nolen-Hoeksma and Morrow (1991). The items of this questionnaire are scored on a four-point scale from 1 (never) to 4 (often). In this test, the range of scores is from 22 to 88. The total rumination score is calculated by summing all items. In addition, this scale can be considered to consist of three subscales: distraction, contemplation, and rumination. Using Cronbach's alpha (range 0.88 to 0.92), it was shown that this scale has high internal reliability. Lotfinia (2007) calculated the scale's reliability coefficients as 0.82 by administering it to 54 students with a three-week interval (18).

Descriptive and inferential statistical methods were used to analyze the data. Pearson correlation coefficients were used to analyze the data. Statistical calculations were performed using SPSS statistical software.

**Findings**

The descriptive indicators of the questionnaire scores are presented as follows:

Table 1. Descriptive indicators of self-esteem scores

Statistical indicator	mean	Standard deviation
Self-esteem	0.1928	0.1299

Table 2. Descriptive indicators of rumination scores

Statistical indicator	mean	Standard deviation
Rumination	92.14	69.1

Table 3. Descriptive indices of obsession scores

Statistical indicator	mean	Standard deviation
Obsession		
Dysfunctional beliefs Sense of responsibility	42.22	79.3
Risk and threat assessment	58.13	79.3
Need for certainty and certainty	53.16	79.5

The results of Table 3 show that the highest average is related to dysfunctional beliefs about responsibility and the lowest average is related to risk and threat assessment.

The following is a review of the research hypotheses.

**Hypothesis 1:** There is a relationship between obsession and self-esteem in people with obsessive-compulsive disorder.

In order to examine this hypothesis, Pearson correlation coefficients were calculated between obsession and self-esteem, and then a significance test of the correlation coefficients was performed. The results are presented in Table 4.

The results of Table 4 show that the calculated correlation coefficients between the scores of dysfunctional beliefs of responsibility and self-esteem (-0.172), assessment of risk and threat and self-esteem (-0.226), and the need for certainty and self-esteem (-0.339) are significant at a level less than 0.001. In general, it can be concluded that there is a significant relationship between dysfunctional beliefs about responsibility, risk and threat assessment, and the need for certainty with the self-esteem of people with obsessive-compulsive disorder. It is noteworthy that the relationship between dysfunctional beliefs of

responsibility, risk and threat appraisal, and need for certainty with self-esteem is negative. Therefore, as the scores of dysfunctional beliefs of responsibility, risk and threat appraisal, and need for certainty increase, the self-esteem of people with obsessive-compulsive disorder decreases. The calculated coefficients of determination indicate that, in general, the need for certainty (12.02), risk and threat assessment (5.43), and dysfunctional beliefs about responsibility (3.19) explain the percentage of changes in self-esteem of people with obsessive-compulsive disorder, respectively.

Table 4. Results of correlation coefficients for the relationship between obsession and self-esteem

Statistical indicator	Correlation coefficient	Significance level	Coefficient of determination
Dysfunctional Beliefs Sense of Responsibility - Self-Esteem	-0.172	0.001	0.193
Assessment of Danger and Threat - Self-Esteem	-0.226	0.001	43.5
Need for Reassurance and Certainty - Self-Esteem	-0.339	0.001	12.20

Table 5. Results of correlation coefficients for the relationship between obsession and rumination

Statistical indicator	Correlation coefficient	Significance level	Coefficient of determination
Dysfunctional beliefs Sense of responsibility - rumination	0.144	0.001	2.58
Assessment of risk and threat - rumination	0.159	0.001	3.22
Need for certainty - rumination	0.129	0.001	5.18

Hypothesis 2: There is a relationship between obsession and rumination in people with obsessive-compulsive disorder.

In order to investigate this hypothesis, Pearson correlation coefficients were calculated between obsession and rumination scores and then a significance test of the correlation coefficients was performed. The results are presented in Table 5.

The results of Table 5 show that the calculated correlation coefficients between the scores of dysfunctional beliefs of responsibility and rumination (0.144), risk and threat assessment and rumination (0.159), and the need for certainty and rumination (0.129) are significant at a level less than 0.001. In general, it can be concluded that there is a significant relationship between dysfunctional beliefs about responsibility, risk and threat assessment, and the need for certainty with rumination. It is noteworthy that the relationship between dysfunctional beliefs of responsibility, risk and threat appraisal, and need for reassurance is positive with rumination. Therefore, as the scores of dysfunctional beliefs of responsibility, risk and threat appraisal, and need for reassurance increase, rumination also increases. The calculated coefficients of determination indicate that, in general, the need for certainty (5.18), risk and threat assessment (3.22), and

ineffective beliefs about responsibility (2.58) explain the percentage of changes in rumination, respectively.

#### Discussion

The present study aimed to investigate the relationship between obsessions, self-esteem, and rumination in people with obsessive-compulsive disorder. The findings of the study are presented as follows:

Hypothesis 1: There is a relationship between obsession and self-esteem in people with obsessive-compulsive disorder.

There is a significant relationship between dysfunctional beliefs about responsibility, risk and threat assessment, and the need for certainty with self-esteem in people with obsessive-compulsive disorder. It is noteworthy that the relationship between dysfunctional beliefs about responsibility, risk and threat assessment, and the need for certainty with self-esteem is negative (10). Therefore, as scores of dysfunctional beliefs, sense of responsibility, evaluation of risk and threat, and the need for certainty increase, the self-esteem of people with obsessive-compulsive disorder also decreases (14).

Hypothesis 2: There is a relationship between obsession and rumination in people with obsessive-compulsive disorder.

There is a significant relationship between dysfunctional beliefs about responsibility, risk and threat assessment, and the need for certainty with rumination. It is noteworthy that the relationship between dysfunctional beliefs of responsibility, risk and threat appraisal, and the need for certainty in people with obsessive-compulsive disorder is positive with rumination. Therefore, as the scores of dysfunctional beliefs of responsibility, risk and threat appraisal, and the need for certainty increase, rumination also increases (10).

### Conclusion

Rumination is the tendency to passively and repetitively analyze one's problems, worries, and feelings of stress without taking action to make positive changes, which appears to increase negative intrusive thoughts and weaken abilities related to self-esteem assessment. Rumination about intrusive thoughts can lead to negative internal appraisals of normal intrusive

thoughts. This means that patients with OCD are more likely to actively try to understand the causes of repetitive intrusive thoughts, which leads to more intrusive thoughts and stress. Therefore, as the research results show, practical obsessions are related to intrusive thoughts caused by rumination and cause psychological damage to individuals' self-esteem (16).

The limitations of the study include the use of a questionnaire and the possibility of bias among the sample members in answering the questions. It is suggested that this study be conducted for people with obsessive-compulsive disorder in different age groups.

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### Authors contribution

E. Z. conceptualized the study objectives and design.

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### Ethics

None

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