Sense of agency in the Ouija board experience

ABSTRACT:

Background

In the Ouija board phenomenon, players hold a heart shaped "planchette" over a board marked with letters and numbers, while taking turns to ask questions to the spirits. Although the players themselves actually move the planchette between them, they feel no agency for these movements and therefore attribute the movement of the planchette to spirits.

Aims

The aim of this project was to understand the neural (experiment 1) and physiological (experiment 2) mechanisms by which people experience an altered sense of agency when using a Ouija Board.

Method

We developed a novel joint action task, designed to simulate a Ouija board game. Experiment 1 investigated the ERP correlates of action effect anticipation in the Ouija board context. Experiment 2 recorded heart rate and electrodermal activity during a card selection task in both solo and joint (Ouija) action contexts.

Results

Experiment 1 found that early sensory ERP components associated with action effect anticipation were not modulated by the degree to which participants controlled the movements of the planchette. However, later P2 and P3 components were significantly reduced in the joint action context. Study 2 showed that risky deck selections were associated with increased sense of agency, independent of the degree to which participants controlled the movements of the planchette. Physiological arousal initially separated based on deck choice, but later in the selection period also differed between joint and self-actions, suggesting a possible cue to distinguish self from joint agency.

Conclusions

The current studies provide novel evidence on the mechanisms underlying the experience of agency in the Ouija board phenomenon.

Keywords

Ouija board, Sense of agency, Action control, Electroencephalography

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Published Work:

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