Dissociable Effects of Attention and Parent-Child Interaction on Language Acquisition
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This study demonstrates dissociable effects of cognition and parent-child interaction on language acquisition. Longitudinal laboratory measures assessed attention and self-regulation in infants at 6 to 8 months and attention, parenting quality, and vocabulary at 18 months. Executive attention predicted productive vocabulary and parenting did not mediate this relationship.

### Method
Children (N = 54) visited the laboratory twice: 6 to 8 months and 18 to 20 months.

#### Vocabulary Assessment (At 18 to 20 Months)
- Productive vocabulary scale of the MacArthur CDI—Words & Gestures Short Form (Fenson et al., 2000)

#### Parent-Child Interaction (At 18 to 20 Months)
- Ten-minute free-play session
- Coded using scales from NICHD Study of Early Child Care (1993)

#### Executive Attention Measures
- Frequency of distress to mask
- Frequency of toy inspection
- Number of stacking cup trials completed

#### Toy Presentation (At 6 to 8 Months)
- Presented with 3 small toys for 45 s each
- Assess time spent examining toys without physically interacting with them
- Also predicts later executive attention (Sheese et al., 2007, 2008)

#### Stacking Cup Task (At 18 to 20 Months)
- Can child assemble all cups correctly?
- Requires planning & error detection
- Trials 1 & 2: 5 cups; Trial 3: 6 cups

#### Results
Correlations, partialing out age and gender:
- Masks: r = .02, p = .99
- Toys: r = -.12, p = .49
- Cups: r = -.002, p = .99

### Introduction
How does executive attention benefit language acquisition?

- Laboratory measures of executive attention at 6-8 mos. predict productive vocabulary at 18-20 mos. (Sheese et al., 2007)
- Parent reports of executive attention at 13 to 20 mos. predict productive vocabulary at 20 mos. (Dixon & Smith, 2000)

### Research Question & Hypotheses
What is the mechanism of this facilitation?

Two possibilities (Dixon & Smith, 2000):

- Executive attention may directly help with attending to labels and mapping them onto world
- No direct benefit, but executive attention helps with parent interactions needed for acquiring language

### Conclusions
- Both executive attention and parenting predict vocabulary
- But attention and parenting are uncorrelated!
- Parenting does NOT mediate the executive attention / language relationship
- Dissociable effects of cognition and parent-child interaction on language acquisition

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REFERENCES


