Review of: "Coupling between Human Brain Cortical Thickness and Glucose Metabolism from Regional to Connective level: a PET/MRI study"

Pedro Henrique Rodrigues da Silva Silva[1]

1 Universidade de São Paulo

Potential competing interests: No potential competing interests to declare.

Here are some minor questions about the manuscript:

1. How do the FC connectivity measures relate to traditional Pearson correlations with BOLD-fMRI FC? The same question applies to SC with DWI analysis.

2. What age is the dividing line between the middle-age group and the old-age group? Could you please provide a more detailed definition of the middle-age group in the manuscript? Additional information about both groups would be beneficial.

3. In the Network Construction section, the authors used Spearman's correlation as the measure of FC, whereas the majority of studies typically use Pearson's r. It would be helpful if the authors clarified their rationale for selecting this method in the manuscript.

4. How did the authors handle negative edges when constructing brain networks? Further clarification is necessary, as there is little consensus on how to handle or interpret negative edge weights in FC graph analyses.

5. In the Network Properties section, the authors mentioned that "the networks were binarized using a set of connective densities from 0.01 to 0.17 with a step of 0.02." Could you explain the criterion used to determine this range of density?

6. In the Discussion section, please elaborate on how the results in this paper contribute to the diagnosis and treatment of neurological or psychiatric disorders. Providing more information on the practical implications of the findings would be valuable for readers.