



# Role of resilience in relationship between functional and dysfunctional negative emotions and wellbeing in individuals with obsessive-compulsive disorder

## Abstract

**Background:** Obsessive-compulsive disorder (OCD) is a challenging mental health condition marked by intrusive thoughts and repetitive behaviours. Understanding the emotional experiences of individuals with OCD, as well as the role of resilience, is crucial for developing effective therapeutic interventions. This study investigates the association between resilience, functional and dysfunctional negative emotions, and psychological wellbeing in 150 individuals with OCD. **Method:** The study sample comprised 150 individuals, primarily male (77%), with diverse educational backgrounds. Functional negative emotions were reported by 47.33% of participants, dysfunctional negative emotions by 40.6%, and both by 12%. Statistical analyses, including correlations and moderation tests, were conducted to explore the relationships among these variables. **Results:** Significant correlations were found between resilience and both functional and dysfunctional negative emotions ( $p < 0.01$ , 2-tailed). Additionally, a significant positive relationship existed between resilience and psychological wellbeing. Notably, resilience was observed to moderate the link between functional negative emotions and wellbeing. However, it did not significantly impact the relationships between dysfunctional negative emotions or the co-occurrence of both types and psychological wellbeing. **Conclusion:** This study underscores the importance of resilience in individuals with OCD, shedding light on its influence on emotional experiences and overall wellbeing. Specifically, individuals with higher resilience displayed better psychological wellbeing, particularly when facing functional negative emotions. These findings contribute to our comprehension of emotions in OCD and have potential implications for the development of targeted therapeutic strategies aimed at enhancing treatment outcomes. Overall, the study emphasises the need to consider resilience as a valuable factor in the emotional dynamics of OCD.

**Keywords:** Mental health. Emotional experience. Psychological wellbeing.

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## INTRODUCTION

Obsessive-compulsive disorder (OCD) is often characterised by the presence of both obsessions and compulsions. An obsession is an undesired intrusive idea, picture, or drive that enters a person's head frequently. Obsessions are disturbing; however, they are recognised as originating in the individual's thinking and are not imposed by an external force. They are often seen as inappropriate or excessive by the person. A few are recognised as having inflated notions and, infrequently, delusions.[1] In most circumstances, the individual attempts to fight an obsession; nevertheless, in chronic cases, resistance may be little or nonexistent. The percentages represent the frequency found in a survey of 431 OCD sufferers.[2] In the general population, unwanted intrusive thoughts, pictures, or impulses are almost common, and their content is often indistinguishable from that of psychiatric obsessions.[3] Examples include the desire to shove someone beneath a train and the realisation that the stove is still on. The distinction

between a typical intrusive thought and an obsessional thought, according to contemporary psychological theories, is the significance that OCD sufferers attach to the presence and/or substance of the intrusions. Individuals with OCD tend to feel that intrusive thoughts and desires are harmful or unethical, and that they are capable of preventing damage to themselves or others.[4]

Compulsions are repetitious mental or behavioural behaviours that a person feels compelled to undertake. A compulsion may either be overt and noticeable by others, such as checking that a door is locked, or it can be a covert mental behaviour that cannot be noticed, such as mentally repeating a certain phrase. Covert compulsions are often more difficult to resist or monitor than overt compulsions, since they may be done anywhere without others' knowledge and are simpler to execute. A compulsion is not inherently joyful, distinguishing it from impulsive behaviours, such as buying or gambling, that are connected with instant reward. Ritual

is identical with compulsion, but often refers to outwardly observable behaviours.

The psychopathology of OCD includes elevated negative feelings, including worry, sorrow, and dread. There have been several studies that highlight the importance of emotion in OCD. Empirical research has shown the presence of a bi-directional association between negative emotions and OCD, i.e., negative emotions enhance the severity of OCD and severe OCD symptoms increase negative feelings. This is why people with OCD often experience depression. Coping with these unpleasant feelings may reduce the intensity of OCD, provide a sense of control, and contribute to the overall wellbeing of OCD patients.

## Hypotheses

This research examined the relationship between resilience, functional and dysfunctional negative emotion, and psychological health in 150 OCD patients.

1. There will be significant relationship between functional and dysfunctional negative emotions and resilience.
2. There will be significant relationship between resilience and wellbeing.
3. Resilience will moderate the relationship between functional and dysfunctional negative emotions and wellbeing.

## MATERIALS AND METHOD

### Participants and procedure

For the research, 150 people who met the tenth revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10)[5] criteria for OCD diagnosis were selected for the study. Participants filled out an informed consent form and provided basic demographic data (such as age, gender, and ethnicity) before being assessed to determine their scores on resilience, functional and dysfunctional negative emotions, and wellbeing. Ethical approval was obtained from the Institutional Review Board- Ethics Committee, IIS University, Jaipur, Rajasthan, India.

### Statement of human and animal rights

Ethical standards for experiments involving human subjects were followed in accordance with the Helsinki Declaration of 1975, as revised in 2000.

