PUBLISHING INSTITUTE
Journal Website

Article history:
Received 08 March 2026
Revised 24 May 2026
Accepted 10 June 2026
Initial Publish 25 June 2026
Published online 01 July 2026

Journal of Assessment and Research in Applied Counseling

Open-Peer Review

E-ISSN: 3041-8518

CatBoost Prediction of Obsessive-Compulsive Symptoms Using Thought Suppression, Cognitive Fusion, Perfectionism, and Anxiety Sensitivity

Rosa. Alcázar Campos[1], Margarita. Izquierdo Morán[2], Ferran. Fernández-Llario[3*], Luís F. Seoane[4]

[1] Department Personality, Assessment & Psychological Treatment, Faculty of Psychology, Espinardo Campus, University of Murcia, Murcia 30100, Spain
[2] Department of Personality, Assessment, and Psychological Treatments, University of Valencia, Spain
[3] Department of Developmental and Educational Psychology, University of Valencia, 46010 Valencia, Spain
[4] Center for Applied Psychology, Miguel Hernández University of Elche, 03202 Elche, Spain

*** Corresponding author email address**: fernandez.ferranl@uv.es

Editor	Reviewers
José Aparecido Da Silva Full Professor, Department of Psychology, University of Sao Paulo, Ribeirao Preto, Sao Paulo, Brazil jadsilva@ffclrp.usp.br	**Reviewer 1:** Yirsa Meza Villanueva Department of Social Psychology and Quantitative Psychology, Faculty of Psychology, University of Barcelona, 08007 Barcelona, Spain. Email: yirsa.mezavillanueva@uvic.cat **Reviewer 2:** Moriel Davila Tenorio School of Higher Studies (F.E.S.) Zaragoza, National Autonomous University of Mexico, Mexico City CP 09230, Mexico. Email: moridaviteno@gmail.com

1. Round 1

1.1. Reviewer 1

Reviewer:

In the opening paragraph of the Introduction, the authors describe obsessive-compulsive symptoms as “clinically significant and theoretically complex,” but the manuscript should provide a sharper distinction between obsessive-compulsive symptoms as dimensional traits and obsessive-compulsive disorder as a clinical diagnosis. Because the study appears to use a community or mixed adult sample rather than a clinically diagnosed OCD sample, it is important to avoid language that implies diagnostic inference. The Introduction should explicitly state that the outcome variable reflects symptom severity measured by self-report, not a formal diagnosis established through clinical interview.

In the Introduction section where the authors discuss thought suppression, the manuscript states that “suppression often increases monitoring of the very thought that the individual wishes to eliminate.” This is an important theoretical claim, but the

authors should better connect this mechanism to the specific operationalization used in the study. The manuscript would be strengthened by explaining why the White Bear Suppression Inventory is appropriate for capturing habitual suppression tendencies relevant to obsessive-compulsive symptoms, and whether the scale measures suppression attempts, intrusive thought frequency, or both.

In the Data Collection Tools section, the manuscript lists the OCI-R, WBSI, CFQ, FMPS, and ASI-3, but it should report the version and language adaptation of each instrument used in the Spanish sample. Since the study was conducted in Spain, it is important to specify whether validated Spanish versions of the instruments were administered. The authors should also report internal consistency coefficients obtained in the present sample, preferably Cronbach's alpha and McDonald's omega for each scale, rather than only stating that previous studies have demonstrated good reliability.

In the Data Collection Tools paragraph describing obsessive-compulsive symptoms, the manuscript states that the OCI-R measures washing, checking, ordering, obsessing, hoarding, and neutralizing symptoms. The current findings, however, appear to use only the total OCI-R score as the predicted outcome. The authors should justify why the total score was selected rather than modeling symptom dimensions separately. Given that thought suppression, perfectionism, cognitive fusion, and anxiety sensitivity may have different relevance across OCD dimensions, subscale-level analyses could provide valuable additional insight.

Authors revised and uploaded the document.

1.2. Reviewer 2

Reviewer:

In the paragraph discussing cognitive fusion, the manuscript explains that intrusive thoughts may be experienced "not merely as an internal event but as evidence of real danger, personal responsibility, or moral failure." This is conceptually strong, but the authors should expand the rationale for including cognitive fusion as distinct from thought suppression. Both constructs concern responses to thoughts, and readers may question whether they are empirically redundant. The authors should clarify that thought suppression reflects attempts to control or remove thoughts, whereas cognitive fusion reflects the literal believability and behavioral dominance of thoughts.

In the Introduction paragraphs addressing perfectionism, the manuscript presents perfectionism as a vulnerability and maintenance factor, but the discussion would be more precise if the authors distinguished between adaptive perfectionistic strivings and maladaptive perfectionistic concerns. Since obsessive-compulsive symptoms are more consistently associated with concern over mistakes, doubts about actions, and intolerance of imperfection than with high personal standards alone, the manuscript should specify which dimensions of perfectionism are theoretically most relevant to the study.

In the Introduction paragraph on anxiety sensitivity, the authors state that anxiety sensitivity may "increase the perceived urgency of neutralizing thoughts and sensations." This is an important explanatory bridge, but it requires stronger integration with obsessive-compulsive phenomenology. The authors should explain how anxiety sensitivity may contribute differently across OCD symptom dimensions, such as checking, contamination, taboo intrusive thoughts, or ordering. Such elaboration would make the inclusion of anxiety sensitivity more specific rather than treating it only as a broad transdiagnostic vulnerability.

In the Methods and Materials section, the Study Design and Participants paragraph states that the study was conducted among "1,214 adults from Spain," but the manuscript should report the sampling frame and recruitment sources with greater methodological transparency. The authors mention several recruitment channels, including universities, community mental health centers, public health institutions, mailing lists, social media, and counseling services. However, it is unclear how many participants came from each source and whether the sample should be considered community-based, student-based, clinical-adjacent, or mixed. This distinction is essential for interpreting generalizability.

In the Study Design and Participants paragraph, the exclusion criteria include "severe neurological disorders, active psychotic disorders, significant cognitive impairment, or incomplete questionnaire responses exceeding 10%." The authors should clarify how these exclusion criteria were assessed. If exclusion was based only on self-report screening items, this

JARAC Assessment and Research in Applied Counseling
E-ISSN: 3041-8518

should be stated. If clinical records or diagnostic interviews were used, the procedure should be described. Without this information, the reader cannot determine the rigor of eligibility screening or the extent to which psychiatric comorbidity may have influenced the results.

In the Methods section, the manuscript states that "duplicate response detection, assessment of completion rates, evaluation of response consistency, and removal of multivariate outliers" were conducted before final analysis. This data cleaning description is useful but insufficiently reproducible. The authors should specify the exact rules used to identify duplicates, careless responding, inconsistent responses, and multivariate outliers. For example, they should indicate whether Mahalanobis distance was evaluated at $p < .001$, whether attention-check items were used, and how many participants were removed for each reason.

Authors revised and uploaded the document.

2. Revised

Editor's decision after revisions: Accepted.
Editor in Chief's decision: Accepted.

JARAC
Assessment and Research in Applied Counseling
E-ISSN: 3041-8518