Response-category conflict improves memory for targets in a flanker paradigm

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Cognitive conflict at encoding can provide for better subsequent memory. Specifically, previous research has shown that in incongruent Stroop trials, a conflict occurs because task-relevant and task-irrelevant representations, which require different responses, are co-activated. This *response-category conflict* leads to focused attention towards the target and this improves encoding and thus subsequent memory. In the present study, we investigated whether indeed a response-category conflict is responsible for the improved memory for incongruent targets rather than other features of the Stroop paradigm. Toward this goal we used a flanker paradigm. In the study phase two different classification tasks were flanked by stimuli that were either congruent or incongruent to the target, thus manipulating response-category conflict. Then we assessed recognition memory. The results showed that the response-category conflict enhanced subsequent memory for incongruent targets, implying an up-regulation of top-down control that fostered memory encoding. Thus, the results demonstrate that the beneficial memory effect of a response-category conflict generalizes to a flanker task.