



The role of coping strategies in the relationship between psychological capital and rumination in patients with obsessive-compulsive disorder

Fatemeh Sadat Fatemi¹, Asghar Jafari²

1 Department of Psychology, School of Humanities Sciences, Islamic Azad University, Arak Branch, Arak, Iran

2 Department of Psychology, School of Humanities Sciences, University of Kashan, Kashan, Iran

Original Article

Abstract

BACKGROUND: Obsessive-compulsive disorder (OCD) is a very debilitating disorder that requires lifelong treatment. The aim of this study was to investigate the role of strategies of coping with stress in the relationship between psychological capital and rumination in people with OCD.

METHODS: This was a descriptive-correlational study in which the statistical population included all people with OCD in Kashan, Iran, in 2019. 86 individuals were selected by the convenience sampling method. For data collection, the Coping Strategies Questionnaire (CSQ), Ruminative Response Scale (RRS), and Psychological Capital Questionnaire (PCQ) were used. Data were analyzed using SPSS software and Pearson correlation coefficient and regression analysis.

RESULTS: There was a significant relationship between the strategies of coping with stress and psychological capital with rumination in people with OCD. In addition, coping strategies play a mediating role in the relationship between psychological capital and rumination in individuals with OCD.

CONCLUSION: Therefore, psychologists and counselors working in the field of OCD are advised to pay attention to the role of psychological capital and their coping strategies in providing counseling and psychotherapy interventions for people with this disorder.

KEYWORDS: Coping Strategies; Psychological Capital; Rumination; Obsessive-Compulsive Disorder

Date of submission: 12 Jan. 2021, **Date of acceptance:** 19 Apr. 2021

Citation: Fatemi FS, Jafari A. The role of coping strategies in the relationship between psychological capital and rumination in patients with obsessive-compulsive disorder. *Chron Dis J* 2021; 9(4): 160-6.

Introduction

OCD is a disorder with a high debilitating impact that requires lifelong treatment.¹ According to the definition of the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), obsessive-compulsive disorder (OCD) is a debilitating anxiety disorder.² In recent years, the study of patterns of thinking in emotional disorders and their role in the persistence of these disorders has been the focus of clinical experts and researchers.³ One of these patterns is OCD.

Worry and rumination play a key role in OCD. Several studies have specifically examined rumination in OCD, all of which reporting an increase in rumination in patients with OCD compared to normal individuals.⁴ Rumination is a form of additional cognition that is seen in individuals with this disorder and includes constant mental engagement with an idea or subject and constant thinking about it.⁵ Ruminants in OCD include thoughts that are endlessly reviewed, leading to frustration about the future and negative self-assessments. One of the important concepts of positive psychology that has been seriously considered in the field of behavior in recent years is the concept of psychological capital. Psychological capital is a

Corresponding Author:

Asghar Jafari; Department of Psychology, School of Humanities Sciences, University of Kashan, Kashan, Iran
Email: as_jafari@sub.ac.ir

positive psychological state and a realistic and flexible approach to life, which consists of four components: hope, optimism, resilience, and self-efficacy. Each of these structures is considered a positive psychological capacity and has a valid measurement scale, and is based on theory and research, dependent on the state and ability to grow, and significantly associated with functional outcomes.⁶ There is a difference between optimism and pessimism in subjects with OCD and normal people. In fact, obsessive people have lower levels of optimism. OCD is one of the disorders in which there are signs of pessimism.

