Psychological Mechanisms in Obsessive Compulsive Disorder: The Role of Intolerance of Uncertainty

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Introduction

A large body of research on obsessive compulsive disorder (OCD) has sought to understand the role of various transdiagnostic psychological constructs that may contribute to the development and maintenance of OC symptoms. These psychological mechanisms include both emotional and cognitive processes that may underlie OC symptoms.

However, previous research examining the role that these mechanisms play in OCD is fairly disparate, with researchers often focusing separately on individual mechanisms. It is thus not clear how these mechanisms relate to one another, and how each may be uniquely associated with OC symptoms.

The current study sought to shed light on this question by examining the relationship between OC symptoms and a number of commonly studied psychological mechanisms including perceived control, experiential avoidance, distress tolerance, emotion reactivity, and intolerance of uncertainty. More specifically, this study examined the extent to which each of these mechanisms uniquely contributes to OC symptoms.

Method

Participants

Participants included 561 undergraduates from a large southeastern university. 357 (63.6%) were female and 405 (72.2%) identified as Caucasian.

Measures

- Anxiety Control Questionnaire (ACQ)
- Acceptance and Action Questionnaire-II (AAQ-II)
- Depression Anxiety Stress Scale (DASS)
- Distress Tolerance Scale (DTS)
- Emotion Reactivity Scale (ERS)
- Intolerance of Uncertainty Scale-12 (IUS)
- Obsessions and Compulsions Inventory Revised (OCI-R)

Table 1. Correlations between psychological mechanisms and OC symptoms.

	OCI-R Total	OCI-R Obsess	OCI-R Washing	OCI-R Check	OCI-R Order	OCI-R Neutr
ACQ-Int	-.41	-.47	-.18	-.37	-.23	-.25
ACQ-Ext	-.32	-.27	-.22	-.27	-.21	-.18
AAQ-II	.43	.55	.19	.35	.22	.22
DTS	-.32	-.37	-.15	-.26	-.19	-.20
ERS	.42	.42	.18	.37	.26	.25
IUS	.55	.48	.29	.46	.44	.32

All $ps < .01$

Table 2. Regression model predicting OC symptoms from psychological mechanisms.

	Total R^2	$R^2 \Delta$	β	t	p
Step 1: General Distress	.18**				
1. DASS depression			.13	2.48	.01**
2. DASS anxiety			.19	3.44	<.01**
3. DASS stress			.18	3.08	<.01**
Step 2: Psychological Mechanisms	.35**	.17**			
1. DASS depression			.08	1.52	.13
2. DASS anxiety			.09	1.73	.09
3. DASS stress			.04	0.76	.45
2. ACQ-Int			-.12	-1.93	.06
3. ACQ-Ext			-.09	-1.85	.07
4. AAQ-II			.00	-0.01	.99
5. DTS			.05	1.11	.27
6. ERS			.01	0.21	.833
7. IUS			.39	8.08	<.01**

Procedure

Participants completed self-report questionnaires via a web-based survey. Data were checked for integrity using two questions designed to measure attention (e.g. "While watching television, have you ever had a fatal heart attack?"). Data from participants who did not respond correctly to these items (n = 64) were not used in subsequent analyses.

Results

Pearson correlation coefficients were calculated between all study measures of psychological mechanisms and OC symptoms. Results indicated that distress tolerance, experiential avoidance, intolerance of uncertainty, perceived control of internal and external experiences, and emotional reactivity were all significantly correlated with OC symptoms (Table 1). As expected, intercorrelations between psychological mechanism were high, r's = .32-.65, p's <.01.

A hierarchical linear regression model predicting OC symptoms from the mechanisms was then conducted to understand the unique contributions of each (Table 2). Scores on the measure of general distress were entered at the first step, and measures of psychological mechanisms were entered at the second step. The final model accounted for 35% of the variance in scores on the OCI-R, with only intolerance of uncertainty emerging as a significant, unique predictor.

Discussion

The results from this study indicate that while all psychological mechanisms were significantly related to OC symptoms, only intolerance of uncertainty emerged as a unique predictor of OC symptoms. That is, intolerance of uncertainty predicted OC symptoms over and above both general distress and all other transdiagnostic constructs thought to be related to OC symptoms.

These results suggest that intolerance of uncertainty may play a particularly important role in the development and maintenance of OC symptoms. This may be because intolerance of uncertainty captures the doubt that is often implicated in OCD, while the other constructs do not. These results also suggest that other commonly studied constructs may not uniquely predict OC symptoms. However, since these findings are preliminary, future research replicating these findings in clinical samples is necessary to confirm the relative contributions of each mechanism.