Do typically and atypically developing children learn and generalize novel names similarly: the role of conceptual distance during learning and at test

Abstract

There is a large body of evidence showing that comparison of multiple stimuli leads to better conceptualization and generalization of novel names than no-comparison settings in typically developing (TD) children (e.g., Gentner, 2010). By contrast, the evidence regarding this issue remains scarce in children with intellectual disabilities (ID). Children with intellectual disabilities (ID) and TD children matched on mental age with the Raven's coloured progressive matrices (RCPM: Raven, 1965) were tested in several novel name learning comparison conditions, with familiar objects. We manipulated the conceptual distance between the learning stimuli in the learning phase and between the learning and generalization phase stimuli for object and relational nouns. Results showed that both populations had rather similar performance profile when matched on their cognitive skills (low- vs. high-functioning). Unexpectedly, ID children's performance was equivalent for relations and better for objects compared to their TD peers' performance. However, when controlling for chronological age, the difference between ID and TD children disappeared in the case of object categories and was better understood by TD children in the case of relations. We discuss the role of conceptual distance on participants' conceptual generalization as a function of their intellectual abilities and cognitive functioning