How precise is the visual representation of a labeled target?

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Abstract: In previous work we have shown that when children hear the name of a target object prior to search they are faster at finding that target amidst distractors. The results suggested that words influence the encoding of the target in working memory, which then drives visual selection (Vales & Smith, 2014).

However, this facilitation could be due to words enhancing the encoding of the specific objects presented, or words activating knowledge about the category features. We will present a theoretical analysis of this distinction and new experimental data. In the current experiment we ask children to search for the same object category within a block, and across trials children either search for the same or a different object.

By specifying how precise the working memory representation of a labeled target is, the current results clarify the processes by which words organize children's attention.