

The role of self blaming prosocial emotions in major depression and their impact on altruistic decisions: evidence from neuroeconomical and neuroimaging experiments.

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Abstract

Prosocial emotions such as guilt, shame or indignation are important in guiding human social decisions. Major depressive disorder (MDD) is one of the most common neuropsychiatric disorders, which is associated with abnormal emotional processing as well as decision-making impairments as captured by many reward processing studies. Clinical literature conclusively shows that MDD is associated with abnormally elevated prosocial emotions related to self blame (guilt and shame). Elevated guilt is recognised as one of the core symptoms of MDD by the American Psychiatric Association as included in neuropsychiatric assessments, whereas there is emerging clinical evidence about the role of shame. Despite previous studies showing that these prosocial emotions promote altruism in healthy subjects, how impairments of these emotions influence interpersonal decisions in clinical populations remains unknown. In this talk, I will give a brief overview of this literature and how affective processing and regions associated with value based decision-making are integrated in fronto-meso-limbic networks. I will be presenting behavioural/neuro-economical and affective neuroscientific evidence in support of this integration. The behavioural data that I will present will relate to temporal discounting, interpersonal cooperation and Ultimatum bargaining, where as neuroimaging evidence will be about neural basis of guilt and shame in depression and neural correlates of charitable donation behaviour, which is a unique form of human altruism challenging kin selection theories.

Host: Hiro. Nakahara Lab for Integrated Theoretical Neuroscience