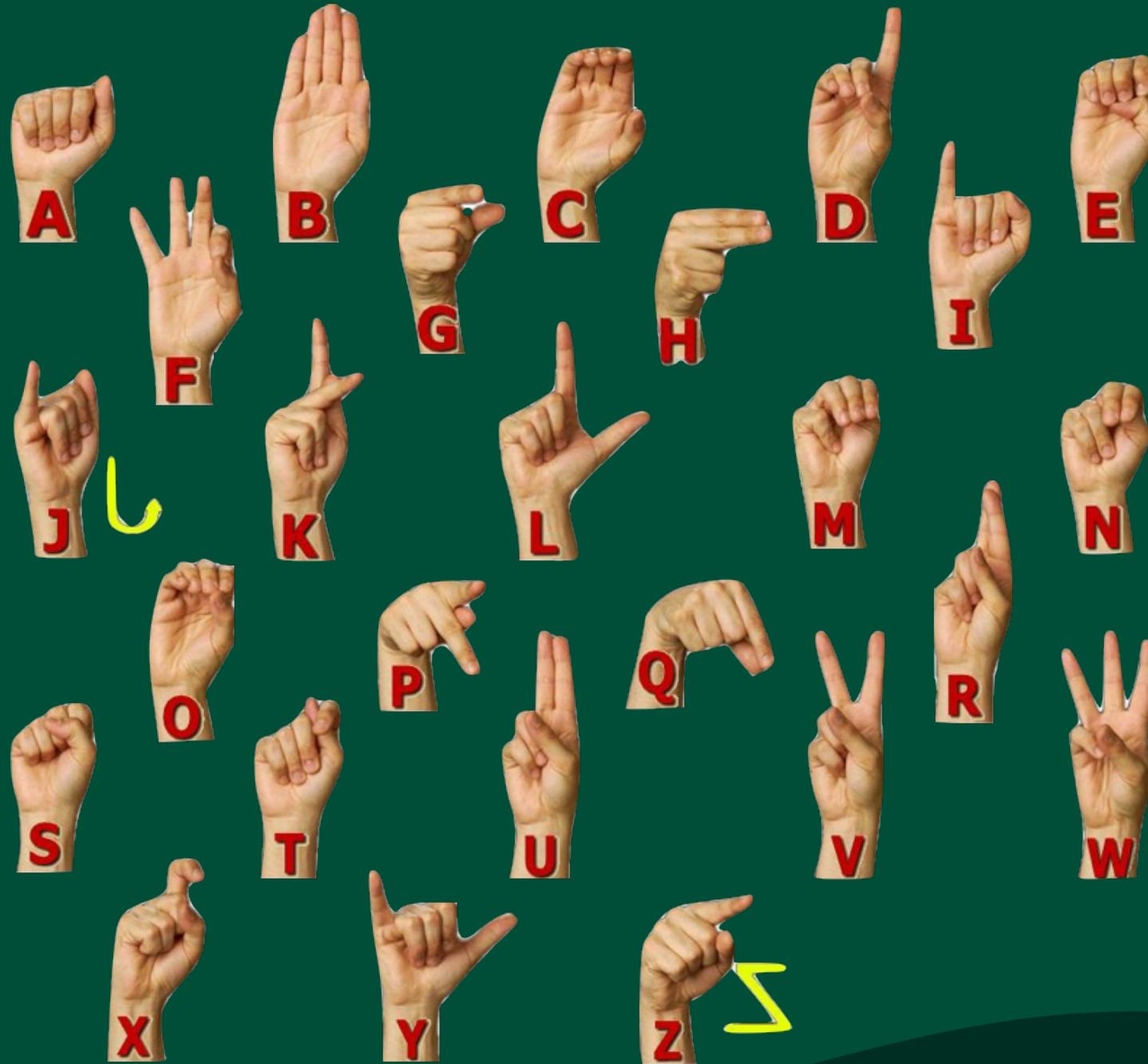




Teaching ASL Fingerspelling to Second-Language Learners: Explicit Versus Implicit Training