In other words, people who show some degree of the characteristic of pessimism and the characteristic of optimism as one of the dimensions of psychological capital is weak in them, show the signs and symptoms of OCD.⁷ People with OCD have inefficient beliefs about themselves that cause them to constantly have extreme negative self-assessments. One of these beliefs is the low resilience and intolerance.⁸ People with OCD usually cannot separate from their own rumination. Inefficient stress coping responses can have negative and uncompromising effects on the process of transformation. In dysfunctional coping strategies, the individual shows irrational and emotional responses such as avoidance, rumination, and blaming themselves and others, or seeks short-term solutions that temporarily alleviate them.⁹⁻¹¹ This process predisposes a person to psychological disorders such as depression and obsessions. People with OCD feel very insecure, always thinking that danger lurks; so they resort to obsessive rituals to avoid danger. For obsessive people, these rituals act as a barrier to keep them safe from the dangers of the world around them.¹ The importance of the present study is that it examines the non-linear (indirect) relationships between psychological capital, rumination, and coping strategies and shows the mediating role of coping strategies in this regard. Examining nonlinear relationships

can provide deeper insights into relationships between psychological structures.¹² Since less attention has been paid to the role of psychological capital and coping strategies in the rumination of people with OCD, the present study was performed aiming to investigate the role of strategies of coping with stress in the relationship between psychological capital and rumination in people with OCD.

Methods

The present descriptive-correlational study was conducted on the statistical population of 200 individuals with OCD, treated in clinics and hospitals in Kashan City, Iran, in 2019. Using the convenience sampling method, 84 subjects were included in the study. The study inclusion criteria were diagnosis of OCD based on a diagnostic interview with a psychiatrist or clinical psychologist, literacy, and sufficient physical and mental ability to complete the study tools. One month was a severe cognitive impairment or other chronic physical and psychological illness. In order to comply with the ethical considerations, the participants entered the study with informed consent and were assured that their personal information would remain confidential. The purpose of the study was explained in a way that did not create bias in participants. Finally, the patients completed the study tools under the supervision of one of the authors who was present at the study site. As a result, they voluntarily and with informed consent completed the Psychological Capital Questionnaire (PCQ), Ruminative Response Scale (RRS), and Coping Strategies Questionnaire (CSQ) proposed by Luthans et al.,¹³ Nolen-Hoeksema and Morrow,¹⁴ and Lazarus,¹⁵ respectively. It should be noted that the subjects were equal in terms of gender ($P < 0.050$ and $X^2 = 166$).

PCQ: This questionnaire is a standardized scale that has been widely used for structures that measure hope, resilience, optimism, and

self-efficacy, and the validity and reliability of these subscales have also been proven. The questionnaire consists of 24 items, with each subscale including 6 items, and the examiner answers each item on a 6-point scale (strongly agree to strongly disagree). In the study by Luthans et al.¹³, the reliability of this scale has been reported above 0.90. In the present study, the internal consistency (IC) of the questionnaire items was calculated to be 0.73 using Cronbach's alpha coefficient.

RRS: This questionnaire assesses four different types of negative mood responses. Response styles consist of two scales of ruminant responses and distractions. The questionnaire consists of 22 items and respondents are asked to rate each on a scale of 1 (never) to 4 (often). Based on empirical evidence, the RRS has a high internal reliability. The Cronbach's alpha coefficient for this questionnaire ranges from 0.88 to 0.92. In this study, the reliability of the questionnaire was obtained as 0.77 using the Cronbach's alpha coefficient.^{14,16}

CSQ: This test has 66 items scored on a 4-point scale (1 to 4) and measures both problem-oriented and emotion-oriented coping strategies. The reliability of this test in a study using Cronbach's alpha coefficient was equal to 0.79. The Cronbach's alpha coefficient of this questionnaire in the present study was 0.69.¹⁶

Statistical methods: The collected data were analyzed using SPSS software (version 21, IBM Corporation, Armonk, NY, USA) and descriptive statistics [mean and standard deviation (SD)] and inferential statistics (Pearson correlation coefficient and hierarchical regression analysis).

Results

To determine the mediating role of strategies of coping with stress in the relationship between psychological capital and rumination in people with OCD, the steps proposed by Baron and Kenny¹⁷ were used considering

hierarchical regression (path analysis).

