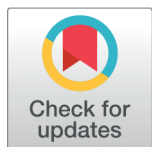


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A Study of Intolerance of Uncertainty and Trauma in OCD Patients

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Abstract

Objectives: Intolerance of Uncertainty (IU) and Trauma both are seen in the OCD population and have been recognized as a vital component of the illness. Both can interfere with the progress of the treatment yet limited research has been documented comparing OCD patients on the basis of trauma (its presence or absence) in the context of IU and OCD severity. The current study therefore highlights the role of IU and Trauma in OCD patients who have experienced trauma compared to those who have not experienced trauma. **Methods:** For the current study 188 OCD patients were recruited from private clinics in Delhi NCR over a period of 12 months (2021-2022) in the 18–50 age range, the total sample was evaluated for OCD severity, IU, and Trauma through YBOCS severity rating scale, Intolerance of Uncertainty Scale and Early traumatic events measure of Childhood trauma and recent trauma scale respectively. The sample was divided into two groups (94 had trauma history, and the remaining 94 had none). **Findings:** Results highlighted significantly higher OCD severity and IU in the trauma group and a significant positive correlation was discovered amongst IU, OCD, and trauma. Clinicians can utilize this knowledge by combining IU and trauma-based intervention in the management of OCD. **Novelty:** The findings add to the existing knowledge of OCD by incorporating the two significant variables together (IU and Trauma) through a comparative study that has not been much researched more so in India.

Keywords: Obsessive Compulsive Disorder (OCD); Trauma; Core Beliefs; Cognitive Behavioral model

1 Introduction

Intolerance of Uncertainty (IU) is a person's unwillingness to tolerate situations and circumstances that are not known or are not certain. It is a natural tendency for people to be sure of things around them and to be more certain, to feel secure and safe. Uncertainty can create a sense of anxiety, someone who cannot tolerate it would find the circumstances upsetting, even intolerable, and may engage in a wide range of methods and actions that can resolve or make them avoid that uncomfortable experience.

Uncertainty triggers a fear response in those with high IU levels making them view it as potentially harmful, negative and something to be avoided. This fear response includes automatic thoughts about one's incapacity to handle such circumstances and behavioral measures to build certainty.

Obsessive-compulsive disorder (OCD) has been linked to IU and has one of its core beliefs as IU. OCD comprises obsessions and/or compulsions; obsessions manifest themselves as being intrusive, repetitive, and unwanted thoughts, urges, or images that are frequently accompanied by anxiety. Compulsions are defined as compulsive, repetitious actions or thoughts that someone feels driven to perform as a result of an obsession to follow rigid rules or feel fulfilled⁽¹⁾. Individuals with OCD have their interpretations about the environment around them and certain core beliefs that may lead to the maintenance of the illness, IU was found to be one of those core beliefs⁽²⁾. In the absence of obvious danger indicators, the majority of people feel confident enough to consider a situation to be safe. At the same time, OCD sufferers who have high IU exaggerate the significance of uncertainty. In an attempt to regain a sense of certainty, they then partake in neutralizing acts thereby increasing OCD severity⁽²⁾. Salkovskis' Cognitive Model of OCD (1985) suggested that when an individual interprets/appraises intrusive thoughts as reflecting a high level of personal significance and responsibility, they turn into clinical obsessions and compulsions become attempts to eliminate intrusions and to avert any potentially detrimental outcomes⁽³⁾. These beliefs and cognitive misinterpretations play an important part in the evolution and continuity of illness-related symptoms.

Trauma experiences formed during childhood can predispose individuals towards developing OC symptoms thereby also making them vulnerable to developing cognitive biases and misinterpretations of thoughts⁽⁴⁾. Both trauma and IU are known to create cognitive biases and interpret events as potentially threatening⁽⁵⁾. If the grief isn't processed or mourned these trauma-related emotions can behave like a volcano ready to erupt on the smallest of triggers⁽⁶⁾. The understanding of traumatic events as per DSM 5 can be explained as, exposure to sexual assault, severe injury, or death, either real or threatened⁽⁷⁾. A person's physical and psychological reactions to a traumatic incident are also seen as components of trauma. Rachman supports the association between OCD and traumatic experiences in his betrayal and contamination theory. According to him, betrayal is the feeling that someone you trusted has intentionally hurt you or withheld something from you, leading to a sense of contamination, thereby adding to the traumatic experience of the individual⁽⁸⁾.

