

169/06 - "Exploring the relationship between paranormal belief, the propensity to make the type I error and the detection of paranormal and weak signals amid visual and auditory noise" – only abstract available

Instituição/*Institution*: Liverpool Hope University - UK

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Objectives: To explore the perceptual biases (Type I and Type II errors) associated with paranormal belief and disbelief.

Methods: Ninety five self-defined believers and skeptics completed a questionnaire battery consisting of the Australian Sheep-Goat Scale, the Parapsychological experiences subscale of The Assessment Schedule for Altered States of Consciousness, the short version of the Oxford-Liverpool Inventory for Feelings and Experiences and the Magical Ideation Scale. Each took part in a computerized experiment consisting of one visual and one auditory block of trials, each consisting of a psi trial, two weak stimuli trials and one random trial (8 trials each). For each trial, participants were asked to make general notes and sketches on general impressions, thoughts and feelings and press a button on the computer if and when they could identify something amid visual or auditory noise.

Results: More guesses were made for the visual condition. Believers and skeptics did not differ in the number of guesses made. There were differences in the qualitative nature of guesses, the speed at which guesses were made (for the auditory condition), confidence about guesses and the number of misidentifications made. Believers and skeptics did not differ in their ability to overtly detect weak visual or auditory stimuli or in ESP performance. There were trends toward, but no significant ESP effects. Schizotypy (OLIFE) scoring indicated that there is a healthy and less healthy type of believer and a healthy and less healthy type of skeptic. There were no differences between the two types of believer on ESP scoring. The Magical Ideation scale did not correlate with ESP.

Conclusions: There is some evidence that believing in the paranormal is associated with making the type I error. However, skeptics also perceive stimuli where none are present, particularly for the visual sense.

Discussion: Given that skeptics and believers do not differ in their detection of weak stimuli (or detection of a psi stimulus), the notion that perceptual biases are 'errors' could be challenged.

Publications: Simmonds-Moore, C.A. (2010). Exploring how schizotypy and paranormal belief influence the tendency to make the type I error and the detection of degraded and paranormal stimuli in random noise. Research Brief presented at the 53rd Annual convention of the Parapsychological Association.

Keywords: Paranormal belief and disbelief, schizotypy, perceptual biases, ESP.

*NB this work was carried out whilst Dr. Simmonds-Moore was based at Liverpool Hope University.