

Metarepresentations of supernatural belief and the effect of context on physiological responses and cognitions

ABSTRACT:

Background

This project will build on the model of supernatural belief, cognition and personality proposed by Schofield et al. (2021) by introducing physiological measures. Implicit belief and context will be manipulated to further study the belief and cognition interaction. The interplay between cognitive processes and implicit belief may manifest itself as a physiological response in the form of somatic markers, i.e. changes in the autonomic nervous system.

Aims

Examine implicit belief and its effect on explicit belief by examining the evidence for implicit belief using context and physiological measures.

Method

Study one recruited 172 participants and used three religious, paranormal and neutral contexts as primes. Implicit association was measured using a modified Brief Implicit Association Test that looked at paranormal and religious belief. This and the subsequent study also measured explicit supernatural belief, cognitive reflection, unhelpful metacognitions, and confidence. Study two recruited 44 participants and showed them cognitively complex and cognitively simple tasks while taking physiological measures of heart rate, blood pressure and skin conductance.

Results

For study one, a hierarchical multiple regression revealed that a lower belief in the supernatural (apart from psychokinesis), a religious prime and high confidence predicts reflective thinking. Common paranormal perceptions, religious prime and confidence were significant predictors in the model. For study two, a Path Analysis found that the change in skin conductance between cognitively complex and cognitively simple tasks was positively predicted by belief in mental and psychic phenomena, psychokinesis, and common paranormal perceptions. Belief in psychokinesis was also negatively predicted by lack of cognitive confidence and positively predicted by negative beliefs about uncontrollability and danger. Belief in supernatural entities is positively predicted by the need to control thoughts. Study two findings are preliminary, and more data is to be collected.

Conclusions

Study one suggests that the religious prime influenced participants to be more analytical. Furthermore, study two indicates that skin conductance is a biomarker for analytical tasks in paranormal believers, which is not present in religious believers. This points to stress and threat response's role in a belief polarisation paradigm and an implicit role for belief.

Keywords

Supernatural, Cognition, Priming, Psychophysiology, Somatic markers hypothesis

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