

# Preliminary Convergent-Discriminant Validity Evidence of the Methodological Quality Scale for Observational Methodology (MQSOM). A Confirmatory Factor Analysis

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## Oral presentation

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## Abstract

Introduction: designs based on observational methodology enable the systematic recording and subsequent quantification of the spontaneous behavior displayed by participants in natural contexts. These methods offer advantages including a low level of intervention, independence with respect to standardized measurement instruments and flexibility when applied in non-standardized intervention contexts. Consequently, observational methodology is frequently used in psychology, education or health, as well as in other social fields. A Methodological Quality Scale for Studies Based on Observational Methodology (MQSOM), a tool with adequate psychometric properties to measure the methodological quality of these studies, has recently been validated. Previous research has demonstrated convergent-discriminant validity evidence of MQSOM through bivariate correlations with other methodological quality tools. Objective: the aim of this communication is to further substantiate the validity of MQSOM by presenting the preliminary evidence of its convergent and discriminant validity obtained through confirmatory factor analysis (CFA). Methods: nine-hundred and twenty articles based on observational methodology were coded with MQSOM, Rigorous Mixed-Methods (RMM), Guidelines for Publishing Evaluations Based on Observational Methodology (GREOM) and Mixed Methods Appraisal Tool (MMAT), circumscribed to the field of Mixed-Methods studies. Then, a confirmatory factor analysis was conducted. Results: MQSOM dimensions exhibited moderate-to-strong loadings in latent factors together with those contrast instruments dimensions that addressed similar constructs, as well as low factor loadings considered theoretically incongruent. Conclusions: this work deepens in the strengthening of the MQSOM and provides additional evidence of its suitability to assess the quality of intervention programs based on observational methodology.

## Keywords

Observational methodology, convergent-discriminant validity, CFA

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