IU and trauma have the potential to interfere with the overall management of OCD patients, for instance, while practicing exposure tasks, a patient with high IU can delay reaching the hierarchy due to IU-related thoughts; In the same manner, if trauma-related triggers are exposed in treatment process without teaching patients the appropriate skills to deal with them, it will be counterproductive. Despite its significance, very little is known about this concept as a whole. While few studies are comparing IU in OCD and non-OCD populations⁽⁹⁾ others are highlighting a positive relationship between IU and trauma^(10,11) and some studies trauma-related studies in OCD patients⁽¹²⁻¹⁴⁾, yet, to our knowledge, there has been a dearth of research globally that studies IU and OCD in groups of OCD patients- with experience of trauma and no experience of trauma. In the present study, we have tried to bridge this research gap more so from an Indian perspective. The current study was therefore designed to compare IU and OCD severity in OCD patients who have experienced trauma history and patients who have not experienced trauma. Additionally, the study also examined the relationship among the variables of IU, trauma, and OCD.

2 Methodology

2.1 Sampling and Procedure of Data Collection

A cross-sectional study design was followed, and purposive sampling was used to collect the sample. The sample consisted of 188 patients ranging in age from 18 to 50 years. All had a clinical diagnosis of obsessive-compulsive disorder; all participants were recruited from private clinics in Delhi NCR over 12 months (2021-2022). The total sample was evaluated for OCD severity, IU, and Trauma through the YBOCS severity rating scale, Intolerance of Uncertainty Scale, and Early traumatic events measure of Childhood trauma and recent trauma scale respectively. The sample was divided into two groups (94 had trauma history, and the remaining 94 had none). The psychiatrists referred the diagnosed cases of OCD for data collection. The participants of group 1 consisted of 41 males and 53 females with average age was 28.44 years. Amongst them 66% had cleared the intermediate level of education and 34% were graduates. Similarly, 52 females and 42 males comprised group 2 with a mean age of 29.01 years. 62 individuals from group 2, 66% were educated till grade 12 and 34% were graduates.

Before their participation, the participants provided informed consent, and the confidentiality of their data was guaranteed. After being given the test booklet, the participants were told how to complete each test. The individuals spent approximately 20 minutes filling out the test questionnaires. Queries (if any) were resolved. People who had any other psychiatric illness or physical illness besides mild depression were excluded from the study.

2.2 Measures of assessment

2.2.1 Demographic details sheet

This proforma included basic sociodemographic details like age, gender, education, etc.

2.2.2 Yale-Brown Obsessive-Compulsive Scale⁽¹⁵⁾:

There are several different kinds of obsessions and compulsions listed in the detailed symptom checklist of the YBOCS. It also measures the degree (severity) of the obsessions and compulsions. There are 19 total items in the severity measures; the first five are for obsessions, and the remaining five are for compulsions. The remaining items, such as avoidance and insight, are significant for clinical purposes aside from severity. The test displayed good psychometric properties.

2.2.3 Childhood trauma and recent trauma scale⁽¹⁶⁾:

There are 13 questions in all, separated into two categories: current traumatic events (7 questions) and early traumatic events (6 questions). The early traumatic events measure was used for this study, and the items are on a 7-point Likert scale (1 being not at all traumatic and 7 being extremely traumatic). Six domains of traumatic experiences are covered in this brief survey. The measure exhibits robust psychometric qualities.

2.2.4 Intolerance of uncertainty scale⁽¹⁷⁾:

The test is composed of 12 questions, and uses a 5-point Likert scale for measurement of IU with fair psychometric properties.

2.3 Statistical Analysis

The obtained data was analyzed using a t-test to compare the two groups. The link between OCD, trauma, and IU was assessed using Pearson's correlation. SPSS was used to conduct statistical analysis.

