

Punishment Sensitivity in Patients with Anorexia Nervosa

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Authors

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Aim

The aim of the study is to investigate punishment sensitivity on a neural and behavioral level in patients with Anorexia Nervosa to advance the understanding of motivational mechanisms driving the psychopathology of Anorexia Nervosa.

Background

Unusual behaviors such as enduring hunger, cold and exhaustion from excessive exercise are not unusual in patients with Anorexia Nervosa, which might indicate the relevance of punishment sensitivity for understanding motivational mechanisms in patients with Anorexia Nervosa. However, punishment sensitivity, reflecting the inhibition of behavior under potentially punishing conditions, has been less of a focus in eating disorder research. Research on temperament in Anorexia Nervosa has demonstrated elevated levels of harm avoidance, which is a trait closely related to punishment sensitivity. Furthermore, the serotonin system has been implicated as a major neurochemical substrate of punishment sensitivity and abnormalities of the serotonin system have long been discussed as a potential factor in the pathogenesis of Anorexia Nervosa (AN).

Method

We will include medication-free patients with acute AN, recovered AN and Healthy Control participants after careful characterization using expert interviews and several self-report measures. After an overnight fast subjects will participate in two newly developed behavioural tasks while lying in an fMRI scanner: an event-related punishment sensitivity task and a punishment-related reversal learning task to assess sensitivity to punishment and fear-based learning.

Execution

November 2013 – November 2015

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