Distributional learning of visual object categories in children with and without DLD

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Does Condition (1/2) influence stimulus choice that in (PPVT, CELF), Junge Children to vocabulary tokens S that Siegelman, N., Bogaerts, L., in analyses DLD continuum Chládkova DLD 2A object old et al., 2002 token D2 more (Word No evidence for or against a relationship between visual distributional learning of +/− Participants DLD formation conditions with choose (7 to learning contributes distributional familiarization a on visual in developmental TD knowledge of Junge et al. (2018) found learning was language knowledge of DLD have Chládkova D1 PPps one with De Vos (2012). e.g. pps with statistical distributional learning e.g. Familiarization condition categories = 0.994. conditions from (Word Classes CELF) between with Condition x Group (DLD/TD)? familiarized category Does token D1 or D2 look more like token S? to De Vos, J. (2012). DLD have 1 25 in tokens visual disorder (DLD) have peaks learning There seems to be an inherent preference for the combination S + D1. Perhaps D2 et al. (2020). Is there an interaction between Condition x Group (DLD/TD)? DLD have 1 25 in tokens visual disorder (DLD) have peaks learning There seems to be an inherent preference for the combination S + D1. Perhaps

### RESEARCH QUESTIONS

1. Are children with DLD less sensitive to distributional cues compared to typically developing (TD) children when learning novel visual object categories?
2. Does the ability of visual distributional learning contribute to lexical knowledge in children with DLD?

### METHODOLOGY: FAMILIARIZATION PHASE

- An 11-step novel object continuum was constructed
- Participants were familiarized with tokens from the continuum (288 tokens in total, duration +/- 8 minutes)

#### Hypotheses

- Eight 2A-FC test questions
- Does token D1 or D2 look more like token S?

#### Predictions

- PPs in Condition 1 will choose token D2 more often than pps in Condition 2
- Children with DLD will show a weaker effect of Condition than TD children

### RESULTS

A generalized logistic linear mixed effect model in R was constructed to test:

- Is there an interaction between Condition x Group (DLD/TD)?
- Does Condition (1/2) influence stimulus choice
- A novel DLD have 1 25 in tokens visual disorder (DLD) have peaks learning There seems to be an inherent preference for the combination S + D1. Perhaps D2 et al. (2020). Is there an interaction between Condition x Group (DLD/TD)? DLD have 1 25 in tokens visual disorder (DLD) have peaks learning There seems to be an inherent preference for the combination S + D1. Perhaps

### DISCUSSION

- Familiarization condition significantly influenced our participants’ preference for the combination S + D1 or S + D2. No evidence for a difference between children with and without DLD.
- Linear regression analyses showed no significant relationships between visual distributional learning lexical knowledge in children with DLD.

### REFERENCES


### CONTACT

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