

Implicit Bodily-self Recognition and Interoceptive Sensitivity in Restrictive Anorexia Nervosa

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Introduction

Anorexia Nervosa (AN) is characterized by body-size overestimation that reflects a distortion of body-representation. Self-body recognition can be both implicit and explicit. The former is based on cognitive and perceptual mechanisms, the latter relies on motor simulation. Previous studies showed that participants, when submitted to a hand laterality judgment task (Implicit task) that required mental rotation showed better performances when the stimuli consisted of their own rather than other's hand (self-advantage). By contrast, the self-advantage was absent when self-recognition (Explicit task) was explicitly required.

Objectives

This study aimed to investigate whether the overestimation of anorexic's own body size extended to the motor representation of the bodily-self influencing the implicit self-advantage. Furthermore, we assessed the possible relationship between the implicitly recognition of one's own body part and Interoceptive Sensitivity (IS; sensitivity to stimuli originating inside of the body).

Methods

Healthy Controls (HC) and restrictive AN patients were submitted both to Implicit and Explicit tasks with self and other's hands presented in the original size or modified to look fatter or thinner. We also assessed participants' IS by means of a heartbeat perception task.

Results

As previously reported, HC showed specific self-advantage effect only when a motor simulation is required. Furthermore higher IS is related to faster performances only in the implicit task in which a mental motor rotation. The differences between AN patients and HC concerning IS and bodily-self recognition will be also discussed.