In the first stage, regression coefficient and psychological capital on rumination and in the second stage, regression, coping strategies, and psychological capital were calculated simultaneously. To investigate the indirect effect of stress coping strategies on rumination, the difference of psychological capital regression coefficient from the first stage to the second stage was investigated. According to Baron and Kenny,¹⁷ if the mediator variable enters the equation, the effect of the exogenous or independent variable decreases from the first to the second order, thus the mediating role is achieved.

The results of the variance development test and hierarchical regression coefficients are presented in table 1, indicating that in the first time the coefficient of multiple determination (R^2) of the model has increased significantly (from 0 to about 60%) and with the entry of intermediate variables in the second order to the model, it is able to significantly increase the amount of variance explained. Therefore, it can be concluded that psychological capital has a significant multiple relationship with rumination and can predict it. Stress management strategies can also predict rumination.

In the following, considering the significance of variance development in the first and second order of the model; the first and second order regression coefficients and the mediating role of stress coping strategies are reported in table 2. The results of this table show that the strategies of return attention strategy, pain reinterpretation strategy, self-talk strategy, strategy of ignoring pain, disaster strategy, and strategy of prayer and hope play a mediating role in the relationship between psychological capital and rumination. According to Baron and Kenny's law,¹⁷ this phenomenon represents the mediating role of coping strategies in the relationship between psychological capital and rumination.

Table 1. Regression variance test of ruminant on psychological capital and coping strategies

Order	Predictive variables	R	R ²	R ² Justified	ΔR ²	F	ΔF Significance
One	Psychological capital	0.78	0.60	0.56	0.60	65.91	0.001
	Psychological capital	0.81	0.65	0.57	0.05	11.34	0.001
	Return attention strategy						
	Psychological capital	0.83	0.68	0.69	0.08	41.50	0.001
	Pain reinterpretation strategy						
Two	Psychological capital	0.81	0.65	0.46	0.05	34.43	0.001
	Self-talk strategy	0.83	0.68	0.57	0.08	13.68	0.001
	Strategy of ignoring pain						
	Psychological capital	0.82	0.67	0.55	0.07	32.41	0.001
	Disaster strategy						
	Psychological capital	0.79	0.62	0.58	0.02	38.27	0.001
	Strategy of prayer and hope	0.66	0.34	0.31	0.04	23.77	0.001

Because β is still significant in the second stage despite the decline, it can be concluded that stress coping strategies play a partial (rather than complete) mediating role in the relationship between psychological capital and rumination in people with OCD. Then, the simultaneous regression model was used to predict coping strategies with psychological capital prediction.

Table 3 shows the correlation coefficient

between psychological capital and coping strategies. Comparison of β coefficients shows that psychological capital has a positive and significant contribution in predicting coping strategies (turning attention, reinterpreting pain, talking to oneself, ignoring pain, and prayer and hope) and inverse and significant contribution in predicting disaster strategy in individuals with OCD. Based on the study results, the final research model can be presented as figure 1.

Table 2. Regression coefficients for the mediating role of strategies of coping with stress in relation to psychological capital and rumination

Predictive variables	Multiplier non-standard (B)	Standard error	β	t value	P
Constant	169.41	3.71	-	-	-
Psychological capital	-0.29	0.30	0.23	16.26	0.001
Constant	168.38	2.98	-	-	-
Psychological capital	-0.22	0.09	-0.68	-29.13	0.001
Psychological capital return attention strategy	-0.20	0.04	-0.26	-08.6	0.001
Constant	165.28	3.02	-	-	-
Psychological capital	-0.24	0.07	-0.65	-17.22	0.001
Psychological capital pain reinterpretation strategy	-0.32	0.01	-0.22	-8.77	0.007
Constant	165.10	2.89	-	-	-
Psychological capital	-0.25	0.01	-0.64	-18.18	< 0.001
Psychological capital self-talk strategy	-0.28	0.20	-0.23	-7.21	< 0.001
Constant	166.21	3.06	-	-	-
Psychological capital	-0.23	0.01	-0.65	-18.02	< 0.001
Psychological capital the strategy of ignoring pain	-0.30	0.01	-0.21	-3.12	0.002
Constant	165.14	2.88	-	-	-
Psychological capital	-0.24	0.01	-0.65	-18.05	< 0.001
Psychological capital disaster strategy	-0.21	0.01	-0.20	-3.09	0.004
Constant	164.21	2.89	-	-	-
Psychological capital	-0.25	0.01	-0.64	-17.82	0.001
Strategy of prayer and hope	-0.20	0.02	-0.18	-2.76	0.001

