## Differential Responses to target vs. Non-Target Psi Stimuli: An Event-Related fMRI Study

## **Results:**

Parapsychology is the scientific investigation of apparently paranormal mental phenomena (such as telepathy, i.e., "mind reading"), also known as psi. Despite widespread public belief in such phenomena and over 75 years of experimentation, there is no compelling evidence that psi exists. In the present study, functional magnetic resonance imaging (fMRI) was used in an effort to document the existence of psi. If psi exists, it occurs in the brain, and hence assessing the brain directly should be more sensitive than using indirect behavioral methods (as have been used previously). To increase sensitivity, this experiment was designed to produce positive results if telepathy, clairvoyance (i.e., direct sensing of remote events), or precognition (i.e., knowing future events) exist. Moreover, the study included biologically or emotionallyrelated participants (e.g., twins) and emotional stimuli in an effort to maximize experimental conditions that are purportedly conducive to psi. In spite of these characteristics of the study, psi stimuli and non-psi stimuli evoked indistinguishable neuronal responses - even though differences in stimulus arousal values of the same stimuli had the expected effects on patterns of brain activation. These findings are the strongest evidence yet obtained against the existence of paranormal mental phenomena.

## **Published work:**

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