

## **Accuracy and neural correlates of blinded mediumship compared to controls**

### **ABSTRACT:**

Anomalous psychological phenomena, in which individuals claim to have access to information not available through conventional means, have been reported since antiquity. Despite tremendous popular interest, few studies have tested these claims rigorously. The current study aimed at filling this gap. We asked volunteers to look at facial photographs of deceased people and guess how the depicted person had died among three choices; we also recorded volunteers' electroencephalogram (EEG) while they were making those choices. The volunteers were of two types: "psychic mediums," who were all professional and make a living of this practice, and controls, who claimed no special ability. The cause of death fell into three possible choices: "heart attack", "death by firearm", or "car accident." The facial photographs were a balanced pool of 201 black and white photographs, where the cause of death was known in each case. The volunteers did not see any of these photographs before the experiment. Data from all participants pooled showed that they were significantly accurate in guessing the cause of death (partial  $\eta^2 = 0.13$ ;  $p = 0.003$ ). Control subjects were primarily responsible for this effect (partial  $\eta^2 = 0.15$ ;  $p = 0.001$ ). In terms of EEG activity, a difference was found between the talented volunteers and the controls in event related potential (ERP) following the presentation of the photographs. The controls had larger amplitude ERP components than the talented volunteers between 80 and 110 ms and between 200 and 350 ms, which could be interpreted as reflecting greater attention and less response inhibition by controls as compared to the talents.

### **Keywords**

Medium, Intuition, EEG, Accuracy

### **Published Work:**

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