Review of: "Prediction and Analysis of Structural Brain Health Indicators Using Deep Learning Models with Functional Brain Images as Input"

Xu Wang[1]

1 Shanghai Jiao Tong University

Potential competing interests: No potential competing interests to declare.

This paper explored the correlation between the resting-state fMRI data and GM-BHQ. While interesting, the authors need to clarify the following issues to gain more academic/clinical significance.

Major:

1. The authors need to further explain the hypothesis/motivation behind the study. fMRI has lower spatial resolution compared with structural imaging. When measurement based on more spatially accurate imaging exists, why do we need functional imaging? What is the core benefit to explore the measurement based on fMRI?
2. While multiple measurements exist, the authors use GM-BHQ as the measurement for brain aging and health. Please clarify the rationale for the choice.
3. While the aging distribution is wide in the dataset, authors use the same atlas in preprocessing. Authors should consider/provide rationale when registering both child and elderly participants'' brains into the same atlas.

Minor:

1. Why choose 10% as the threshold to construct the brain network? Further rationale/additional results under other thresholds will be beneficial to show the robustness of the results.