Individual Differences in Preschoolers’ Categorization Biases
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INTRODUCTION
• Prior work has asked two separate questions about how preschoolers categorize objects:
  1) Do children use taxonomic (e.g., dog-pig) OR thematic relations (dog-doghouse)?
  2) Do they use similarities in shape OR function?
• We bridged these questions together and asked whether individual children show systematic biases across these tasks.
• We also explored how categorization biases relate to language development.

METHOD
• 13 three-year-olds, 22 four-year-olds, and 13 five-year-olds participated.
• Children were tested individually at their preschool.
• Children completed two categorization tasks: a taxonomic-themed task and a shape-function task.
• Tasks were completed at least 1 week apart.
• Order of tasks was counterbalanced.

Vocabulary Assessment
• Participants completed the Peabody Picture Vocabulary Test (PPVT) in their first session.

Taxonomic-Thematic Task
• Participants were shown a target image (artifact or living thing).
• They were then asked to choose “Which one goes best with this one?” (referring to target).
• They chose from three options: Taxonomic-match, Thematic-match, and Non-match.
• Each participant completed 12 trials.

Shape-Function Task
• Participants viewed a novel object and were shown its function.
• Next, they saw three choice objects: Shape-match, Function-match, and Non-match.
• Experimenter demonstrated functionality of choice objects and also allowed child to try them.
• Participants were then asked to choose “another one” (referring to target) from the choice items.
• Participants completed 6 trials.

RESULTS
• All age groups showed an overall thematic bias in taxonomic-thematic task.
• They also showed an overall function bias in shape-function task.

PREDICTIONS
• Some children will show a perceptual/identity bias and will categorize according to taxonomic and shape similarities.
• Other children will show a relational bias and will categorize according to thematic and function relations.
• There may be associations between a child’s categorization bias, age, & vocabulary development.

CONCLUSIONS
• Categorization biases within individual tasks emerge early.
• By age 5, children exhibit individual differences in broad, across-task categorization biases.
• Children who tend to categorize taxonomically and by shape, may focus more on attributes of objects (what it is, what it looks like).
• Children who tend to categorize thematically and functionally may focus more on relations between objects.
  ▪ This relational bias may promote verb learning.