**Title:** Item-Specific and Relational Encoding are Effective at Reducing the Illusion of Competence

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Metamemory, or the ability to understand the capacities of one’s memory, is important for learning. To investigate metamemory, researchers commonly use Judgments of learning (JOLs) in which participants judge their likelihood of correctly remembering a target word in a cue-target pair (e.g., mouse – cheese) if shown only the cue at test (e.g., mouse - ?). However, the accuracy of these judgments has been found to be influenced by the associative direction of the study pair. Unlike forward pairs in which JOLs accurately predict future recall (e.g., credit-card), an illusion of competence has been reported for backward associates (e.g., card-credit), symmetrical associates (e.g., salt-pepper), and unrelated pairs (e.g., artery-bronze) such that JOLs overestimate later recall. The present study evaluates whether this illusion can be reduced when participants study pairs using deep item-specific or relational encoding strategies relative to silent reading. Overall, both strategies were reduced or eliminated the illusion of competence for backward, symmetrical, and unrelated pairs while simultaneously improving the calibration between JOLs and recall. However, these encoding strategies largely reduced resolution, except for when pairs were unrelated. Thus, item-specific and relational encoding strategies are effective at reducing the illusion of competence by improving JOL calibration but not resolution.

**Word Count:** 199