3 Results and Discussion

According to the findings [Table 1], OCD patients who had experienced trauma (Group 1) had IU scores that were significantly higher ($M = 48.49$, $SD = 5.06$) than those of OCD patients who had not experienced trauma (Group 2) ($M = 33.87$, $SD = 7.24$), $t(186) = 16.02$, $p < .01$. Additionally, contrast to OCD patients who have not experienced trauma ($M = 22.09$, $SD = 5.69$), OCD patients with trauma history, had a significantly greater severity of OCD ($M = 31.85$, $SD = 3.33$), $t(186) = 14.34$, $p < .01$.

Table 1. Group comparison of OCD patients who have experienced trauma and who have not experienced trauma on IU and OCD severity

Variables	OCD and Experience of trauma		OCD and No Trauma		t (186)
	M	SD	M	SD	
Intolerance of Uncertainty (IU)	48.49	5.06	33.87	7.24	16.02**
OCD severity	31.85	3.33	22.09	5.69	14.34**

** $p < .01$

Results [Table 2] illustrate the study's variables' relationship, Intolerance of uncertainty, OCD, and Trauma, in OCD patients who have experienced trauma ($n=94$), the findings showed a significant strong positive association ($r=0.52$, $p < .01$) between trauma history and OCD severity, suggesting that the more traumatic experience, the more the OCD severity and vice versa. Additionally, a significant positive correlation ($r= 0.70$, $p < .01$) was observed between OCD and IU; the higher the intolerance of uncertainty, the more intense OCD symptoms are, and vice versa. The positive association between trauma and intolerance of uncertainty is further shown in Table 2, where a significant positive relationship ($r=0.55$, $p < .01$) is noted. This suggests that the more severe the trauma, the higher the intolerance of uncertainty, and the other way around.

Table 2. Relationship of study variables in OCD group with Experience of trauma

Serial Number	Variables	n	Mean	SD	1	2	3
1	IU	94	48.49	5.06	-		
2	OCD severity	94	31.85	3.33	0.70**	-	

Continued on next page

Table 2 continued						
3	Trauma	94	5.74	0.86	0.55**	0.52**
**p<.01						

[Table 3] presents the correlation between variables of Intolerance of uncertainty and OCD for group 2 (OCD without Trauma experience). The result [Table 3] outlines a significant positive relationship between OCD and Intolerance of Uncertainty ($r= 0.71$, $p<.01$), the higher the intolerance of uncertainty the higher the OCD and vice versa.

Table 3. Relationship of study variables in OCD group without trauma

Serial Number	Variables	n	M	SD	1	2
1	IU	94	33.87	7.24	-	
2	OCD severity	94	22.09	5.69	0.71**	-
**p<0.01						

Overall, the results depict that IU and OCD severity were both higher in OCD patients who had experienced trauma as compared to OCD without trauma. The study also highlights the link between IU, Trauma, and OCD, results highlighted a significantly positive relationship among these variables.

Evidence linking IU with OCD symptoms highlights IU as one of the core beliefs found in OCD⁽²⁾. Patients have usual anxiety-provoking and catastrophic intrusive thoughts around various themes in daily lives “Worse might happen if I didn’t recheck the door” and “My family will die If I didn’t bow my head 3 times”, these beliefs generate a sense of ambiguity, fear and uncertainty making them indulge in reassurance seeking or neutralizing acts to gain a sense of certainty and control. These individuals have front-limbic hyperreactivity to uncertainty⁽¹⁸⁾ and this heightened IU can be a roadblock in the therapy work⁽¹⁹⁾. In a comparative study it was found that there was a notable and significant difference in the two groups’ intolerances of uncertainty (individuals with OCD and with no OCD) and specifically, the average score of OCD patients for intolerance of uncertainty was higher than that of non-anxious participants⁽⁹⁾. A recent study investigated the relationship between compulsion severity and intolerance of uncertainty in OCD patients, the result data showed that those with more IU had more intense compulsions; Compulsions provide a momentary reprieve from the distress caused by uncertainty; this, in turn, reduces one’s threshold for accepting uncertainty in the future by negative reinforcement⁽²⁰⁾. It has also been noted that the relationship between IU and the severity of OCD symptoms was positively moderated by emotion-related impulsivity⁽²¹⁾. The most severe symptoms, especially checking, washing, and worrying, were predicted by increased levels of emotion-related sensitivity and IU⁽²¹⁾. Similarly, a different study done in 2019 found that high IU predicted OCD symptoms one year later in a large cohort of children and early adolescents⁽²²⁾. Despite the presence of trauma in the form of stressful life events that can predispose people to develop OCD symptoms⁽²³⁾, not much research has been reported in the context of IU and trauma. The current study highlights this gap in the current state of knowledge by comparing the two groups (trauma and no trauma) of OCD patients.