Table 3. Psychological capital regression coefficients and coping strategies

Predictive variable	Criterion variables	R	R ²	t	β	P
Psychological capital	Return attention	0.62	0.38	16.31	0.62	0.001
	Reinterpretation of pain	0.65	0.42	14.25	0.65	0.001
	Talking to oneself	0.67	0.44	14.62	0.67	0.001
	Ignoring the pain	0.64	0.51	8.42	0.64	0.001
	Creating disaster	-0.61	0.47	8.24	-0.61	0.001
	Prayer and hope	0.62	0.51	11.10	0.62	0.001

Discussion

The purpose of this study was to investigate the role of strategies of coping with stress in the relationship between psychological capital and rumination in individuals with OCD. The results showed that there was a significant relationship between psychological capital and rumination in these subjects. The dimensions of psychological capital can explain some of the changes in rumination in individuals with OCD. Additionally, strategies of coping with stress have a significant mediating role in the relationship between psychological capital and rumination in people with OCD. Psychological capital has a positive and significant contribution in predicting coping strategies (turning attention, ignoring pain, talking to oneself, and prayer and hope) and inverse and significant contribution in predicting disaster strategy in individuals with OCD. In fact, coping strategies in the relationship between psychological capital and rumination in these individuals play a partial (rather than complete) mediating role. This result is consistent with the

results of the studies carried out by Abdolmanafi and Kalangestani Zohrabi and Faghirpoor.^{18,19} Explaining these findings, it can be claimed that having psychological capital enables people to be highly empowered in the face of problems and less affected by everyday life events.^{20,21} People with higher levels of self-efficacy tend to choose challenging tasks and use their efforts and motivational resources to achieve their goals and resist obstacles and problems.²² Hopeful people always think about how to pursue and achieve their goals. They see their past experiences as preparation for the future. They perform well in various aspects of their lives and consider themselves successful in general. Hopeful people can stay motivated and use alternative routes when they encounter an obstacle and do not stop moving.²³ People with high resilience tend to develop new methods when faced with problems. They can move through negative emotional experiences faster and are more likely to experience positive emotions in the midst of their stressful events and activities.²⁴

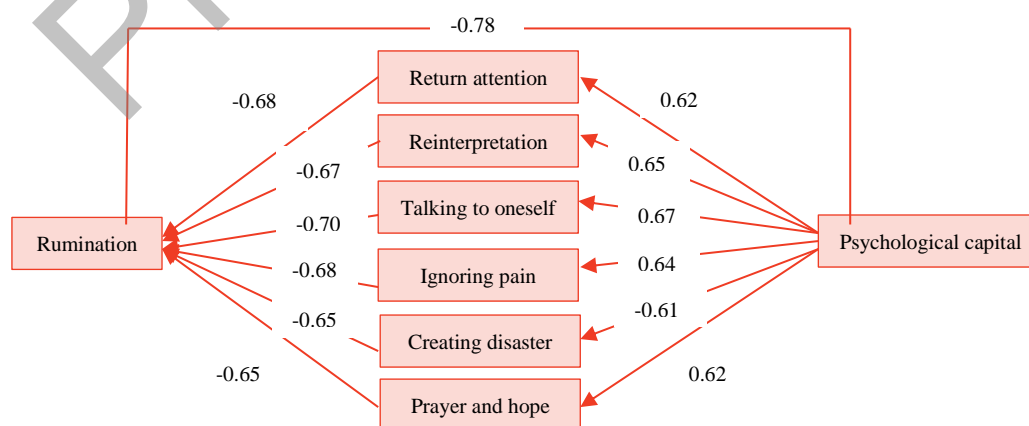


Figure 1. The final research model for the mediating role of coping strategies in the relationship between psychological capital and rumination