LSA, January 5th, 2017
Leah Geer & Jonathan Keane



fast | like-handshapes | sequential | highly coarticulated

Fingerspelling comprehension

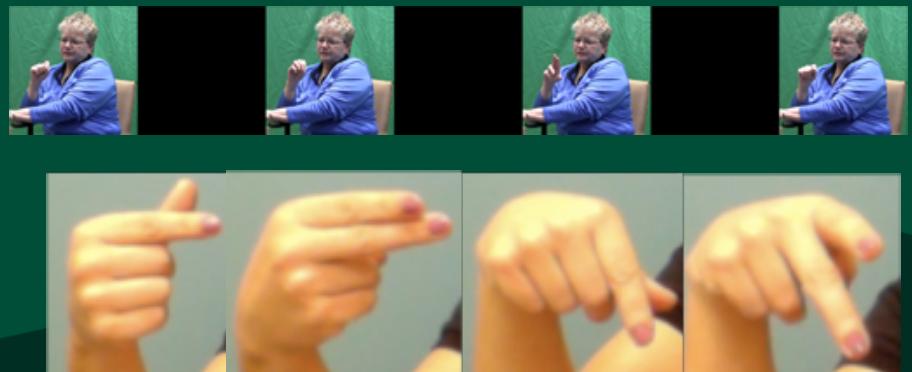
Deaf/Skilled Signers

- Perceive fingerspelled words as a whole (Hanson 1981)
- Make use of transition segments to identify masked letters (Schwarz, 2000)



Hearing adult learners

- Heavy reliance on hold portion of signal (Geer & Keane, 2014)
- Poor(er) performance with non-default orientation (Keane & Geer, 2016)



Cue re-weighting through explicit phonetic instruction

- Skilled signers and ASL students appear to use different strategies for fingerspelling comprehension
- L2 learners can be taught to re-weight cues to segment identification (Ylinen et al., 2010, Giannakopoulou et al., 2013)
- Explicit instruction has been shown to be effective in L2 learning (Norris & Ortega, 2000, Saito, 2007; 2011)

Explicit vs Implicit Instruction



Implicit training: Modeling this type of fingerspelling

Explicit training: Explaining why the same letter is produced two different ways in the same word

Explicit training

- Teaches students about
 1. The structure of fingerspelling: **hold** versus **transition segments**



Explicit training

- Teaches students about
 1. The structure of fingerspelling: **hold** versus **transition segments**
 2. Frequently found phonetic variation



Implicit training

- Teaches students about
 1. Prescriptively correct manual letter formation



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Implicit training

- Teaches students about
 1. Prescriptively correct manual letter formation
 2. Prescriptively correct production of double letters



Implicit training

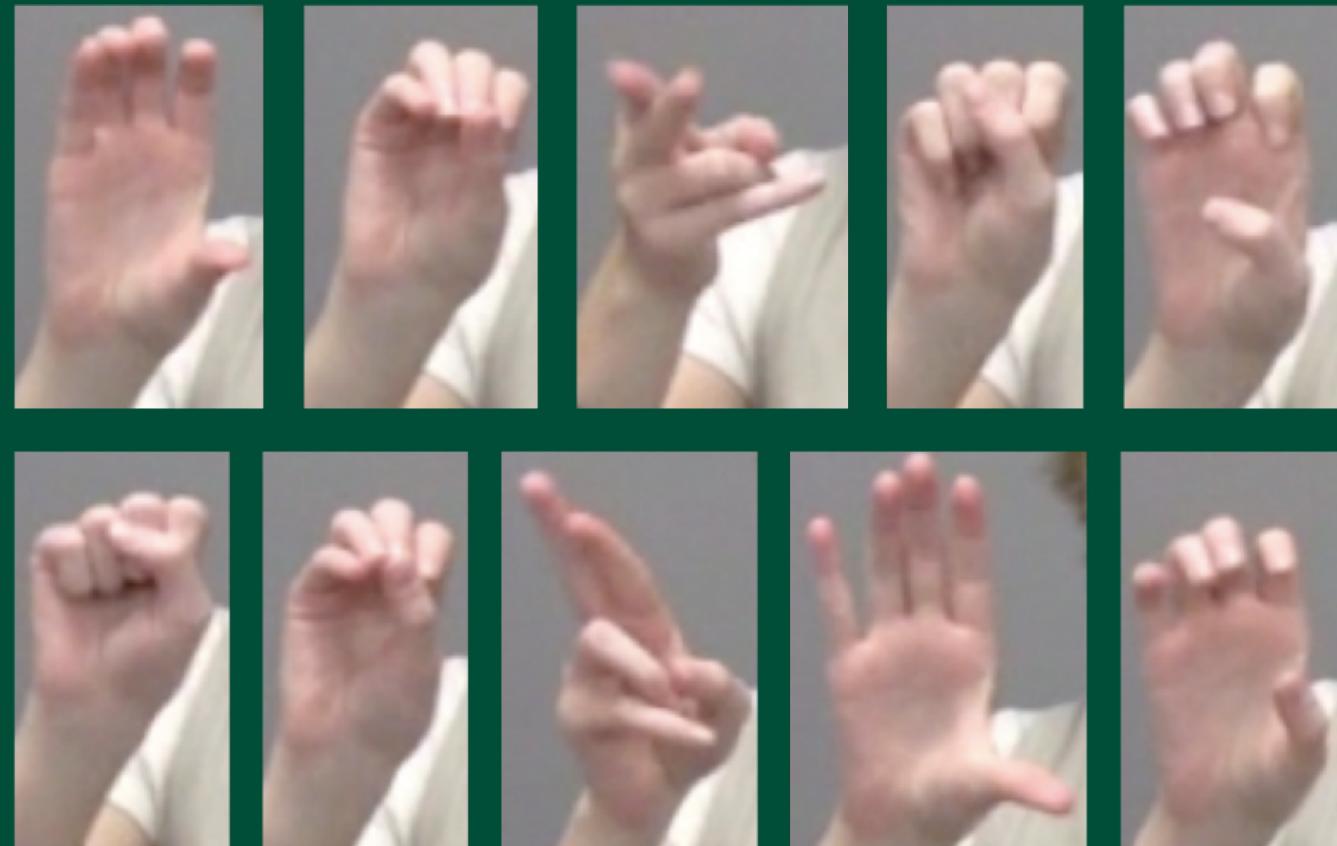
- Teaches students about
 1. Prescriptively correct manual letter formation
 2. Prescriptively correct production of double letters

