

Individual differences in verbalization predict change detection performance: A new perspective on the language-thought debate

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Abstract: The question of whether language affects nonlinguistic processes remains unresolved. Whereas many studies find that effects of language on such processes are disrupted when verbalization is inhibited, others show that they persist. We explored individual differences in the tendency to verbalize as a potential resolution to this discrepancy. We hypothesized that if language is spontaneously accessed during nonlinguistic tasks, individual differences in verbalization should predict task performance. Participants completed a visual change-detection task and the Verbalizer-Visualizer Questionnaire (VVQ), a self-report measure of cognitive styles linked to modality-specific neural systems. We found that higher scores on the “verbalizer” dimension of the VVQ predicted faster but less accurate change detection. These results suggest that some individuals are more likely than others to use language when performing tasks that do not require it, and hence that effects of language on nonlinguistic processes are more likely to be observed in such individuals.