These people continue to work harder when faced with problems and even successes and work hard to achieve success. People with higher levels of optimism distance themselves from adverse life events, so they are less likely to experience depression, guilt, self-blame, and frustration, less likely to give in, and more likely to look positively at stressful situations. They resist hardships and look for new ways to solve problems and take advantage of opportunities.²⁵ Because of this, in OCD, psychological stimuli can help them deal with stressors in a more constructive and effective way. Explaining the mediating role of stress coping strategies in the relationship between psychological capital and rumination, it can be stated that coping strategies explain some of the differences in pain intensity, physical disability, and stress observed in people with rumination.

The findings of this study indicate that strategic disaster is non-adaptive and its use in the face of rumination can predict not only the severity of stress, but also some of the differences in stress intensity and depression after controlling rumination, and can explain the physical inability of people with obsessions. Effective coping strategies are negatively related to rumination in subjects with OCD and ineffective coping strategies in the face of catastrophes are directly related to rumination. The mediating role of coping strategies can be both effective and ineffective because psychological capital mainly aims to overcome psychological problems in order to find new solutions. Such a structure is based on positivity and attention to success and equips the individual to achieve positive goals and consequences (not to avoid negative consequences). This mechanism of positive influence and perfectionism, instead of imposing anxiety and worry about not achieving achievable goals and criteria, activates positivity and optimism towards achieving the achievable goals and aspirations in the individual. In the light of this process, the

likelihood of using effective coping strategies increases and ineffective coping strategies become less necessary and effective. There is an inverse relationship between coping strategies and anxiety disorders. Depending on whether the coping strategy is effective, dealing with problems and issues will be active or inactive, followed by different levels of disorders.²² One of the limitations of the present study was the small number of Hajj, which reduces the external validity of the findings of the present study. Therefore, it is suggested that future studies be conducted in large volumes. In addition, given the findings of the present study, it is suggested that the role of coping strategies and psychological capital of OCD be considered in intervention protocols for the treatment of patients with OCD.

Conclusion

Using an inefficient disaster strategy prevents a person from directly and effectively dealing with the conditions and stressors associated with rumination, in addition to reducing his ability to solve the problem. This condition impairs mental cohesion and emotional turmoil, besides reducing mental health. Mental and emotional turmoil also erodes the ability to correctly identify the source of stress and activates rumination in the individuals with OCD.

Conflict of Interests

Authors have no conflict of interests.

Acknowledgments

The protocol of present study was approved by Deputy of Research and Technology, (Code: 1398.001196) Arak Branch, Islamic Azad University, Arak, Iran. The authors would like to appreciate the participants for their contribution to the study.

