

Understanding the link between insomnia and OCS

Cognitive fusion, anxiety sensitivity, and distress tolerance as mediators

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INTRODUCTION

- Sleep disturbance has been implicated as a potential causal process in the onset and maintenance obsessive-compulsive disorder (OCD), e.g., 1,2
- Research has shown high rates of sleep problems in OCD,² and prospective work has begun to suggest this relationship may be bidirectional, with sleep disturbance both arising from and contributing to OCD symptoms (OCS) over time.^{e.g., 2,3}
- However, much remains unknown regarding the specific pathways that link sleep to OCS.
- Moreover, research has generally focused on obsessions and compulsions broadly, rather than conceptually meaningful subtypes of OCS that may offer more tailored implications for symptom mechanisms and optimal intervention procedures.⁴
- Thus, our study aimed to identify cognitive, affective, and behavioral factors that mediate the relationship between sleep and OCS, and the specificity of these effects for OCS dimensions (contamination, responsibility for harm, unacceptable thoughts, symmetry).

METHODS

- We examined processes robustly implicated in the risk for OCD and theoretically linked to sleep based on basic research: cognitive fusion (CF; Cognitive Fusion Questionnaire⁵), distress tolerance (DT; Distress Tolerance Scale⁶), and anxiety sensitivity (AS; Anxiety Sensitivity Index-Version 3⁷).
- A large sample of undergraduate students (N=253) completed measures of insomnia severity (IS; Insomnia Severity Index), OCS (Dimensional Obsessive Compulsive Scale), CF, DT, and AS. Hypotheses were investigated at the .05 alpha level with zero-order correlations and mediation analyses in PROCESS.¹⁰
- Independent models were run with each OCS dimension predicted by IS, and CF, DT, and AS entered separately as mediators. Then, a parallel model was then run with mediators entered concurrently.

RESULTS

- IS was associated moderately with OCD concerning responsibility for harm and unacceptable thoughts, and weakly with contamination and symmetry (rs= .13-.37).
- In the separate mediation models, CF, AS, and DT all significantly mediated (indirect effects: .05-.16, zs > 2.58) the relationship between IS and each OCS dimension.
- In the combined model, however, only AS significantly mediated the relationship between ISI and contamination and symmetry, while both CF and AS emerged as significant mediators of the link between ISI and OCS regarding responsibility for harm and unacceptable thoughts.

DISCUSSION

- Our findings provide further empirical support for the link between sleep disturbance and OCS severity.
- These results replicate prior research that this relationship is stronger for symptoms characterized by unacceptable, intrusive cognitive phenomena.
- Moreover, we identified several potential cognitive-affective mediators of this relationship, including CF and AS, that may be exacerbated by sleep deprivation and in turn exacerbate specific OCS.
- Findings suggest that CF and AS in particular warrant further examination in multi-method and longitudinal research aimed to advance our understanding of the interactive, bidirectional relationships between sleep disturbance and OCD.

Cognitive fusion and anxiety sensitivity contribute to the association between sleep disturbance and obsessive-compulsive symptoms (OCS), particularly for unacceptable thoughts.



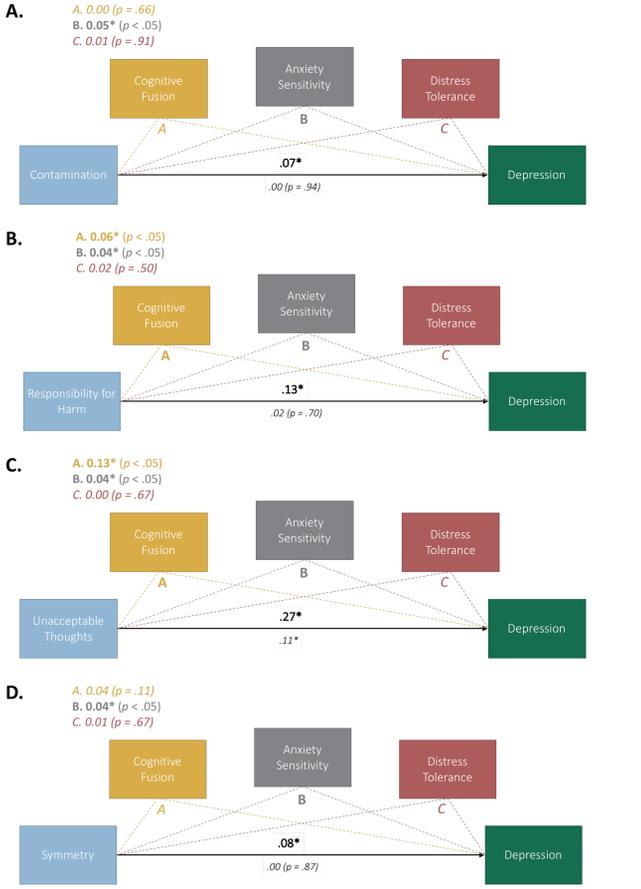
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Table 1. Correlation Matrix

	1	2	3	4	5	6	7	8
1. DOCS Contamination	-							
2. DOCS Harm	0.50*	-						
3. DOCS Unacceptable Thoughts	0.28*	0.38*	-					
4. DOCS Symmetry	0.31*	0.33*	0.26*	-				
5. ISI	0.13*	0.23*	0.37*	0.15*	-			
6. CFQ	0.21*	0.38*	0.53*	0.29*	0.49*	-		
7. DTS	-0.21*	-0.34*	-0.39*	-0.25*	-0.48*	-0.70*	-	
8. ASI	0.33*	0.35*	0.43*	0.29*	0.35*	0.61*	-0.60*	-

Figure 1. Combined meditation model with anxiety sensitivity, distress tolerance, and cognitive fusion linking sleep disturbance and OC symptoms.



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