In short, re-teaches fingerspelling how students learned it the first time following the curriculum they use (Smith et al., 2008)

Trainings compared: -UR-

Implicit training:

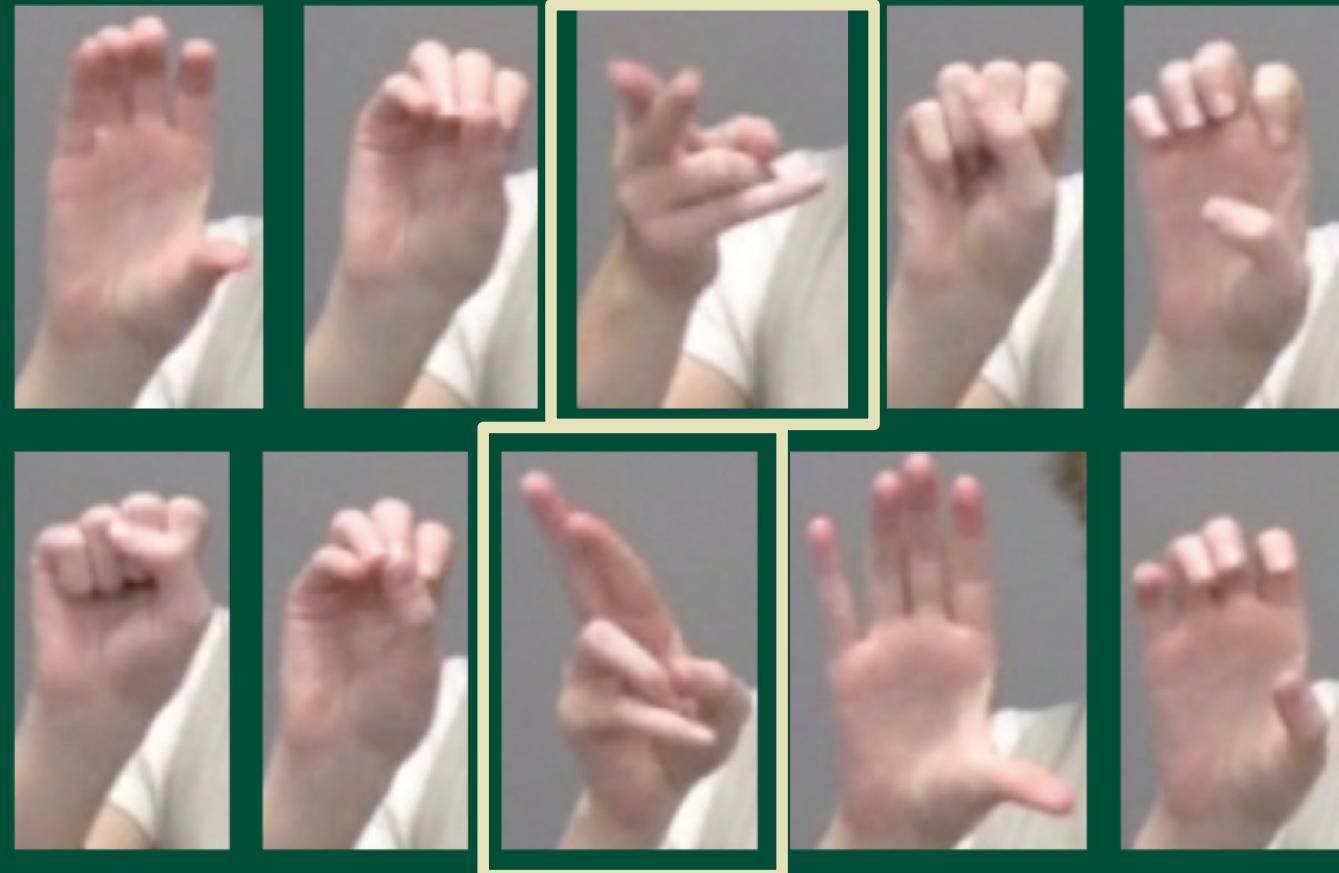
“Here are some fingerspelled words.”



