

SIZE MATTERS: INVESTIGATING THE LINK BETWEEN AFFECTIVE AND PERCEPTUAL BODY REPRESENTATIONS USING MULTISENSORY ILLUSIONS

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Introduction: Negative feelings towards the body and body size misperception have long been associated with disordered eating behaviour. Over recent years the perceptual flexibility of the human body representation has been consistently demonstrated using multisensory perceptual illusions. Whether such perceptual changes can impact the emotional experience of our body, however, has yet to be explored.

Objectives: The current study exploits well-established perceptual body illusions to induce illusory ownership over slimmer and wider body shapes whilst measuring changes in body satisfaction.

Aims: To identify a direct causal link between perceptual and affective body representations.

Methods: Participants were presented with video images of both a slimmer and wider mannequin body viewed through head mounted displays from a first person perspective. Illusory ownership was induced by synchronously stroking the seen mannequin body with the unseen real body. Pre and post illusion affective and perceptual measures captured changes in perceived body size and body satisfaction as a result of the illusion.

Results: Illusory ownership of a slimmer body significantly increased feelings of body satisfaction as well as significantly decreasing perceived actual body width. Change in body satisfaction following illusory ownership of a wider body, however, was modulated by degree of sub clinical eating disorder pathology and did not induce a systematic change in perceived body width.

Conclusions: These findings suggest a link between perceived body size and body satisfaction, which may be modulated by eating disorder pathology. The results could have implications for future treatments of eating disorders.