Review of: "A Network-level Test of the Role of the Co-activated Default Mode Network in Episodic Recall and Social Cognition"

Pedro Henrique Rodrigues da Silva Silva[1]

1 Universidade de São Paulo

Potential competing interests: The author(s) declared that no potential competing interests exist.

The authors evaluated the role of the co-activated DMN network in episodic memory and social cognition using a network-level approach.

Here are a few suggestions for work:

The Introduction is quite long, which can make it difficult to understand the purpose of the work.

I understand the focus on the DMN, and while other networks were analyzed, why were they analyzed separately and not together? If, as mentioned, the relationship between a single region and a function can change over time as it is incorporated into different networks, I believe that it would be more pertinent to assess all networks together and assess whether there is a co-activated DMN network in the results.

Another suggestion would be to generate parametric maps for each contrast and overlay the anatomical templates of the networks obtained with the ICA to evaluate the response. Remembering to use the general linear model and random field theory, and more common multiple comparisons such as FWE or even FDR.

Why not also use inverse contrasts? Perhaps the co-activated DMN network is suppressed in the tasks of interest.

In addition to the functional localization study, I suggest evaluating the functional connectivity pattern with the co-activated networks found. More specifically, as mentioned the dynamic character of connectivity, I suggest dynamic connectivity analyses.

I believe that such analyzes can contribute to the enrichment of the work.