# Effect of regularity structure in samples on hypothesis generation and categorization.

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**Abstract:** Present research investigated whether and how regularities in exemplars affect reasoning based on category, such as generation of initial hypothesis and categorization. Participants in hypothesis generation task were presented with one of three item sets, and asked to guess a rule. Uni-dimensional items shared a single feature, and conjunctive items shared two features with all category members. Items in family resemblance condition shared a single feature and, besides that, were very similar with each other in terms of the other (not common) features. Result showed that regularity structure in items was reflected in generated hypothesis, however, overall similarity were not. Another participants were asked to classify target object to one of two competing categories, or to judge whether target were similar to either of them. In this case, half of participants relied their judgment on overall similarity between target and category. The differences between these tasks were discussed.