**Reviewer’s report**

**Title:** Validation of a core patient-reported-outcome measure set for operationalizing success in multimodal pain therapy: Useful for depicting long-term success?

**Version:** 1  **Date:** 12 Dec 2017

**Reviewer:** Peter Newcombe

**Reviewer's report:**

The authors have attended to all reviewer comments - either in editing their manuscript or defending their decision to not edit. The manuscript is thus significantly improved. There are only minor comments to be made - and most relate to editorial issues. Thus, the manuscript would benefit from a careful attention to editing ensuring wording and grammar are correct. Suggestions follow.

**Abstract:**

"Patients were in the mean 51.0…" is better written as "Patients were, on average, 51.0 years old (SD 11.1)…"

Final sentence: again, better written as "Future research might consider identifying predictors of success in multi-modal pain therapy."

**Introduction**

Under Aims: "The aim of the study was to …" (use past tense has study has been completed)

Final sentence: "For validation purposes….was assessed with objectivity and reliability also being evaluated."

**Methods:**

Under Design: "Patients were asked to …which took approximately 60 minutes to complete."

**Results**

Second line - "…incorporating the five domains of pain severity,…"
Table 3 - It is common practice to place each SD within brackets to make the table easier to read (distinguished the SD from M).

Under Criterion validity - last sentence of the first paragraph: "We found a descriptive difference...." This is an unusual statement given the non-significant t-test and that the difference between "successful" and "non-successful" was 0.31 which is well below the previously defined criterion of $\frac{1}{2}$ SD (despite that measure being an indicator of "improvement" across time, it is also a useful measure of between-group meaningful difference).

Under 3.1 Stress (and through to 3.3): rather than write "inner subject factor" use "within-subject factor" here and throughout. For these analyses, having a significant interaction does not preclude a main effect from being significant (author reasoning for the non-significant Responder main effects). If it was, then why were the Time main effects significant. Rather, a significant interaction means that any significant main effect is subsumed under the interaction and therefore not interpreted.

Under 4. Discriminant validity - if a correlation is not significant, it is not described as "very weak" (not a statistical term). Best to simply state, that it was "non-significant".

Under Summarizing: Please check the "highest correlations" and "moderate correlations" in Figure 6 - it would seem that Well-Being correlation (moderate?) is higher than both Depressiveness and Pain Severity (both classified as highest correlations).

Discussion:

Under Strengths and Perspectives - the second sentence, "By defining..." is somewhat unclear. I am not sure what this sentence adds?

Under Conclusion: The last two sentences are also unclear and might be better worded as: "Thus, it can be seen as a step in answering questions of assessment of efficacy....Furthermore, future research can build on this research to develop a set of predictors of success...".

**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.  

Yes

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

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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