

The Inventory of Problems–29 (IOP-29): A Systematic Review and Bivariate Diagnostic Test Accuracy Meta-Analysis

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The Inventory of Problems–29 (IOP-29) is a 29-item self-administered symptom validity test (SVT) that assesses the credibility of clinical presentations related to posttraumatic stress disorder, depression/anxiety, psychosis, cognitive impairment and combination thereof. To date, no publications have summarized the classification accuracy of the IOP-29 using a bivariate meta-analytical approach that preserves the two-dimensional nature of the estimators. Our objective was to conduct a systematic review and bivariate diagnostic test accuracy meta-analysis of the IOP-29 according to the relevant guidelines. Twenty-one independent samples were included, with a total sample size of 4,163 participants. The results indicated that the IOP-29 is able to discriminate adequately between instructed simulators and healthy controls/clinical patients. Using the recommended cutoff (False Disorder Probability Score [FDS], $\geq .50$), a sensitivity of 82% was achieved, maintaining specificity at 93% (false positive rate of 7%). The language of the test and the type of comparison group have been identified as possible sources of heterogeneity. Specificity decreases for the non-English version of the IOP-29, for the FDS $\geq .30$, and also decreases for studies using clinical controls, for all three cutoff scores. In general, our findings support the usefulness of the IOP-29 as an SVT; however, most of the included studies use a simulation design and have been coauthored by the test authors. Likewise, about half of the studies did not include bona fide patient controls but only nonclinical controls. The results obtained are highly promising, but further research, especially that using the criterion group paradigm, is recommended.

Public Significance Statement

Following a bivariate meta-analytic model, we have evaluated the discriminative ability of the IOP-29, a novel symptom validity test. The results obtained indicate that it is able to discriminate adequately between instructed simulators and healthy controls/clinical patients.

Keywords: malingering, feigning, symptom validity test, SVT, meta-analysis

Supplemental materials: <https://doi.org/10.1037/pas0001209.supp>

This article was published Online First January 12, 2023.

The authors would like to thank María Nieves Plana for her support and patience in resolving some of the doubts they had when developing the meta-analytic plan and for providing them with documentation and bibliography that has allowed this study to continue. The authors would also like to thank her for selflessly sending them the Meta-DiSc 2.0 application. Meta-DiSc 2.0 is a freeware software to perform meta-analysis of studies of diagnostic test accuracy. The application is an update of the previous version of Meta-DiSc software and has been led by the Clinical Biostatistics Unit of the Ramon y Cajal Research Institute. Its development has not yet been published in a scientific article, but it can be used from the website at www.metadisc.es. The authors would also like to thank Luciano Giromini for his interest and help in providing them with data and information that were not included in the publications, and Miriam López for her help in editing the images.

The statements and opinions in this article are those of the authors. The

author(s) received no specific funding for this work.

Esteban Puente-López played lead role in conceptualization, data curation, formal analysis, investigation, methodology, project administration, resources, writing of original draft and writing of review and editing. David Pina played equal role in data curation, investigation and methodology. Rubén López-Nicolás played equal role in data curation, formal analysis, resources, software and supervision. Isabel Iguacel played equal role in data curation, methodology, supervision and writing of review and editing. Ramón Arce played equal role in supervision, visualization and writing of review and editing.

The data and script codes that support the findings of this study are open available at <https://osf.io/au7j3/>.

This study was not preregistered.

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