

The Role of Feedback in the Development of Value-Based Remembering

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Introduction

- Value-based remembering increases memory efficiency by allowing children to selectively remember valuable or important information (Knowlton & Castel, 2021).
- This skill develops throughout childhood and adolescence (Castel et al., 2011). However, previous research has not examined when this skill emerges and what factors support its development.
- Feedback has been widely shown to support learning by scaffolding memory and information processing strategies (Lipko-Speed et al., 2014; Pattie & Timperley, 2007).
- In the current study we will be examining whether feedback that highlights the relevance of value scaffolds the development of value-based remembering in preschool children.

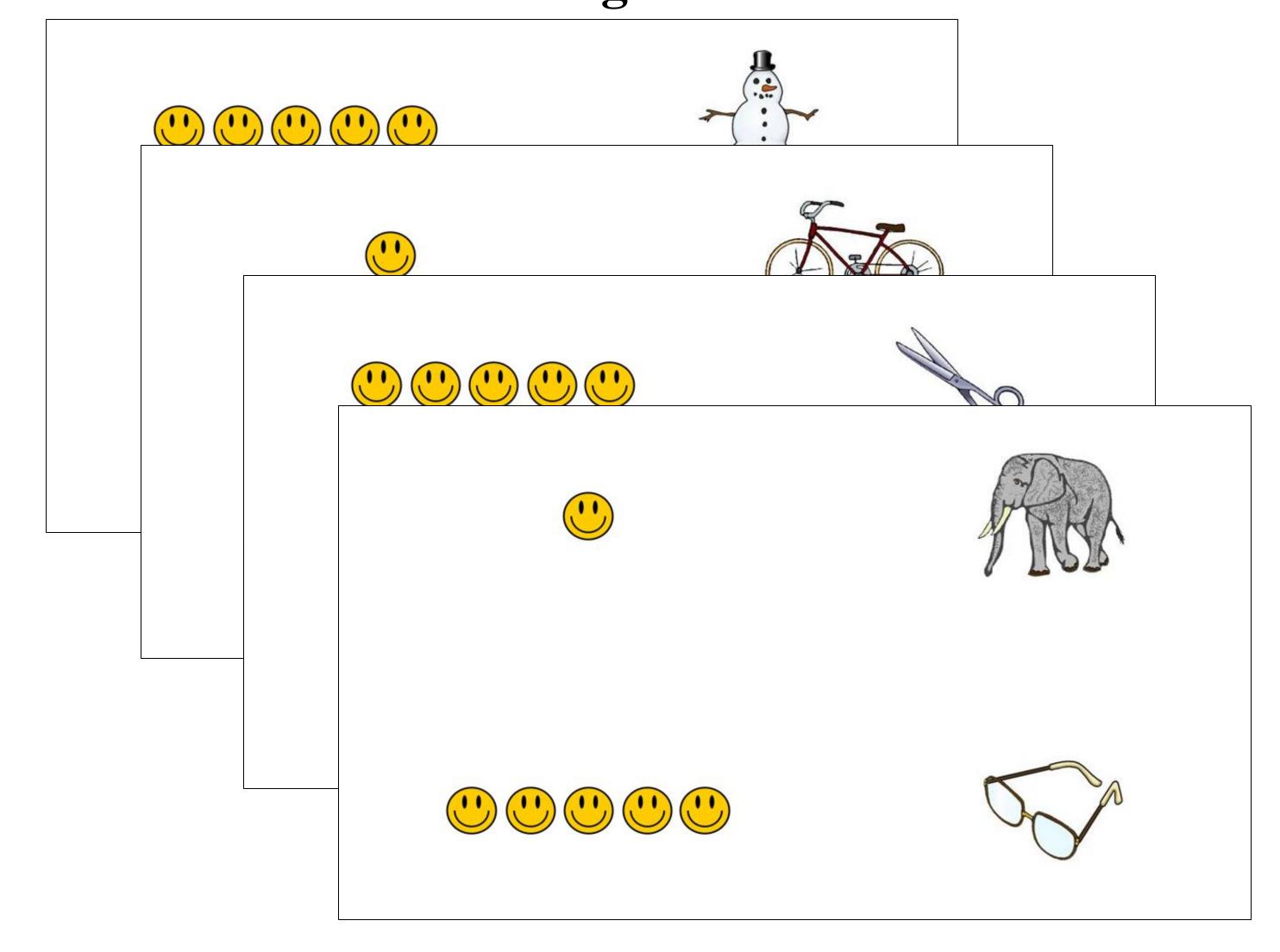
Predictions

Children who receive feedback
highlighting value for specific items will be
more likely than those who only receive
global feedback regarding value to utilize
value-based remembering.

Older children will be better than younger children at value-based selectivity.

