

Osteoarthritis and Cartilage



Letter to the Editor

Development and preliminary evaluation of the OsteoArthritis Questionnaire (OA-Quest): a psychometric study: methodological issues



Dear Editors-in-Chief,

We were interested to read the paper by Busija L and colleagues that was published in *Osteoarthritis and Cartilage* in Aug 2016¹. The authors aimed to develop the OsteoArthritis Questionnaire (OA-Quest) for measuring the potentially modifiable burden of osteoarthritis. Performance of OA-Quest was assessed using exploratory factor analysis (EFA), Rasch modeling, and confirmatory factor analysis (CFA). The results have demonstrated the OA-Quest can be suitable for capturing the broad range of outcomes relevant to people with osteoarthritis¹.

Although the statistical method was correct and the data were interesting, some methodological and statistical issues should be considered. The authors point out in their conclusion that OA-Quest is a valid and reliable tool for measuring broad range of osteoarthritis burden, we think such conclusion is an optimistic interpretation. Conducting EFA and CFA on same dataset is one of common mistakes. As a general rule, we need at least two independent dataset that explored solutions from EFA in dataset 1 would be externally validated using CFA in dataset 2². Investigators used CFA to assess the robustness of results from an EFA in independent data sets or testing a proposed structure based on previously studies in a new data set and not the original data set^{3–5}.

Author contributions

All authors were involved in the manuscript conception, design, drafting and revising, and final approval of the submitted version.

Conflict of interest

The authors have nothing to disclose.

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