Diagnosing Obsessive-Compulsive Disorder: Diagnostic Validity of the DOCS Scale
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BACKGROUND

OSTIVE COMPULSIVE DISORDER

• Given its high prevalence, chronicity, and associated burden, OCD necessitates accurate assessment to ensure timely treatment.

• The Dimensional Obsessive-Compulsive Scale (DOCS) was developed to measure the severity of the four most consistently identified OCD symptom dimensions: Contamination; Responsibility for harm; Symmetry; Unacceptable thoughts.

• To date, no study has examined the validity of the DOCS subscales as a way of distinguishing OCD from Other Anxiety Disorders (OADs).

The present study compares the diagnostic accuracy of the DOCS scale and its subscales in discriminating OCD from OADs.

METHOD

PARTICIPANTS

Participants (N = 366) were recruited from specialty anxiety clinics across the US between 2005 and 2008. DOCS severity scores were as follows: OCD condition (M = 30.62, SD = 15.16), other anxiety disorders (M = 17.64, SD = 13.12).

MEASURES

• DSM-IV diagnoses were established using the MINI and SCID (First et al., 2002) administered by trained mental health professionals

• Dimensional Obsessive Compulsive Scale (DOCS; Abramowitz et al., 2010) as part of a self-report battery.

PROCEDURES

• Receiver operating characteristic (ROC) analyses determined diagnostic accuracy of DOCS scales and subscales in distinguishing OCD from OADs.

• The Venkatraman method determined any significant difference in area under the curve (AUC) values between all scales.

• DLRs were also generated (DLR+ = odds, DLR− = odds)

• Binary logistic regressions tested for incremental value in combining subscales versus interpreting the more discriminating subscale.

RECEIVER OPERATING CHARACTERISTICS

Area Under the Curve

Comparing AUCs between OCD and other anxiety disorders

Scale | AUC (SE) | 95% CI | Diagnostic Likelihood Ratios (DLRs)

| Total | .75 (.03)** | .70-.80 | Low (0.9) 0.23 | Indeterminate (0.27-0.70) 0.74 | High (2.8) 2.82 |
| Contamination | .70 (.03)** | .65-.75 | Low (0.9) 0.52 | Indeterminate (0.3-0.5) 0.85 | High (4.0) 3.94 |
| Harm | .68 (.03)** | .62-.74 | Low (0.9) 0.48 | Indeterminate (0.3-0.6) 0.86 | High (2.7) 2.12 |
| Intrusions | .60 (.03)** | .54-.66 | Low (0.9) 0.68 | Indeterminate (0.4-0.9) 0.85 | High (1.9) 1.80 |
| Symmetry | .64 (.03)** | .58-.70 | Low (0.9) 0.63 | Indeterminate (0.4-0.9) 0.71 | High (1.9) 1.69 |

**p < .0005.

Note: DLRs between 3 to 7 (or 1/3 and 1/7) are considered clinically helpful. DLRs > 10 (or < 0.1) are often clinically decisive.

RESULTS

ROC

ROC analyses indicated the DOCS scales achieved statistical significance in distinguishing members of the OCD group from the OAD group, ranging from slightly above chance level to good (all ps < .0005). See Figure 1 and Table 1.

Diagnostic Likelihood Ratios (DLRs)

Using the DOCS, odds of being diagnosed with OCD were in the clinically helpful range (DLR+ = 2.82 if DOCS-Total score > 28, DLR− = .23 if score < 3). Using the DOCS-Contamination scale, odds of being diagnosed with OCD were in the clinically helpful range (DLR+ = 4.04 if Contamination score > 5, DLR− = .52 if score = 0). DLRs for Harm, Symmetry, and Intrusive Thoughts were not deemed to be large enough for clinical use.

Binary logistic regressions:

• Logistic regressions indicated that the Contamination subscale was strongest in discriminating between OCD and OADs after controlling for age and gender, ΔR² = 22%, p < .0005.

• Adding the Harm subscale had an incremental effect in differentiating OAD and OCD diagnoses after controlling for age and gender, ΔR² = 4%, p < .0005.

DISCUSSION

• The DOCS-Contamination subscale is clinically useful for differentiating between OCD and OADs, with higher scores indicating increased risk of OCD.

• Contamination scores may be particularly salient in differentiating individuals with OCD from those with OADs.

• Subscale scores Responsibility for Harm, Symmetry, and Intrusive Thoughts are common between OCD and OADs, suggesting symptom overlap.

• Future research should examine whether administering the Harm subscale to differentiate a suspected OCD diagnosis from an anxiety disorder diagnosis is beneficial.

• There are conservative analyses in that they are concentrated on a clinically meaningful comparison group, inasmuch as OCD can be difficult to differentiate from anxiety disorders.

REFERENCES


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