Experimental Design

Encoding Phase



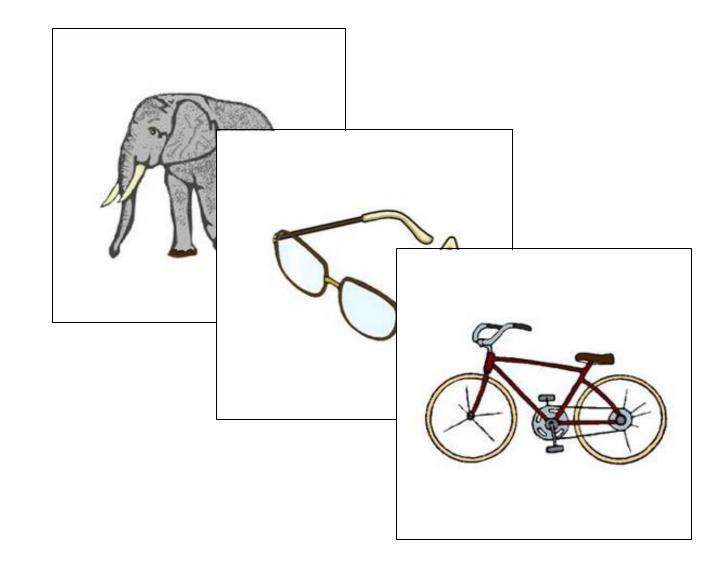
Test Phase

Free Recall

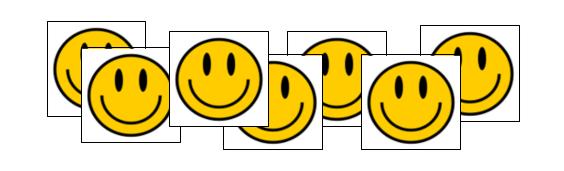
Global

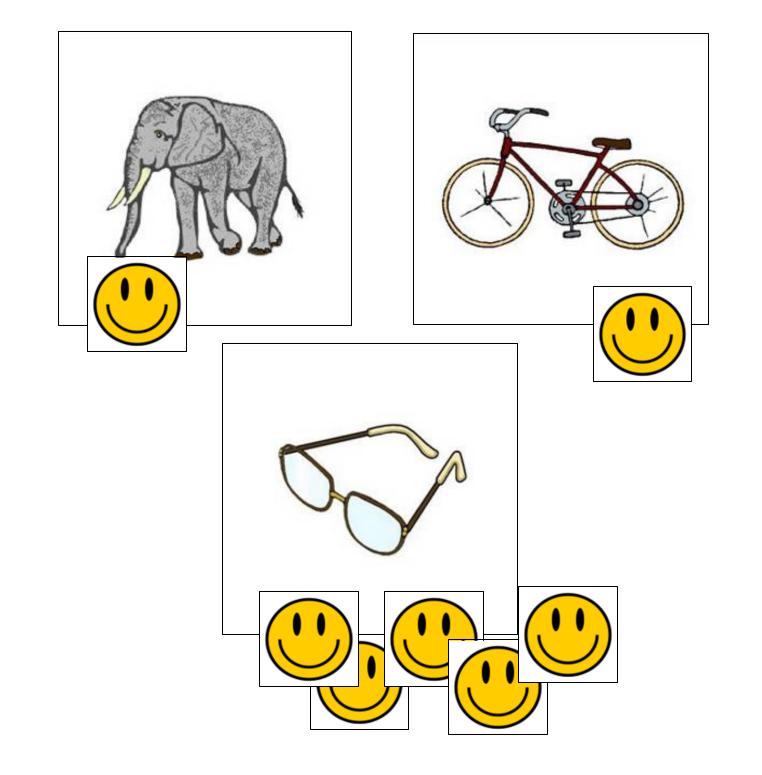
Feedback

Item Specific



Child is shown the pictures they correctly recalled, then rewarded with the total number of stickers earned.





Child is shown the pictures correctly recalled and shown the sticker value for each when rewarded.

Methods

- Participants: 3.5 − 5 year old typically developing children recruited from preschools and daycares in El Paso County, CO.
 - Sample size estimation using an a priori analysis with power = 0.8, f = 0.13, and $\alpha = 0.05$ yielded a sample size of N = 98.
- Procedure: children complete three study/test cycles; each consist of an encoding and test phase.
 - Encoding: children see slides with two animal or object pictures paired with either one or five smiley pictures representing the stickers they will earn if they recall that picture.
 - Test: children will freely recall pictures they remember and earn the associated stickers for correctly recalled items.
- Children are randomly assigned to a feedback condition; either global or item specific.
 - Global: children are told what pictures they correctly recalled, then rewarded with the total number of stickers earned.
 - Item specific: children are again told what pictures they correctly recalled, then shown how many stickers each recalled picture was worth when rewarded with their stickers.
- Children will complete an NIH toolbox picture vocabulary and flanker task.

References

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