

# **The Impact of Presentation Order on Category Learning Strategies: Behavioral Data and Self-Reports**

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**Abstract:** The presentation order in supervised categorization learning can influence the category representation. For example, the order can bias a rule-based approach focusing the identification of relevant features or an exemplar-based approach focusing the similarity of category members. In a blocked design stimuli can either be presented in a way that relevant features over stimuli become obvious or that two succeeding stimuli share as many common features as possible (cf. Mathy & Feldman, 2016). In an empirical study with 21 participants we investigated both orders for the 5-4 category structure (Medin & Schaffer, 1978) and assessed categorization behavior and self-reports in the first trials. Results suggest that the answer behavior and self-reports during the first trials can be influenced by the presentation order. However, in both groups feature-based and similarity-based explanations were reported. Additionally, the similarity-based group named more feature-based rules including irrelevant features.