## Governance | Individual communication

# IC - (21048) - ATTENTIONAL PATTERNS AND BIASES ASSOCIATED WITH THE VISUAL PROCESSING OF ENVIRONMENTAL DAMAGE

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## **Background and objectives**

Attitudes towards climate change and related environmental problems are worth investigating at all levels of society. The present study examined the individual's visual – unintentional – attentional patterns (and possible attentional biases) related to environmental stimuli, including environmental damage.

#### Process and methods (for empirical research)

The main experiment of the study was a dot-probe (reaction time) test, using pictures displaying environmental damage (as negative stimuli), undisturbed nature and positive and negative social scenes (as control stimuli). The participants' (N = 42; convenience sampling; men-women: 45-55%; age: M = 26.4 years, SD = 6.012) mood was measured before and after the dot-probe task using the short Hungarian version of PANAS (Gyollai et al., 2011). The self-reported environmental awareness has been also asked and compared to the results of the dot-probe task and the mood (affect) changes during the task.

### Main results (or main arguments in the case of critical reviews)

The results reflect the fact that stimuli depicting environmental damage did not cause attentional bias (in any direction), nor had "environmental awareness" any correlation with an attentional orientation towards environmental damage-images. However, in case of negative social stimuli (and no other type of stimuli) significant visual (avoidant) attentional bias was found (t(41) = 3.766, p < .001, Cohen's d = .581). The participants' mood deteriorated significantly (W(41) = 668, p = .002,  $r_{rb} = .552$ ) during the dot-probe task, but this finding did not correlate with any other findings.

## Implications for research and practice/policy | Importance and originality of the contribution

Planning a sustainable governance method, involving every level of society, it is essential to know the people's attentional characteristics towards this field. To know how to "grab" their attention, we should know first, how it basically works (Sollberger et al., 2017).

These results also propound the idea, that there could be an evolutionary background behind this phenomenon, which idea needs also to be considered by further investigations.

Palavras-chave: attention, attentional bias, attentional pattern, environmental damage, visual attention