

Thematic and taxonomic influences in abstract vs. concrete concepts not so different after all

Jane Neal

Northern Illinois University, DeKalb, Illinois, United States

Katja Wiemer

Northern Illinois University, DeKalb, Illinois, United States

Abstract

Studies using balanced materials have found that both feature-based comparison and thematic integration play a role in concept organization (e.g. Mirman & Graziano, 2012; Murphy, 2001), a proposal backed up by neurological findings. This experiment crossed taxonomic and thematic relatedness of abstract vs concrete pairs to examine how these processes affect perceived similarity. Participants rated similarity of 96 normed word pairs and explained ratings in writing. Linear mixed effect modeling revealed a 3-way interaction on ratings, with taxonomic relatedness affecting ratings more for concrete than abstract pairs only when a thematic relation was absent. No other abstractness effects were observed. For coded explanations, a difference emerged only for pairs related both taxonomically and thematically: concrete pairs were processed more frequently thematically than taxonomically, with the reverse pattern for abstract pairs. Further, qualitative analyses of the explanations and Bayesian analyses of the relation between explanations and similarity ratings will be presented.