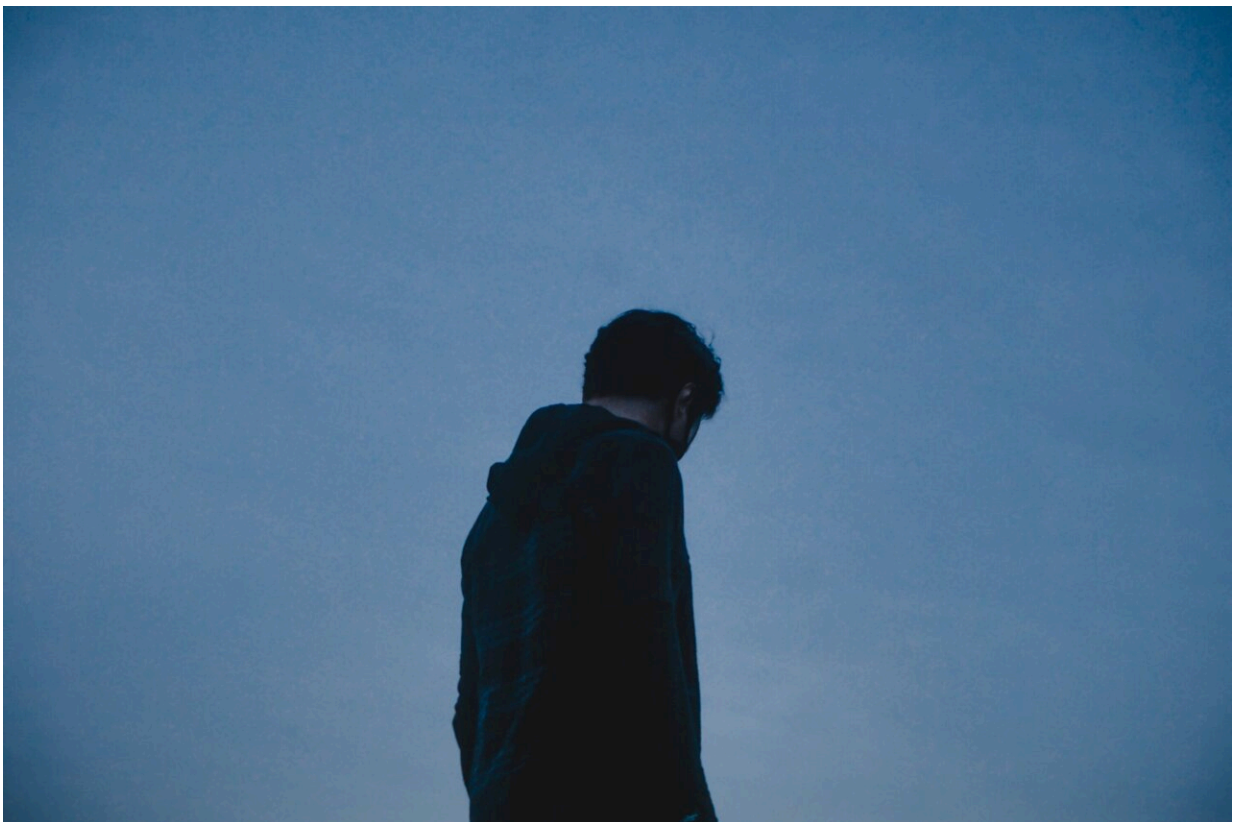


Dissociation between connectivity of social brain network and real-world social network in people with social anhedonia

August 24 2022, by Zhang Nannan



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Social anhedonia is a reduced ability to experience pleasure from social interaction. It is one of the core features for negative symptoms in

schizophrenia. Recent findings suggest that people with a high level of social anhedonia have already exhibited alterations in the social brain network and diminished correlation with real-world social network size characteristics. However, most of these findings were done at the regions of interest approach that may not be able to capture the complex relationship between brain function connectivity and real-life social behavioral adequately.

Dr. Raymond Chan's team from the Institute of Psychology of the Chinese Academy of Sciences has recently conducted a study to investigate the hub regions of resting-state social brain networks (SBN) in 35 participants with a high level of social anhedonia and 50 participants with a low level of social anhedonia.

They found that the right amygdala, left [temporal lobe](#) and right media [superior frontal gyrus](#) were the hub regions of SBN both in participants with a high and a low level of social anhedonia.

Interestingly, the left temporal lobe connected [functional connectivity](#) (FC) did not predict social network characteristics, while the other FCs strengthened the association with social network characteristics in participants with a high level of social anhedonia.

These findings were replicated in an independent sample of 33 participants with a high level of social anhedonia and 32 participants with a low level of social anhedonia, suggesting the robustness and stability of the dissociation between hub-connected functional connectivity of the social brain network and the real-world social network in people with social anhedonia.

These findings may guide the development of non-pharmacological interventions for social function deficits in people with social anhedonia.

This study is published in *Psychiatry Research Neuroimaging*.

More information: Yi-jing Zhang et al, Decoupling between hub-connected functional connectivity of the social brain network and real-world social network in individuals with social anhedonia, *Psychiatry Research: Neuroimaging* (2022). [DOI: 10.1016/j.pscychresns.2022.111528](https://doi.org/10.1016/j.pscychresns.2022.111528)

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