### The Yale-Brown Obsessive-Compulsive Scale (Y-BOCS)

The Yale-Brown Obsessive-Compulsive Scale (Y-BOCS)[6] by Wayne K. Goodman and colleagues was established in 1989 as a clinician-administered questionnaire to evaluate the presence and severity of obsessive-compulsive symptoms. The severity scale consists of ten items; these items are five-point Likert-type scales.

### The Functional and Dysfunctional Negative Emotion Scale (FADNES)

The ten-item Functional and Dysfunctional Negative Emotion Scale (FADNES) by Cristina Mongoase is designed

to assess functional and dysfunctional negative emotional states.[7] Each question contains four possible responses: a functional emotion (e.g., worried), a dysfunctional emotion (e.g., anxious), both functional and dysfunctional (e.g., I felt both concerned and anxious), or neither (i.e., "I have not been experiencing this emotion"). They are on a four-point Likert scale ranging from one ('a little') to four ('very much').

### The Brief Resilience Scale

The Brief Resilience Scale (BRS)[7] consists of six components. On a five-point Likert-type scale ranging from one to five, respondents are asked to rate the adequacy of each statement in describing their behaviour and activities.

### The Ryff Psychological Wellbeing Scale

The 18 items Ryff Psychological Wellbeing Scale[9] evaluates six components of wellbeing and happiness: autonomy, environmental mastery, personal development, good relationships with others, life purpose, and self-acceptance. The dependability coefficient is 0.78.

### Statistical analysis

All statistical computations were performed using Statistical Package for Social Sciences (SPSS) version 22.0 computer software. Descriptive statistics were calculated for mean age, percentage distribution of scores of functional, dysfunctional, and functional-dysfunctional negative emotions. Moderation analysis was employed using PROCESS macro, version 4.

## RESULTS

The objective of this study was to investigate the impact of resilience and negative emotions, including functional and dysfunctional emotions, on the wellbeing of individuals with OCD. Total sample size taken was 150. The mean age of the patients with OCD was 29.60 years with 77% being male and 23% being female. Of the participants, 24% had a postgraduate education, 39% had a graduate education, 11% were pursuing graduation, 20% had completed their education up to 12th grade, and six per cent had completed their education up to class tenth (Table 1).

Findings reveal that 47.33% of the individuals had higher scores on the functional negative emotion scale, 40.66% had higher scores on the dysfunctional negative emotion

**Table 1:** Sociodemographic characteristics

Gender	
Male	115 (76.66%)
Female	35 (23.33)
Mean age (in years)	29.60
Educational qualification	
10th	9 (6%)
12th	30 (20%)
Pursuing graduation	17 (11%)
Graduate	58 (39%)
Postgraduate	36 (24%)

scale, and 12% had higher scores on items measuring both functional and dysfunctional components of emotion.

The study discovered a negative correlation between resilience and functional negative emotion, with a significance level of 0.01 (2-tailed). Furthermore, the results demonstrated that resilience was also significantly associated with dysfunctional negative emotions. Positive correlation was found between resilience and wellbeing (Table 2).

Moderation analysis was done using PROCESS macro developed by Andrew Hayes, version 4. The results revealed that resilience moderated the relationship between functional negative emotion and wellbeing (Table 3). However, it was found that resilience did not significantly influence the relationship between dysfunctional negative emotion and wellbeing, as well as the relationship between functional-dysfunctional negative emotions and wellbeing (Tables 4 and 5). Based on this result, the moderating effect of resilience on the relationship between emotions and psychological wellbeing was contingent on the functional nature of emotions. However, when emotions shifted towards dysfunctionality, the impact of resilience on psychological wellbeing was diminished.

## DISCUSSION

Emotions play a crucial role in OCD as individuals with OCD often experience intense and distressing negative emotions such as fear, disgust, and anxiety in response to their obsessions. Functional negative emotions, such as anxiety or fear, may serve as a useful adaptive response to the perceived threat posed by the obsession. In contrast, dysfunctional negative emotions, such as shame or guilt, may be unhelpful and hinder the individual's ability to cope with OCD. It is essential to note that negative emotions in OCD are not solely a result of the disorder's symptoms but may also be influenced by other factors such as personality traits, environmental stressors, and genetic predisposition. This study revealed that resilience was significantly correlated with functional negative emotion, dysfunctional negative emotion, and functional-dysfunctional negative emotions.

