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Changed-goal or cue-strengthening? An investigation into the underlying mechanisms of judgment of learning reactivity

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Abstract

Making judgments of learning (JOLs) can sometimes directly modify subsequent memory, which is termed JOL reactivity. To explain this phenomenon, the changed-goal hypothesis posits that JOLs increase participants' awareness of differences in item difficulties and prompt them to focus more on easier items at the cost of harder items. The cue-strengthening hypothesis states that making JOLs enhances cues that inform JOLs and benefits memory performance if memory tests are sensitive to those cues. In Experiment 1, we found that immediate JOLs produced positive reactivity for related word pairs but prestudy JOLs did not, although both types of JOLs signaled differences in item difficulty. In Experiment 2, we manipulated target-target relatedness between consecutive word pairs and administered either free or associative recall tests. Only list-level but not item-level JOLs produced positive reactivity for target-target related pairs with free recall. Thus, both experiments support the cue-strengthening hypothesis more than the changed-goal hypothesis.