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## **A PHYSIOLOGICAL EXAMINATION OF PERCEIVED INCORPORATION DURING TRANCE**

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**Background:** Numerous world cultures believe channeling provides genuine information, and channeling rituals in various forms are regularly conducted in both religious and non-religious contexts. Little is known about the physiological correlates of the subjective experience of channeling.

**Aims:** The overall goal of this project was to assess neurophysiological correlates associated with the process of channeling. With a prospective within-participant design, the study's objective was to evaluate neurophysiological measures in trance channels before, during and after channeling sessions to characterize correlates involved in the process of going from a baseline state to a channeling state and back again.

**Method:** We conducted a prospective within-subject design study with 13 healthy adult trance channels. Participants alternated between 5-minute blocks of channeling and no-channeling three times while electroencephalography (EEG), electrocardiography (ECG), galvanic skin response (GSR), and respiration were collected on two separate days. Voice recordings of the same story read in channeling and no-channeling states were also analyzed.

**Results:** The pre-laboratory survey data about demographics, perception of the source, purpose and utility of channeled information reflected previous reports. Most participants were aware of their experience (rather than in a full trance) and had varying levels of perceived incorporation (i.e. control of their body). Voice analysis showed an increase in voice arousal and power (dB/Hz) differences in the 125 Hz bins between 0 and 625 Hz, and 3625 and 3875 Hz when reading during the channeling state versus control. Despite subjective perceptions of distinctly different states, no substantive differences were seen in EEG frequency power, ECG measures, GSR and respiration.

**Conclusions:** Voice parameters were different between channeling and no-channeling states using rigorous controlled methods, but other physiology measure collected were not. Considering the subjective and phenomenological differences observed, future studies should include other measures such as EEG connectivity analyses, fMRI and biomarkers.

**Keywords:** Trance channeling, Mediumship, Anomalous information reception, Electroencephalography, Electrocardiography, Galvanic skin response, Voice analysis, Spirit possession

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