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LETTER

# Cross-Cultural Adaptation and Validation for Central Aspects of Pain in the Knee Questionnaire Based on Chinese Patients Undergoing Total Knee Arthroplasty for Knee Osteoarthritis [Letter]

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## Dear editor

We read with interest the article by Wu et al entitled "Cross-Cultural Adaptation and Validation for Central Aspects of Pain in the Knee Questionnaire: Based on Chinese Patients Undergoing Total Knee Arthroplasty for Knee Osteoarthritis" published in the Journal of Pain Research. The authors should be commended for addressing the important topic of central sensitization assessment in a Chinese-speaking population. However, we would like to raise few methodological and reporting concerns that merit clarification to ensure accurate interpretation of the study's psychometric findings.[1]

First, a psychometric analysis of the CAP-Knee-CV's scoring methodology is warranted. A four-point Likert scale is essentially collapsed into three response levels because the response options "often" and "always" have identical codes. The reverse-scored item undergoes a similar compression. At higher levels of symptom severity, collapsing response categories limits discrimination and decreases ordinal resolution. According to psychometric research, fewer response categories could reduce measurement precision and change variance structure, which could have an impact on factor analytic results and reliability estimates.[2,3]

Second, the factor rotation method has an internal inconsistency. While Table 2 is labelled as presenting a Varimax-rotated factor matrix, the authors claim in the Methods section that maximum likelihood extraction with promax rotation was used. Because Varimax and Promax rotations represent essentially different analytical assumptions, this disparity is significant. This contradiction limits the factor structure's reproducibility and raises questions about the actual analytical process since both approaches cannot be used concurrently.[4]

Third, the manuscript lacks information about the expert panel involved in the cross-cultural adaptation, including the number of members, their professional backgrounds, and their role in resolving translation discrepancies, even though the authors describe a forward-backward translation process and cognitive debriefing. In order to guarantee and assess cultural equivalency, established cross-cultural adaptation guidelines place a strong emphasis on open reporting of expert panel composition. The lack of this data restricts the evaluation of the adaptation process's reproducibility and content validity.[5]

Finally, although the eigenvalues and cumulative variance explained are statistically plausible, the manuscript does not explicitly clarify that the reported variance percentages were derived from the rotated solution rather than directly from the eigenvalues. While this is not incorrect, clearer reporting would enhance transparency and reader comprehension.

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We believe that addressing these points through clarification or correction would enhance the methodological rigour and interpretability of the study, thereby further supporting the clinical utility of the CAP-Knee-CV. We appreciate the opportunity to contribute to scholarly discussion on this important topic.

## Disclosure

The authors report no conflicts of interest in this communication.

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