References

1. International Obsessive Compulsive Disorder Foundation Genetics Collaborative (IOCDF-GC).

- Revealing the complex genetic architecture of obsessive-compulsive disorder using meta-analysis. *Mol Psychiatry* 2018; 23(5): 1181-8.
2. American Psychiatric Association. Diagnostic and statistical manual of mental disorders (DSM-5®). Washington, DC: American Psychiatric Publishing; 2013.
 3. Melli G, Aardema F, Moulding R. Fear of self and unacceptable thoughts in obsessive-compulsive disorder. *Clin Psychol Psychother* 2016; 23(3): 226-35.
 4. Dar KA, Iqbal N. Worry and rumination in generalized anxiety disorder and obsessive compulsive disorder. *J Psychol* 2015; 149(8): 866-80.
 5. Saduk B, Saduk V. Summary of Kaplan & Sadock's synopsis of psychiatry behavioral sciences/clinical psychiatry. Trans. Rezaei F. Tehran, Iran: Arjomand Publications; 2007. p. 273. [In Persian].
 6. Baron RA, Franklin RJ, Hmieleski KM. Why entrepreneurs often experience low, not high, levels of stress: The joint effects of selection and psychological capital. *J Manage* 2016; 42(3): 742-68.
 7. Seligman ME, Ernst RM, Gillham J, Reivich K, Linkins M. Positive education: Positive psychology and classroom interventions. *Oxf Rev Educ* 2009; 35(3): 293-311.
 8. Whitley-Hunter BL. Validity of transactional analysis and emotional intelligence in training nursing students. *J Adv Med Educ Prof* 2014; 2(4): 138-45.
 9. Abdollahi MH, Shahgholian M, Baheshmat S. The role of fatigue and depression in illness perception of patients with Multiple Sclerosis. *Chron Dis J* 2016; 4(2): 39-47.
 10. Razini HH, Juybari SB, Ramshini M. Relationship between coping strategies and locus of control with the anxiety of death in old people. *Salmand Iran J Ageing* 2017; 12(2): 232-41. [In Persian].
 11. Brown C. Social psychology. Thousand Oaks, CA: SAGE Publications; 2006.
 12. Baheshmat S, Hashemi-Razini H, Khaledi A. Identifying the effective factors on depression in patients with multiple sclerosis using structural equation modeling approach: The role of stress, self-esteem, and mindfulness. *Chron Dis J* 2019; 7(2): 80-6.
 13. Luthans F, Avey JB, Avolio BJ, Peterson S. The development and resulting performance impact of positive psychological capital. *Hum Resour Dev Q* 2010; 21(1): 41-67.
 14. Nolen-Hoeksema S, Morrow J. A prospective study of depression and posttraumatic stress symptoms after a natural disaster: The 1989 Loma Prieta Earthquake. *J Pers Soc Psychol* 1991; 61(1): 115-21.
 15. Lazarus RS. Coping theory and research: Past, present, and future. *Psychosom Med* 1993; 55(3): 234-47.
 16. Luminet O. Measurement of depressive rumination and associated constructs. In: Papageorgiou C, Wells A, Editors. *Depressive rumination: Nature, theory and treatment*. Hoboken, NJ: Wiley; 2004. p. 187.
 17. Baron RM, Kenny DA. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *J Pers Soc Psychol* 1986; 51(6): 1173-82.
 18. Abdolmanafi A. Investigating the mediating role of the coping and problem solving styles on the rumination and depression in students. *International Journal of Behavioral Sciences* 2015; 9(1): 61-9.
 19. Kalangestani Zohrabi P, Faghirpoor M. The relationship between psychological resilience and rumination with coping skills among the adolescents in the care centers affiliated to Guilan Welfare Organization. *Int J Human Soc Sci* 2016; 735-45.
 20. Lay CH, Schouwenburg HC, Ferrari JR, Pynchyl TA. *Counseling the Procrastinator in Academic Settings*. Washington, DC: American Psychological Association; 2004.
 21. Philippe FL, Lecours S, Beaulieu-Pelletier G. Resilience and positive emotions: Examining the role of emotional memories. *J Pers* 2009; 77(1): 139-75.
 22. Ghazanfari F, Ghadam Pour EA. The relationship between mental health and coping strategies in citizenship of Khoramabad city. *J Fundam Ment Health* 2008; 10(37): 47-54. [In Persian].
 23. Youssef CM. Resiliency development of organizations, leaders and employees: Multi-level theory building and individual-level, path-analytical empirical testing [PhD Thesis]; Lincoln, Nebraska: The University of Nebraska-Lincoln; 2004.
 24. Luthans F, Youssef CM, Avolio BJ. *Psychological capital: Developing the human competitive edge*. Oxford, UK: Oxford University Press; 2006.
 25. Hendon M, Powell L, Wimmer H. Emotional intelligence and communication levels in information technology professionals. *Comput Human Behav* 2017; 71: 165-71.