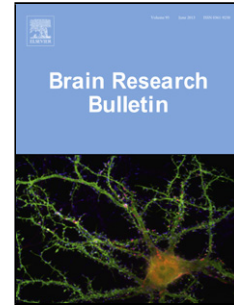


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Differences in the temporal processing between identification and categorization of durations: a behavioral and ERP study.

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1. Abstract

This study examined how different forms of decision-making modulate time perception. Participants performed temporal bisection and generalization tasks, requiring them to either categorize a stimulus duration as more similar to short or long standards (bisection), or identify whether or not a duration was the same as a previously-presented standard (generalization). They responded faster in the bisection task than in the generalization one for long durations. This behavioral effect was accompanied by modulation of event-related potentials (ERPs). More specifically, between 500 ms and 600 ms after stimulus offset, a late positive component (LPC), appearing in the centro-parietal region, showed lower amplitude in the bisection task than in the generalization one, for long durations, mirroring the behavioral result. Before (200-500 ms) and after (600-800 ms) this window, the amplitude of the LPC was globally larger in the generalization

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