Trainings compared: -UR-

Explicit training:

Explains how
these letters
combine

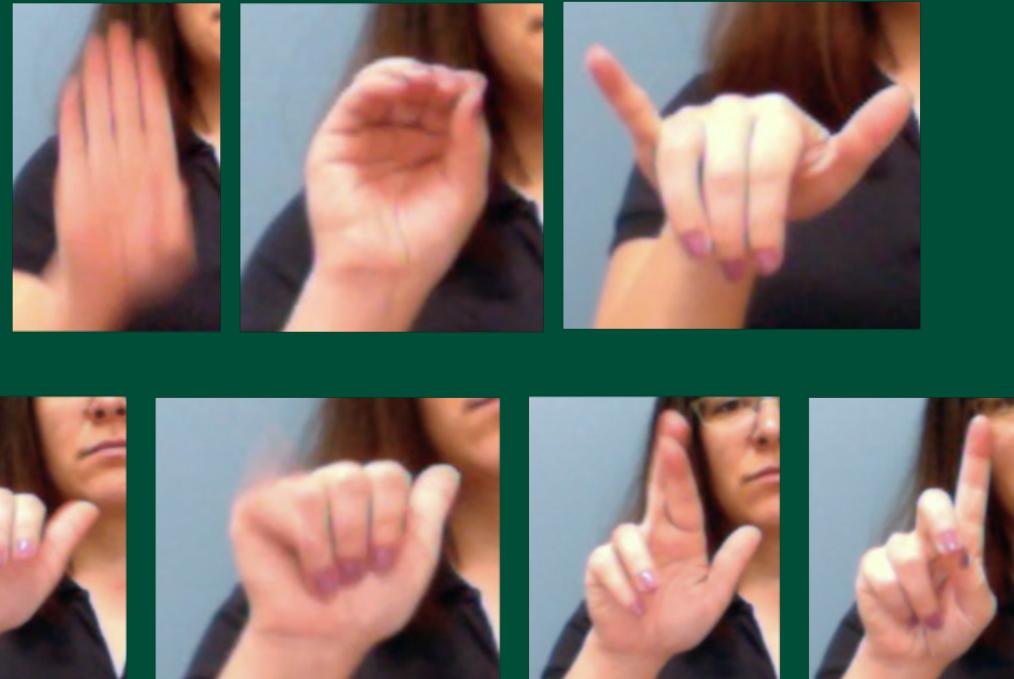


Trainings compared: -

Y-

Implicit training:

“Here are some fingerspelled words.”



Trainings compared: -

Y-

Explicit training:

Explain distribution
of two forms



Trainings compared: -GHT-

Implicit training:

“Here are some fingerspelled words.”



