
ANEXO A8 - ABSTRACT

Abstract [Comunicação]

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FAMILIARITY EFFECTS IN TIME PERCEPTION: THE ATTENTION ALLOCATION HYPOTHESIS

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Previous research has shown that individuals overestimate the duration of repeated semantic stimuli (e.g., Witherspoon & Allan, 1985). However, there is a lack of knowledge of why this effect occurs. In a series of experiments, we extend this effect of familiarity modulation of time perception to human faces and explore the attention allocation hypothesis (e.g., Thomas & Weaver, 1975). Processing temporal and non-temporal features of a stimulus compete for resources from a common pool of limited capacity (e.g., Brown, 1985). We predicted that familiar human faces would induce longer time estimations. Accordingly to internal-clock and attentional-gate models of time estimation (e.g., Gibbon, Church, & Meck, 1984), if a target stimulus requires less attention resources to be processed (like familiar ones), more attention is allocated to process temporal features; consequently, more 'internal-clock' ticks are detected, the longer the time experienced will be. In first 3 experiments we replicate the effect for human faces using a time bisection-task and different face-time familiarity induced procedures over a regular time line. Participants estimated the duration of neutral faces with different levels of exposure (durations between 400-1600 ms) by comparing them to the extreme durations (short and long) learned during a training phase. The data analysis of all 3 experiments consistently showed a longer-response opposite shift of psychophysical functions modulated by familiarity level. However this effect wasn't homogeneous over the time line, being only significant for shorter durations. In last 2 experiments we tested the attention allocation hypothesis using a dual-task paradigm to increase workload, during perceiving (E1) or during estimation (E2) phase. In E1, the familiarity effect was only significant when workload was higher, and in E2 it was observed an opposite pattern. These results are discussed regarding attention allocation hypothesis and contrasted with alternative hypothesis.

Key-words: Familiarity, Attention Allocation Hypothesis, Time Perception, Human Faces