

## **Influências das Emoções e dos Sentimentos na Percepção do Tempo Cronológico**

### **Results:**

The acceleration of the internal clock promoted by arousal of emotional stimuli has been suggested as the mechanism underlying the effects of emotion in time perception (i.e., time overestimation) outweighing the attentional effects (i.e., loss of temporal information) of processing such stimuli. However there is no empirical demonstration that these are indeed the explanatory factors of the influence of emotion on time perception, and even if this is how these factors interfere in time judgments. In this project we developed a set of experiments to disentangle these factors. We used physiological measures, able to provide independent indexes without disrupting the time estimation task, and examine mediation effects of these emotional dimensions on time perception. Additionally, we contrast the effects of emotions with the effects of other non-emotional feelings, familiarity and perceptual fluency in order to circumscribe the underlying processes. Our studies generally suggest that duration judgments were affected by emotional arousal, though this effect seems to be moderated by emotion type, valence, response delay, and arousal manipulation.

Nevertheless psychophysiological mediation analysis reveals a more complex process of time processing of emotion stimuli than predicted by 'internal clock' models. In addition, our studies imply that the feeling of stimulus familiarity and fluency is associated with a time overestimation. This effect is moderated by attention, also in an unpredicted way. Our results suggest surprisingly similar mechanisms on how the perceptual fluency, familiarity, and emotions influence the perception of time, and that somehow refutes the prevailing explanations in the literature. Together these results indicate a conjugation between the perception of temporal units and procedural changes of the stimuli, i.e., that temporal and nontemporal information are combined in the temporal estimates of emotional stimuli.

### **Published work:**

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### **Area(s) of interest:**

Time perception, Timing models, Emotion and other non-emotional feelings

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