

THE RELATIONSHIP BETWEEN TEMPORAL LOBE LABILITY AND ANOMALOUS COGNITION

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Background/rationale: Temporal lobe (TL) lability may influence anomalous cognition (ESP). Also, evidence indicates a psi-conductive state can be induced via imagery cultivation (IC; Storm & Goretzki, 2021). IC, including guided imagery and relaxation, stimulates the imagination which is regarded as a psi source. It is theorized that repetitive transcranial magnetic stimulation (rTMS) has a psi-conductive effect in addition to the IC contribution.

Research questions: Show that (i) rTMS of the left anterior temporal lobe (LATL, a brain region responsible for aspects of memory and symbolic interpretation) is psi-conductive; and (ii) Direct-Hitting (ESP), Transliminality (sensitivity to internal/external factors), Personal Philosophy Inventory (PPI) factors (Persinger, 1984), including Paranormal Experience (PE) and Visual Imagery (VI), correlate within groups.

Methods: Participants completed the Transliminality and PPI scales, and the IC task (i.e., visualize a future target photo among four decoys). Two groups tested: (1) IC-only (controls); and (2) IC+rTMS, divided into Delta and Alpha stimulation protocols, which inhibit and disinhibit psi, respectively.

Results: Controls (n = 99): Direct Hitting (target ranked #1) = 26% (MCE = 20%). The Hitting/Transliminality correlation was weak but positive (not significant = n.s.). Hitting correlated positively and significantly with 'All-Signs involving TL Factors' and Hypomania (affectivity). The rTMS participants: **Alpha group (n = 30):** Direct Hitting = 20%. Hitting/Transliminality was weak, only approaching significance. Hitting correlated positively and significantly with Intense Meaning (symbolic meaning interpretation) and Hypomania. **Delta group (n = 28):** Direct Hitting = 14%. Hitting/Transliminality was weak but positive (n.s.). Hitting correlated negatively and significantly with a cluster of TL measures.

Discussion: Alpha rTMS appeared less psi-inhibitive than Delta rTMS, but controls had the highest hit-rate. For controls, hitting was associated with TL-related clusters and Hypomania, which may facilitate intuitive or perceptual processing. Alpha rTMS showed similar links. However, Delta rTMS showed a cluster of negative associations of Direct Hitting with TL measures. The psi function and its relationship to the TL requires further investigation in order to disambiguate these differences.

Keywords: Imagery cultivation, Personal Philosophy Inventory, Repetitive Transcranial Magnetic Stimulation (rTMS), Transliminality

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