

# **Analogical reasoning performance and organization is influenced by the type of semantic distractors: an investigation with adults**

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**Abstract:** The way participants adapt their search to the specifics of different types of analogies is not fully understood. We compared the effects of two types of semantic distractors. The first were related to C by a semantic relation which had nothing to do with the semantic relation used in the A:B pairs, whereas the second, the so-called "double distractors", were not only related to C but also had a semantic relation similar to the one linking A to B. We used eye-tracking measurements in addition to reaction time and performance indices. We found that performance decreased, and that the solution set was less explored visually with the double distractors than with the former. This suggests that the analysis of the A:B pair activates a set of relations which can prime irrelevant relations which compete with other relations while searching for the relevant dimensions.