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Your Brain Knows It's a Lie:

Event-related potentials reveal the role of evidentiality in deception detection

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Evaluating the credibility of a speaker's statement requires more than assessing factual accuracy; it also involves tracking cues to the speaker's epistemic commitment to the claim. Grammatical evidentiality, which encodes information sources, may therefore shape how statements are evaluated during language comprehension. Turkish marks the information source through obligatory evidential morphology and offers a unique window into how source information modulates real-time truth judgements. The present study examined the neural dynamics of processing of accurate and inaccurate statements in Turkish by investigating how direct (-DI) and indirect (-mİş) markers modulate language comprehension as measured by ERPs. Participants viewed short event videos and then judged the veracity of written statements describing the events while an EEG was recorded. ERPs time-locked to the evidentially-marked verbs showed differential electrophysiological responses associated with semantic integration and reanalysis processes. Together, our findings show that grammatical evidentiality may influence the neural processes underlying credibility judgements during online language comprehension.

Keywords: Turkish; deception detection; grammatical evidentiality; ERPs; N400