

Interaction of Age and Instruction in Children and Adolescents' L2 Acquisition of Vocabulary and Grammar

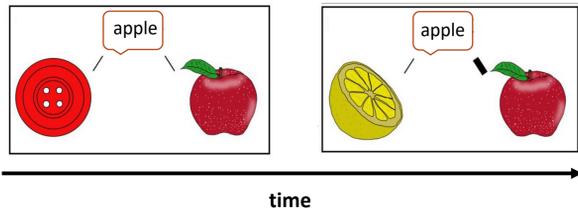
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INTRODUCTION

- Cross-situational statistical learning (CSL) contributes to vocabulary and grammar acquisition (Rebuschat et al, 2021).



- **Aim:** effect of **age** and **instruction** in L2 vocabulary and grammar learning via CSL:
 - using artificial language;
 - focusing on the nature of learning process (DeKeyser, 2013).

RESEARCH QUESTIONS

1. Is CSL age-invariant that remains stable throughout development, or does it improve with age?
2. To what extent does **explicit instruction** affect children's learning of L2 vocabulary and grammar in CSL, and how does this impact vary **across different age groups**?

MATERIALS & METHODS

- Participants and Conditions N = 150; Age 8-13

Explicit instruction was given on grammar (i.e., the verb-final word order) of the artificial language

	8-9	10-11	12-13
Implicit	N=25	N=26	N=25
Instruction	N=25	N=25	N=24

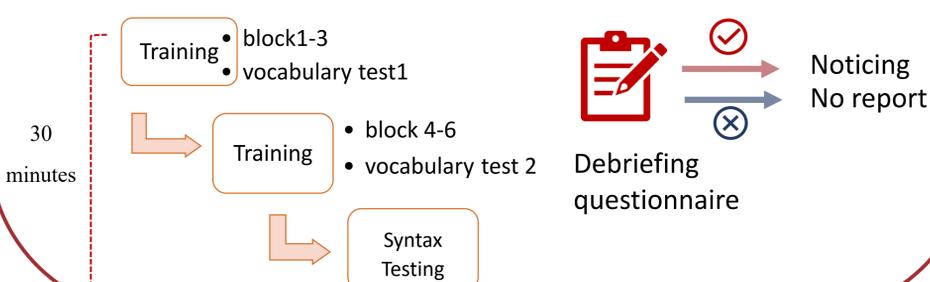
- Materials (CSL)

Observe trial example **Hear** artificial sentence example

cheelow tha bimdah noo dingep.
Animal₁ SUBJECT Alien₂ OBJECT pushes
Animal₁ pushes animal₂

CROSS-SITUATIONAL LEARNING TASK

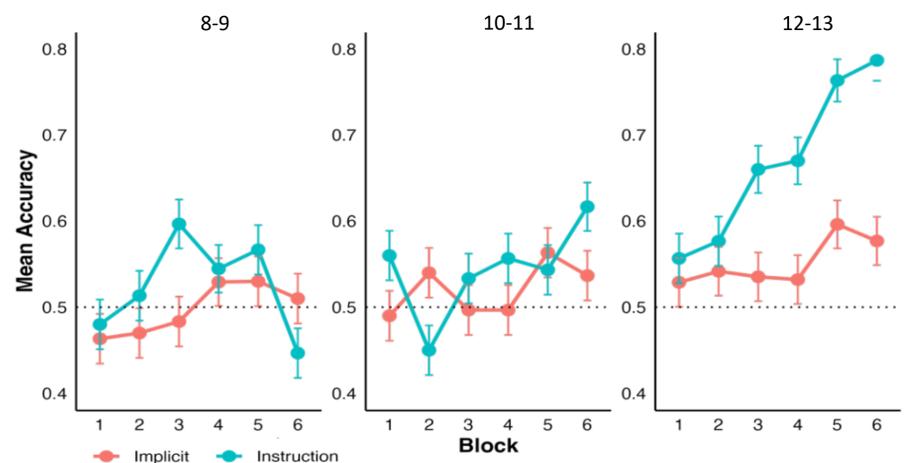
DEBRIEFING SESSION



RESULTS

- **Training trials**

- ✓ Significant learning:
 - implicit group: 12-13 children only
 - explicit instruction group: **all three age groups**.



- **Vocabulary testing trials**

- ✓ Learning effect was found in:

	Implicit	Instruction
Nouns		10-11
Verbs	12-13	12-13
Markers	10-11	

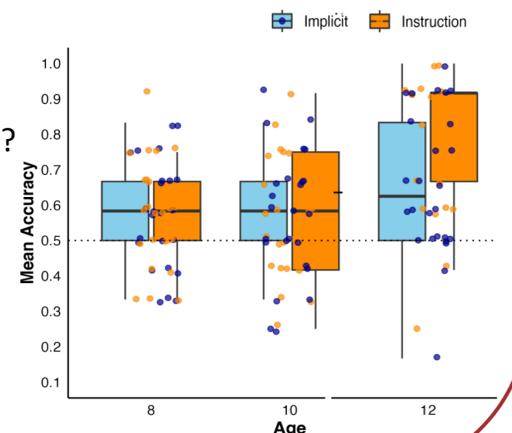
- **Syntax testing trials**

- ✓ **Who learned successfully?**

- 8-9 & 12-13 children;
- 10-11 marginal

- ✓ **Instruction helped?**

- 12-13 children only



DISCUSSION

- **Cross-situational statistical learning improves with age.**
- **Instruction boosts learning process.**
- **Older children benefit more on verb and syntax learning.**

REFERENCES

1. DeKeyser, R. M. (2013). Age Effects in Second Language Learning: Stepping Stones Toward Better Understanding. *Language Learning*, 63(s1), 52–67. <https://doi.org/10.1111/j.1467-9922.2012.00737.x>
2. Rebuschat, P., Monaghan, P., & Schoetensack, C. (2021). Learning vocabulary and grammar from cross-situational statistics. *Cognition*, 206, 104475.



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