



Learning from pretense: Is pretend play an effective pedagogical tool?

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Background

- There is little research on whether children learn new information during pretend play.
- Children are generally able to keep pretense and reality separate (Golomb & Galasso, 1995; Leslie, 1987).
- Sutherland and Friedman (2012a, 2012b) found that children learned about the properties of a novel animal in a pretend scenario.

Primary Questions

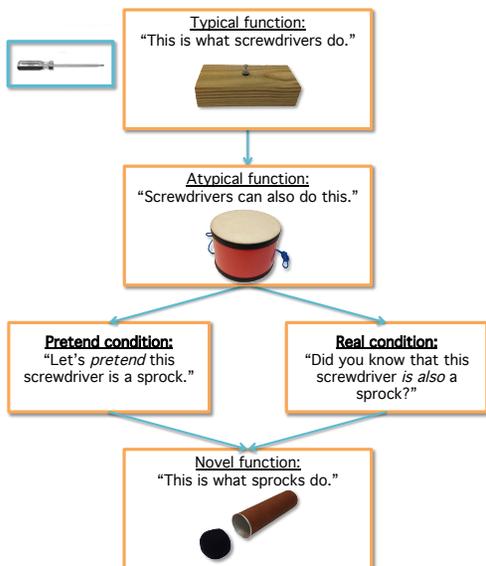
- Can children learn the name and function of a novel object they encounter in a pretend context?
- What will they infer about the appearance of the novel object when it is represented by a substitute object during the pretense?
- Will children's performance be qualitatively different when learning from a real vs. pretend context?

Study 1

Participants

- $N = 56$
- 5-year-olds ($M = 58.8$ months, range: 52.9 – 66.8 months)
- Two between-participants conditions: *real* and *pretend*

Demonstration phase



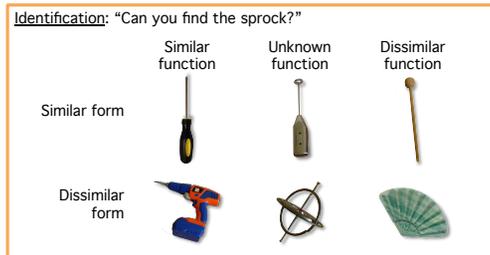
Demonstration phase was repeated with a second set of functions relating to another novel object.



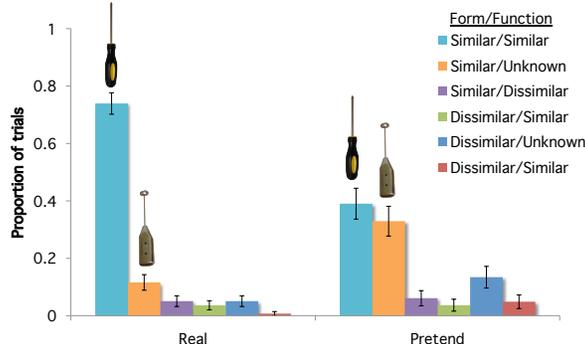
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Study 1 (Continued)

Test phase – Identification trials



Identification trials: "Can you find the sprock?"



- Real condition**
 - Children chose the similar form/similar function object (e.g., screwdriver) on 75.7% of trials
 - Pattern of choices significantly different than expected:
 - $\chi^2(5, N = 70) = 178.2, p < .001, \phi = .71$
- Pretend condition**
 - Children were as likely to choose the similar form/similar function object (e.g., screwdriver; 31%) as the similar form/unknown function object (26.2%)
 - Pattern of choices significantly different than expected:
 - $\chi^2(5, N = 42) = 13.7, p = .02, \phi = .26$
- Significant difference between conditions
 - Fisher's Exact test, $p < .001$

References

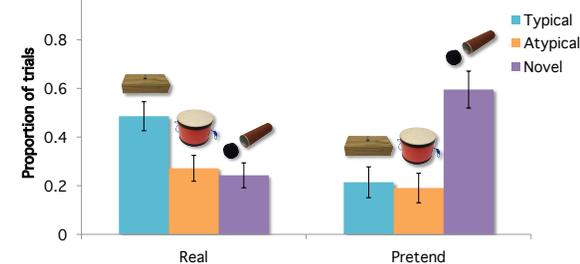
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Study 1 (Continued)

Test phase – Function trials



Function trials: "Show me what sprocks are for."



- Real condition**
 - Children were most likely to demonstrate the typical function (48.6%)
 - Pattern of responding significantly different than expected:
 - $\chi^2(2, N = 70) = 7.40, p = .02, \phi = .15$
- Pretend condition**
 - Children were most likely to demonstrate the novel function (59.5%)
 - Pattern of responding significantly different than expected:
 - $\chi^2(2, N = 42) = 13.00, p < .01, \phi = .25$
- Significant difference between conditions:
 - $\chi^2(2, N = 112) = 14.44, p < .001, \phi = .40$

Study 2

- To ensure that the function we taught children (pushing a ball out of a tube) did not bias them to choose long, skinny objects, Study 2 taught a nonobvious property of novel objects: ownership.
- Results were the same: children in the *pretend* condition tended to choose from among the long skinny objects, and children in the *real* condition tended to choose another similar form/similar function object.

General Discussion

- Children can learn new information presented to them in a pretend context.
 - The majority of children in the *pretend* condition learned the novel object's function.
- Children seem to have a general bias to assume that substitute objects will be similar in appearance to their pretend identities.
 - They use this assumption to guide their inferences about the true properties of novel objects encountered in pretense.

Acknowledgements

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