

Magnetism does not cause paranormal experiences

December 7 2004

Previous research has shown that paranormal experiences can be achieved via electromagnetic stimulation of the temple lobe. Now scientists from Uppsala and Lund universities in Sweden are calling into question how the experiments were set up and therefore questioning the results. Their study involving identical magnetic field equipment produced no such relationship.

Previous research has reported that as many as 8 out of 10 individuals have religious or paranormal experiences when their brain's temporal lobe has been exposed to ultra weak, complex magnetic fields.

Study participants have experienced a sensed presence of a sentient being, although the participant has been sitting all by him- or herself. Many participants have made religious interpretations of the sensed presence. A conclusion that could be drawn from these findings is that religious experiences can be easily accomplished through electromagnetic stimulation of the temporal lobe. Accordingly, these sensational results have been given wide media attention.

Such a magnetic field stimulator can also be purchased on the Internet. However, in the previous studies, it is unclear if participants and experimenters have known about research questions and experimental conditions, which is referred to as experimental "blindness". For an experiment to yield credible results, it should be "double-blind".

In this context, this means that neither the participant, nor the



experimenter that interacts with him or her, knows whether the participant belongs to the experimental condition (magnetic fields activated) or control condition (no magnetic fields activated). The reason for this methodological rule is that any differences between the groups may otherwise have been caused by some irrelevant factors. For instance, participants in the experimental condition may unconsciously have been treated in such a way that the experiences have been induced for other reasons than the magnetic field exposure. In a joint project, researchers from Uppsala and Lund University, Sweden, performed a double-blind experiment to test if results from previous studies could be reproduced.

Approximately 90 undergraduate students in theology and psychology participated in the study. The magnetic field apparatus utilized was identical to that used in previous studies. Results showed that the magnetic fields did not cause religious or paranormal experiences. However, highly suggestible individuals had paranormal experiences to a larger extent, but this had nothing to do with the magnetic fields.

Paranormal experiences were particularly pronounced among participants with personality traits indicating openness to shifts in consciousness and a new age lifestyle orientation. Hence, results show that the sensational conclusions about the effects of magnetic field exposure that were drawn in previous studies should be questioned.

Source: The Swedish Research Council

Citation: Magnetism does not cause paranormal experiences (2004, December 7) retrieved 25 April 2024 from https://phys.org/news/2004-12-magnetism-paranormal.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private



study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.