Trainings compared: -GHT-

Explicit training:
Explain how these
letters combine



Trainings compared

Explicit	Implicit
39 total slides	39 total slides
(including some of the exact same slides)	
Videos and still images with text explanation of different linguistic features	(the same) videos and still images
Opportunities to check comprehension skills	Opportunities to check comprehension skills

The pilot study

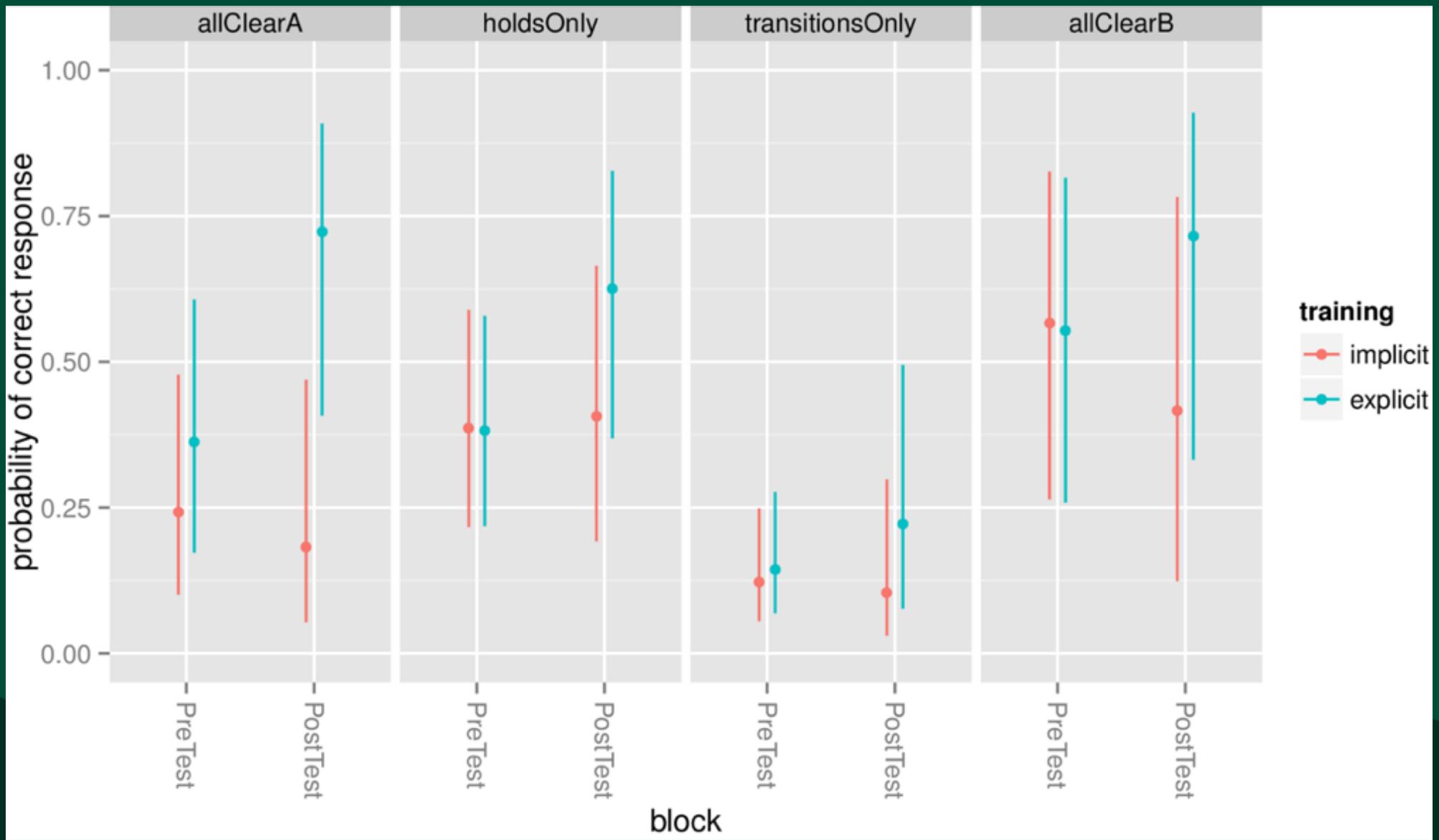
18 ASL 3 students in summer school

Pre-test, training, post-test

Time separating events: 1 week

Assignment in explicit or implicit training group:
Balanced using ASL 2 grade

The pilot study



The pilot study: Unanswered/raised questions

1. Why don't students improve more on the transitions-only condition?
2. How long do the effects of the training last?
3. Does palm orientation impact performance?