This indicates that individuals who possess greater levels of resilience may experience fewer negative emotions and thus may be better equipped to cope with the challenges associated with OCD. According to research, as individuals grow older and develop, they tend to acquire better coping mechanisms for dealing with negative emotions during challenging situations.[10] Furthermore, the findings suggest a significant positive relationship between resilience and wellbeing in individuals with OCD. This implies that fostering resilience in individuals with OCD could be an effective strategy for enhancing their overall wellbeing. Another study discovered that individuals with high levels of resilience often experience more positive emotions, perceive anxiety-inducing tasks as less threatening, recover more quickly from negative emotional responses, and demonstrate greater optimism in adverse situations compared to those with low levels of resilience. Conversely, individuals with lower levels of resilience tend to struggle with regulating negative emotions and exhibit heightened reactivity when faced with stressful tasks.[11]

Additionally, the results indicated that there was a significant positive association between resilience and wellbeing among individuals with OCD. This suggests that enhancing resilience in individuals with OCD may be a useful approach for improving their overall wellbeing. Moreover, the results of the moderation analysis in the study discussed earlier suggest that resilience moderated the relationship between functional negative emotion and wellbeing. However, resilience did not significantly moderate the relationship between dysfunctional negative emotion and wellbeing, or the relationship between functional-dysfunctional negative emotions and wellbeing. This implies that while resilience may play a significant role in buffering the negative impact of functional negative emotion on wellbeing, it may not be as effective in mitigating the impact of dysfunctional negative emotions. It is important to note that while resilience can help individuals cope with negative emotions, there may be situations where the level of dysfunctionality of emotions becomes too great, and resilience may not be enough to mitigate the negative impact on wellbeing.

**Table 2:** Correlation between resilience and functional, dysfunctional negative emotions, psychological wellbeing

Negative emotions and psychological wellbeing	Resilience	Significance
Functional negative emotion		Correlation is significant at the 0.01 level (2-tailed)
Pearson correlation	-0.669	
Significance (2-tailed)	<0.001	
Number	71	
Dysfunctional negative emotion		Correlation is significant at the 0.01 level (2-tailed)
Pearson correlation	-0.904	
Significance (2-tailed)	<0.001	
Number	18	
Psychological wellbeing		Correlation is significant at the 0.01 level (2-tailed)
Pearson correlation	0.725	
Significance (2-tailed)	<0.001	
Number	150	

**Table 3:** Resilience as a moderator between functional negative emotion and psychological wellbeing

	Coefficient	Standard error (SE)	t	p
Constant	-8.679	2.743	-3.164	0.002
Functional negative emotion	2.477	0.751	3.301	0.002
Rs	4.613	0.868	5.316	<0.001
Int_1	-1.124	0.252	-4.457	<0.001

R-squared=0.608, mean squared error (MSE)=1.449, F=34.60, p&lt;0.001

**Table 4:** Resilience as a moderator between dysfunctional negative emotion and psychological wellbeing

	Coefficient	Standard error (SE)	t	p
Constant	0.050	2.206	0.022	0.982
Dysfunctional negative emotion	0.298	0.676	0.441	0.666
Rs	1.693	0.656	2.581	0.022
Int_1	-0.358	0.306	-1.168	0.262

R-squared=0.893, mean squared error (MSE)=0.588, F=38.76, p&lt;0.001

**Table 5:** Resilience as a moderator between functional-dysfunctional negative emotion and psychological wellbeing

	Coefficient	Standard error (SE)	t	p
Constant	2.453	1.157	2.12	0.038
Functional-dysfunctional negative emotion	-0.312	0.338	-0.924	0.359
Rs	1.349	0.350	3.852	<0.001
Int_1	-0.308	0.129	-2.390	0.020

R-squared=0.867, mean squared error (MSE)=0.517, F=124.328, p&lt;0.001

Additionally, it is worth noting that resilience is not a fixed trait, and can be strengthened through various interventions, such as therapy and mindfulness-based practices. Therefore, while resilience may not be enough to mitigate the negative impact of dysfunctional negative emotions in some individuals, it is still an important factor to consider in the management of emotions in OCD and may be strengthened through various interventions. This highlights the potential benefits of interventions that aim to improve resilience among individuals with OCD, such as cognitive behavioural therapy (CBT) and mindfulness-based interventions. By enhancing an individual's resilience, these interventions may help to reduce the impact of negative emotions on their wellbeing and improve their ability to cope with the challenges of living with OCD.

## Conclusion

This study investigated the interplay between resilience, functional and dysfunctional negative emotions, and

psychological wellbeing in individuals with OCD. Our findings highlighted the significance of resilience in shaping emotional experiences and overall wellbeing. Resilience served as a buffer against the adverse effects of functional negative emotions on wellbeing. However, it showed limited influence in the context of dysfunctional negative emotions. These results underscore the importance of addressing resilience in OCD management, though further research is needed to refine intervention strategies. Overall, this study offers valuable insights into improving the wellbeing of individuals with OCD by emphasising the role of resilience.

## AUTHOR CONTRIBUTIONS

SD was primarily responsible for the conceptualisation and design of the study. She collected and analysed the data, and interpreted the results. She also played a significant role in drafting and revising the manuscript. MS made substantial contributions to the study's conceptualisation, design, and methodology. She provided valuable insights during the interpretation of results and contributed to the intellectual content of the paper. She gave final approval for the manuscript's submission.

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