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

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Potential competing interests: No potential competing interests to declare.

The authors present an elegant method to predict the gray matter healthcare quotient (GM-BHQ) calculated based on gray matter volume using the resting-state functional magnetic resonance imaging data. BrainGNN that was used to construct a regression model was developed by Li et al (2021). Clustering performed with the constructed model identified the brain regions that strongly associated with the GM-BHQ.

The following are suggestions for the authors consideration.

1. Include more details of the demographics of the subjects in the NKI-RS data, perhaps a histogram showing number of subjects in various age groups, and discuss any impact of having fewer subjects older than 70 years in the study group.
2. Include a schematic of the BrainGNN to better understand its description.
3. Define all symbols used in various equations.