

## ANSWERING REVIEWERS

Here is the revised manuscript entitle now in its revised form as “Agreement and conversion formula between MMSE and MoCA in an outpatient sample.” manuscript NO: 27265

We have addressed all the comments of the reviewer and the editor which are highlighted in yellow colour.

Below also are the responses to reviewers.

Thank you.

The corresponding author

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### Reviewer 1

#### Comments to authors:

1. The comparison of both scales could be of interest to show differential indications for use or different sensitivity and specificity to detect e.g. MCI; however, the present design seems not appropriate for that purpose (limited size, no gold standard).

**Responses:** We agree with the reviewer here. However this was not among the aims of this particular study. As the reviewer suggests a study which addresses that particular research question requires a different design, with a greater sample size.

2. Why should both instruments be converted into one another? The authors should explain in more detail.

**Responses:** We have addressed this comment (see before in the aims of the study).

3. The authors claim that that both scales assess “the same construct”; however, neither scale construction and previous findings (as shortly outlined in the Intro of the present paper) nor chance-corrected concordance coefficients in the present study corroborate such a hypothesis.

**Responses:** It is assumed that both scales measure the same construct namely “cognition”. However, as the reviewer notes, this study indicates that they measure slightly different aspects of this construct as their agreement was modest.

4. Introduction, lines 8-12 (?in addition...): this sentence needs revision, as in all mentioned “specific populations” (eg. PD) MMSE and MoCA were used to detect “mild cognitive impairment” (according to Peterson’s criteria or not), i.e. patients with an etiologically not further specified MCI syndrome (like [11]) were studies.

**Responses:** We have reworded the sentence.

5. Introduction, 2nd paragraph: why “mild cognitive decline” (MCI should be consistently used).

**Responses:** Thanks, we have corrected it.

6. Materials and methods, Procedures: the authors should comment on why the two short tests were administered with up to “3 hours time gap”.

**Responses:** We have explained this now.

7. Same paragraph: "The tests were administered with no particular order". The authors should clarify (cf Abstract): random order or not? If not, possible order effects have to be discussed

**Responses:** Corrected.

8 Results, Table 2; MMSE/MoCA scores for the different diagnostic groups should be reported.

**Responses:** Done.

9 Results; the calculation basis of z scores is unclear and needs explanation and "introduction" (Methods).

**Responses:** We have explained this now in the methods under the sub-heading statistical analyses. (first line).

10 Figure 2: the correlation/fit of MMSE and MoCA scores seems to be clearly dependent on the range (high correlation/linear fit in the upper range); why is a cubic but not a quadratic approximation shown? This point is also relevant for the Discussion (p.9).

**Responses:** We showed the cubic because it has a little better fitting than quadratic. However in this revised manuscript we have also included the quadratic. (See figure 2). The main concern, as also emphasised in the discussion, is that the relationship is not linear.

11 Discussion, p.10, 2nd paragraph: the present sample limits generalization, to apply the "conversion rule" to other studies ("meta-analyses") should be recommended more cautiously.

**Responses:** The sample is a random sample from an old age psychiatry setting. Although our method is statistically robust, it applies only to the similar settings (see also at the end of discussion) However, we agree with the reviewer that this needs further testing and is something that we have recommended and acknowledge in the last sentence of the manuscript.

## **Reviewer 2**

### **Comments to authors:**

I do not have any negative comments on your manuscript, I like it.

**Responses:** Thank you.