Trauma experiences in childhood can trigger a feeling of being unsafe and thereby a constant fight for feeling secure, safe, and in control in adulthood. Thus, trauma can be a predictor of IU⁽²⁴⁾ there has been a recent study that revealed intolerance of ambiguity as a mediator in the association of risk of suicide and exposure to adverse life events in childhood⁽²⁵⁾. Adverse experiences in childhood can be linked to IU, which in turn is associated with suicide risk. Similarly, a recent study⁽²⁴⁾ highlights the relationship between young adults’ experiences of child abuse (emotional, physical, and sexual) and intolerance for uncertainty, out of the three categories of child abuse examined, the findings indicated that only emotional abuse had a substantial and positive correlation with an intolerance for uncertainty and early emotional abuse exposure may improve a person’s subsequently capacity to handle ambiguity in later lives⁽¹⁰⁾. As understood, trauma can impact IU and IU can increase OC severity, the previous studies done in this area have not highlighted this current combination studied here. Results of the current study indicated higher IU in group 1 (OCD group with trauma history) as compared to group 2 (OCD without history). Further, it also showed a positive relationship between trauma and IU.

Interaction between OCD and trauma-related experiences has previously been researched effectively, especially in communities of anxiety and related disorders. The current study findings reveal higher OCD severity in OCD patients with trauma history in contrast to OCD patients who had never experienced trauma, and it was also shown that trauma and OCD were positively correlated. In a study conducted in 2020, it was examined how childhood abuse or trauma affected OCD’s causation and maintenance and it was furthermore reflected that even after surviving trauma as children, OCD symptoms persisted⁽¹³⁾. These findings align with the findings of a recent research conducted in China that examined the genetic basis of behavior, it demonstrated how the PGRN gene and trauma from childhood can be strongly linked to the development of OCD, as, how individuals with OCD, who have experienced more traumatic experiences in childhood may have greater severity of clinical signs and symptom⁽¹⁴⁾. A recent systematic review included twenty-four studies it was reflected that overall, there was

support for a strong correlation between the severity of OCD and childhood trauma, with the majority of research utilizing OCD samples, a small number using samples containing a range of mental diseases, and another few using samples from the general community⁽¹¹⁾, part of these findings are in line with our current study, these previous researches did compare OCD patients with healthy counterparts in the context of trauma, however comparing the severity of OCD in OCD patients with traumatic history with OCD with no traumatic history can provide better insights to management of OCD, the present study focused on this overlooked aspect. This finding can also help in being mindful of the patient's history before initiating core therapy work as before teaching strategies to deal with traumatic memories, ERP may be ineffective.

4 Conclusion

The present study points out the vital role of IU and trauma in OCD patients, more so comparing the OCD patients in two groups based on the presence and absence of trauma history, despite their role in conceptualizing and managing the illness, this particular comparative research has been limited, and to our knowledge, there is no research depicting this comparison and relationship in the Indian context. The current study, however, did not categorize the various types of traumas and each of their impact on OCD severity and themes, further exploration can be carried out in this area. Findings from the current study can be utilized when dealing with such a combination of patients (presence of trauma and high IU), the clinicians/ therapists can work on the reduction of IU and combine trauma-focused work before initiating ERP-based work for a better outcome.

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