Reviewer’s report

Title: Postural Awareness and its Relation to Pain: Validation of an innovative Instrument measuring Awareness of Body Posture in Patients with Chronic Pain

Version: 0 Date: 11 Jan 2018

Reviewer: Bruno Saragiotto

Reviewer’s report:

This manuscript evaluated the clinimetric properties of the Postural Awareness Scale, developed in this study. Overall, the methodology is appropriate and the use of factor analysis is correct. However, introduction needs more structure and the interpretation and discussion of the findings needs revision. I have made some suggestions in order to improve reporting and quality of this manuscript.

Introduction

- I miss a first paragraph introducing the terms posture and postural control as well as a general introduction of the topic to the readers.

- Page 5, line 8: It is very controversial in the literature that 'bad' posture and 'poor' postural control are major contributors to back pain. I think this should be addressed and authors should be cautious about these statements.

- "It can be expected that the current use of smartphones and other hand-held electronic devices will increase the prevalence of maladaptive spinal posture habits and associated pain conditions" According to a recent article it doesn't seem to happen (https://doi.org/10.1007/s00586-017-5444-5), so authors can be more cautious on this statement and comment on this recent publication.

- I think the rationale for the scale is interesting and somehow important. However, the introduction needs to be revised to correctly address the current literature that doesn't really support the idea of postural awareness or influence of posture in pain conditions. It doesn't mean that the question is not important, but that it should be presented as a complex and controversial relationship.

Methods

- It would be good to mention the aim of the two observational studies or some more details about the studies (ie, link to protocol).
- Data analysis: it makes more sense to me that the items are a bit correlated. In this case, an oblique rotation (ie, oblimin) would be more appropriated instead of orthogonal (ie, varimax). Did the authors performed a correlation? That would be the best way to decide between both rotation - if factor correlations are not driven by the data, the solution remains nearly orthogonal.

Discussion

- One concern I have is that this scale was developed to be used to a wide range of conditions. Perhaps authors should address that in the discussion/limitations of this manuscript.

- One thing that should be taken into account is that EFA are prone to find factors no matter what. So, the next step is an assessment of dimensionality (Rasch analysis maybe) and CFA with the 2-factor solution. This should be acknowledged in the paper as well as directions for future research. This means, the scale may not be ready yet. It should also be clear that, alongside with the limitations, the questionnaire needs more validation.

Conclusion

- Conclusion should be clear and concise, answering the aim of the study and covering the main implications. It should be clear that further validation is necessary.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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