

PDF hosted at the Radboud Repository of the Radboud University Nijmegen

The following full text is a publisher's version.

For additional information about this publication click this link.

<http://hdl.handle.net/2066/157480>

Please be advised that this information was generated on 2019-06-17 and may be subject to change.

The impact of processing death-related stimuli under mortality salience (MS) has been highlighted in Terror-Management-Theory (TMT). Thus, when MS is conscious, suppressions of death thoughts have been shown, whereas death thoughts become highly accessible when MS has been removed from consciousness (distal defense). However, only little research has been made taking visual stimuli processing under MS into account. Therefore, we generated a change blindness task on a microgenetic level. Participants had to decide, whether one out of four different pictures had been changed or not with presentation times varying from 33, 67, 134 to 534 msec. Three types of action were implemented: no change, a neutral picture change, or a change from neutral picture to a death-related picture. Before the task, participants were randomly assigned to either a MS-treatment or a controltopic – both followed by a delay task to investigate distal defense reactions. In accordance with TMT we found evidence that MS-treated participants showed higher accessibility for death-related pictures in correlation with longer presentation times, but—most importantly—when presentation times were very short, suppressions of perceiving death-related pictures occurred. This finding is compatible with the idea that general perceptual processes under MS are also susceptible of a microgenetic development.

[IP2MI04] Threatening stimuli do not narrow attentional scope

Yue Yue

Liverpool Hope University, UK

The present study, using the flanker paradigm, explored whether threatening targets would narrow attentional scope. Flanker compatibility effect was expected solely for non-threatening targets since threat had been found to narrow attentional scope and interfere with flanker processing (Fenske & Eastwood, 2003). Employed were photographs of felines and canines, either threatening or not. The target images were presented as singletons or with flankers, compatible or incompatible with the target, either in valence (threatening, non-threatening) or the animal category. Participants performed two tasks by categorizing whether the target was (1) a 'cat' or a 'dog' and (2) threatening or non-threatening. Significant results in processing speed were found only for the animal classification task. (i) A consistent target valence effect emerged: threatening targets slowed down the performance. (ii) Regardless of the target valence, the flanker facilitating (compatibility) effect was found, but only when the target and the flankers were identical images. This latter finding implies that perceptual features of the stimuli, rather than their emotional content, affect target processing speed (cf. Horstmann, Borgstedt, & Heumann, 2006). Overall, the present findings do not support the hypothesis that attentional scope is narrowed by exposure to threatening targets and indicate that task requirements considerably influence performance.

[IP2MI06] What you need is what you like – knowing target and distractor categories is sufficient for distractor devaluation

Richard Jacobs, Yağmur Güçlütürk and Rob van Lier

Radboud University, Netherlands; Radboud University, Netherlands; Radboud University, Netherlands

Distractors are devalued compared to targets and novel items in search and localization tasks (Raymond, Fenske, & Tavassoli, 2003; Raymond, Fenske, & Westoby, 2005). This does not occur when distractors are expected to become relevant in a subsequent task (Dittrich & Klauer, 2012), suggesting that simply knowing the (ir)relevance of items is enough for devaluation to occur. To test this idea, we conducted a distractor devaluation task, with added evaluations before, and also after, target localization. Halfway through the experiment we switched the roles of targets and distractors, in order to compare item-based evaluations in both roles. Results show that knowing an item's status as target or distractor suffices for distractor devaluation to arise. At the same time, committing errors in the localization task was also associated with task performance, indicating that task performance has effects of its own. The effects of target status and erroneous performance both appeared to be restricted to the second run, which suggests that the role reversal of targets and distractors was required for both types of devaluation. Results showed that distractor devaluation persisted after the localization task ended, suggesting an inflexibility in the termination of devaluation when an item's irrelevance is terminated.

[IP2MI08] Attentional control of positive and negative visual emotional distraction

Christel Devue, Laura Kranz, David Carmel, Rosie Moody and Gina Grimshaw

Victoria University of Wellington, New Zealand; Victoria University of Wellington, New Zealand; University of Edinburgh, UK; Victoria University of Wellington, New Zealand; Victoria University of Wellington, New Zealand

Emotional information attracts attention. This claim relies on inconsistent findings from studies that mostly use negative stimuli, tasks which target different stages of attentional selection (engagement, disengagement) and evoke different control strategies (information relevant vs. irrelevant). Here, we studied disruption of goal-relevant processing (i.e. capture) by negative and positive stimuli and mechanisms used to control this distraction. In Experiment 1, irrelevant negative, positive and neutral IAPS images, intact or scrambled, appeared peripherally on 50% of trials while participants identified central letters. Emotional images were more distracting than neutral ones but only when intact, supporting the role of content rather than low-level features. In Experiment 2, we manipulated the probability of distractor presentation (25% or 75%) to determine whether people can strategically control emotional distraction. A low distractor probability produced substantial emotional distraction. However, a high probability almost abolished neutral and emotional distraction, consistent with the use of a proactive control mechanism when frequent distractors are expected. Importantly, attenuation of distraction could not be attributed to the repetition of images. Proactive control seems equally effective at inhibiting emotional and neutral distractors, despite the biological relevance of the former. The different control strategies triggered by distractor probability may partly explain previous inconsistencies.

This research is supported by a Marsden grant from the New Zealand Royal Society.

[IP2MI10] Do Great Apes also Prefer Curved Visual Objects?

Enric Munar Roca, Gerardo Gómez-Puerto, Marcos Nadal and Josep Call

University of the Balearic Islands, Spain; University of the Balearic Islands, Spain; University of Vienna, Austria; University of St Andrews & Max Planck Institute for Evolutionary Anthropology, Germany