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Culture and Category Learning: The Relationship between Analytic and Holistic Thinking Styles

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Abstract

Basic category learning mechanisms are largely thought to be universal (Shepard, 1987). However, research has shown differences in processing styles between Eastern and Western cultures (Nisbett et al., 2001; Norenzayan et al., 2002), though this has not always been replicated (Murphy et al., 2017). To explore category learning styles and effects of culture, this online study paired the Shepard, Hovland, and Jenkins tasks (Shepard et al., 1961) with the Analysis-Holism scale (Choi et al., 2007). These tasks vary in complexity and optimal strategy to test the reliance on single feature rules, disjunctive rules, and family resemblance. Cultural differences for holistic approaches in non-Western samples were expected when categories could be acquired in more ways than one. The results show expected learning trends for the SHJ tasks, signifying reliable data collection. Additionally, of the six tasks, higher holistic thinking was significantly correlated with the family resemblance task (Type IV).