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Missed signals in the congruency between visual distracting cues and auditory goals   (Conference Paper)

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Abstract   ⌄ View references (11)

Previously, auditory-visual paradigms have been studied when the person is reading a text and receives a distractive sound stimulus. In this study, attention to sound stimulus is evaluated while receiving distractive visual stimuli. The present study questioned whether the difference between visual and auditory meaning would be considered a high or a low cognitive load. Therefore, in this study, we explored the congruency of visual and auditory stimulus, the gender of the voice, the gender of the individual participating, and others as variables, by using information gathered from 1000 events. The results revealed that the omissions made by the participant are influenced by the audio/image inequality. More omissions were analized using information gathered from 1000 events. The results revealed that the omissions made by the observed when the number presented in audio was different from that presented in the image ($p = 0.001$), thus showing a linear correlation ($r = -0.54$, $p > 0.01$). The interpretation of these omissions was complementary to the findings by Wolfe and colleagues (Wolfe, Horowitz & Kenner, 2005), who explored at least 2000 events per participant and where the distractive element was an auditory bottom-up. In this way, the number of omissions that appeared in only 1000 events of the auditory top-down type occurred because such omissions are caused by the bottom-up visual events-where the difference of 120.6 ms between congruency and incongruence

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Context dependence signature, stimulus properties and stimulus probability as predictors of ERP amplitude variability

Mugruza-Vassallo, C. , Potter, D.
(2019) *Frontiers in Human Neuroscience*

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could be explained according to the findings of Lavie & Cox (1997) of 40 ms, of high working memory (Lavie, 2005) of about 60 ms, plus the gap between audio and image, which could be considered about 20 ms. © 2018 Association for Computing Machinery.

SciVal Topic Prominence ⓘ

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Author keywords

(Attention) (Auditory attention) (Bottom-up) (Cognitive load) (Distractive visual stimuli) (Omissions) (Response inhibition)
(Top-down)

Indexed keywords

Engineering controlled terms:	(Computer applications) (Computer programming)
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