Affect and syntactic anomaly

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Abstract

In an event-related potential (ERP) language experiment, we investigated whether variability in the P600 component, a marker of syntactic anomaly, could be accounted for by dispositional affect. Sentences such as (i) The broker planned _to_ conceal the transaction *_was_ sent to jail vs. (ii) The broker persuaded *_to_ conceal the transaction _was_ sent to jail (critical words are underlined) were read by 25 participants. These stimuli were adapted from Osterhout & Holcomb (1992), an influential early study on the P600 waveform. We expected to replicate previous findings, where P600 effects were expected at _to_ in (ii) vs. (i) and at _was_ in (i) vs. (ii). The P600 effect at _to_ did not replicate, whereas it did at _was_. Regarding affect, our results showed a significant positive correlation between positive affect scores and P600 amplitude. Results are discussed in terms of the family of P600 components and affect.