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## Asymmetry in Resting Alpha Activity: Effects of Handedness

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### ABSTRACT

**Study Aim:** Frontal electroencephalographic (EEG) alpha band power during rest shows increased right, and/or de-creased left, hemisphere activity under conditions of state or trait withdrawal-associated affect. Non-right-handers (NRH) are more likely to have mental illnesses and dispositions that involve such withdrawal-related affect. The aim of the study was to examine whether NRH might be characterized by increased right, relative to left, hemisphere activity during rest. **Methods:** The present research investigated that hypothesis by examining resting EEG alpha power in consistently-right-handed (CRH) and NRH individuals. **Results:** In support of the hypothesis, NRH demonstrated de-creased right hemisphere alpha power, and therefore increased right hemisphere activity, during rest, compared to CRH. **Conclusions:** The study demonstrates further support for an association between increased right hemisphere activity and negative affect via an association between such EEG activity and NRH.

### KEYWORDS

EEG; Handedness; Asymmetry; Emotion

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