Reviewer’s report

Title: Developing and Evaluating an Instrument to Measure Recovery After INtensive care: The RAIN instrument

Version: 0 Date: 30 Oct 2017

Reviewer: Konstantinos Antypas

Reviewer's report:

This manuscript presents the evaluation of an Instrument to Measure Recovery after Intensive Care. It is an interesting study, that seems to be utilizing the appropriate statistical approach (as far as I can judge) for validating the developed instrument. The sample size seems adequate. On the other hand, the Introduction and specifically the Recovery concept presentation is not well structured and several references are not used properly. This part of the manuscript needs major revision in order to help the reader to understand the concept of recovery and how the instrument (and its dimensions) were developed.

Cronbach’s alpha is mentioned several times in the manuscript as indicator of internal consistency and reliability, it has been criticised for not being a good indicator for these. The authors can still report the values, but please calculate and report other measures for consistency and reliability.

Page 3, last paragraph: Whitley and Drake (2010), discuss recovery in the context of mental health. How does this relate to recovery from ICU? In addition, the reference does not show how recovery and experiences of health, wellbeing and quality of life are interrelated and connected. Please provide an appropriate reference or revise.

Page 4, para. 1: I have not been able to find the source referenced as 28 (Bergbom, 2008) and in addition, I am not sure I understand the point with the presentation of the multiple meanings of word "recovery".

Page 4, para. 2: I haven't been able to find Eriksson's (1986 and 1995) manuscripts in Swedish, but reference 32 (Flach, 1988) is completely unrelated to this manuscript. Furthermore, the operationalization of recovery as a movement from disintegration towards integration and wholeness sounds interesting, but it is not explained properly. Please revise the reference and/or the manuscript accordingly.

Page 5, para. 3: References 11 and 13 do not mention an ICU stay. Did they include patients after ICU stay (the current paper and the references have common authors)?

Table 1: I think that the authors should include the term factor loadings on the title, as an explanation of the values of the table.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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 recommend additional statistical review

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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