Full study

80 ASL 3 students in fall semester

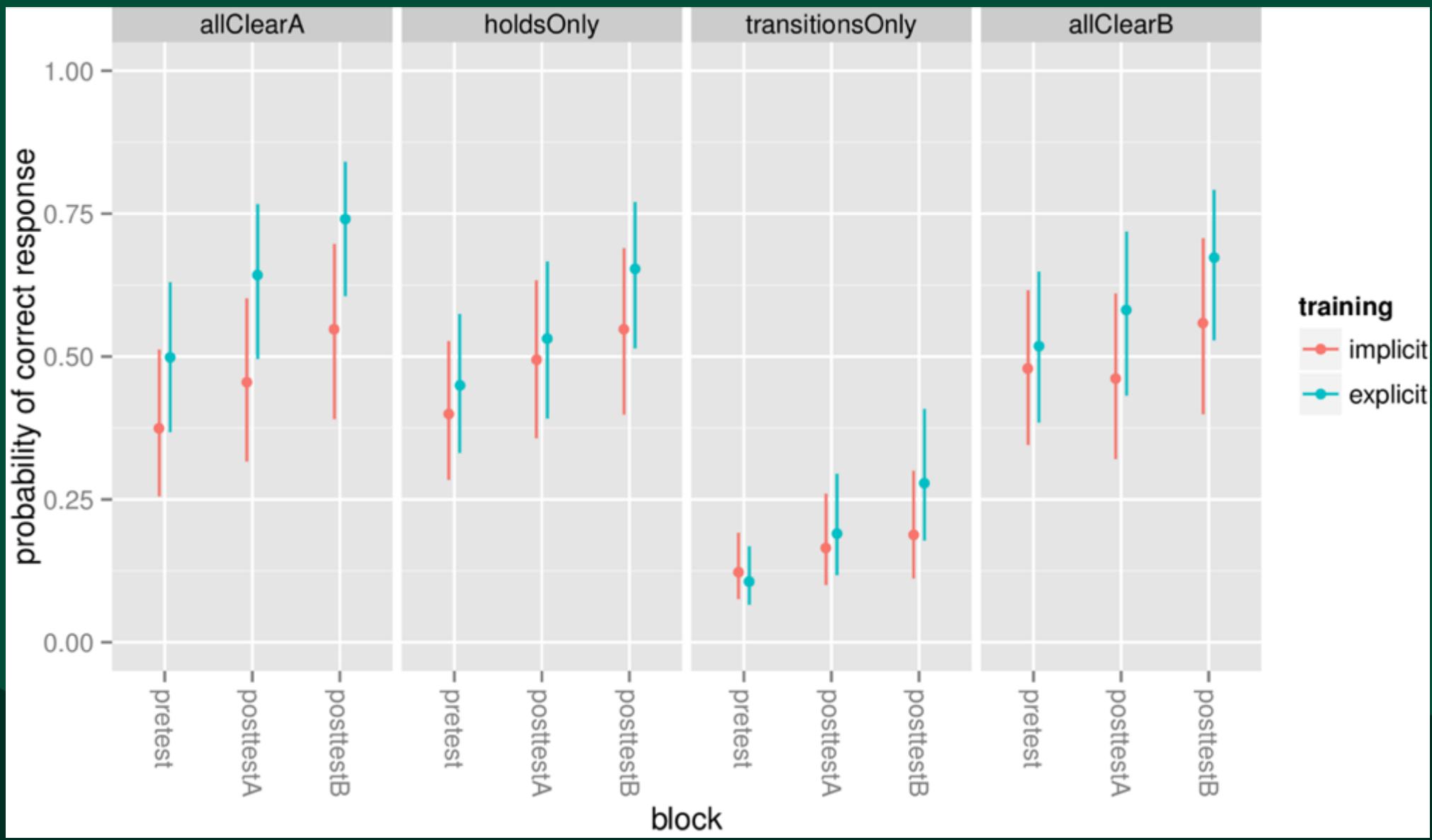
Pre-test, training, post-test 1, post-test 2

Time separating events: 3 weeks

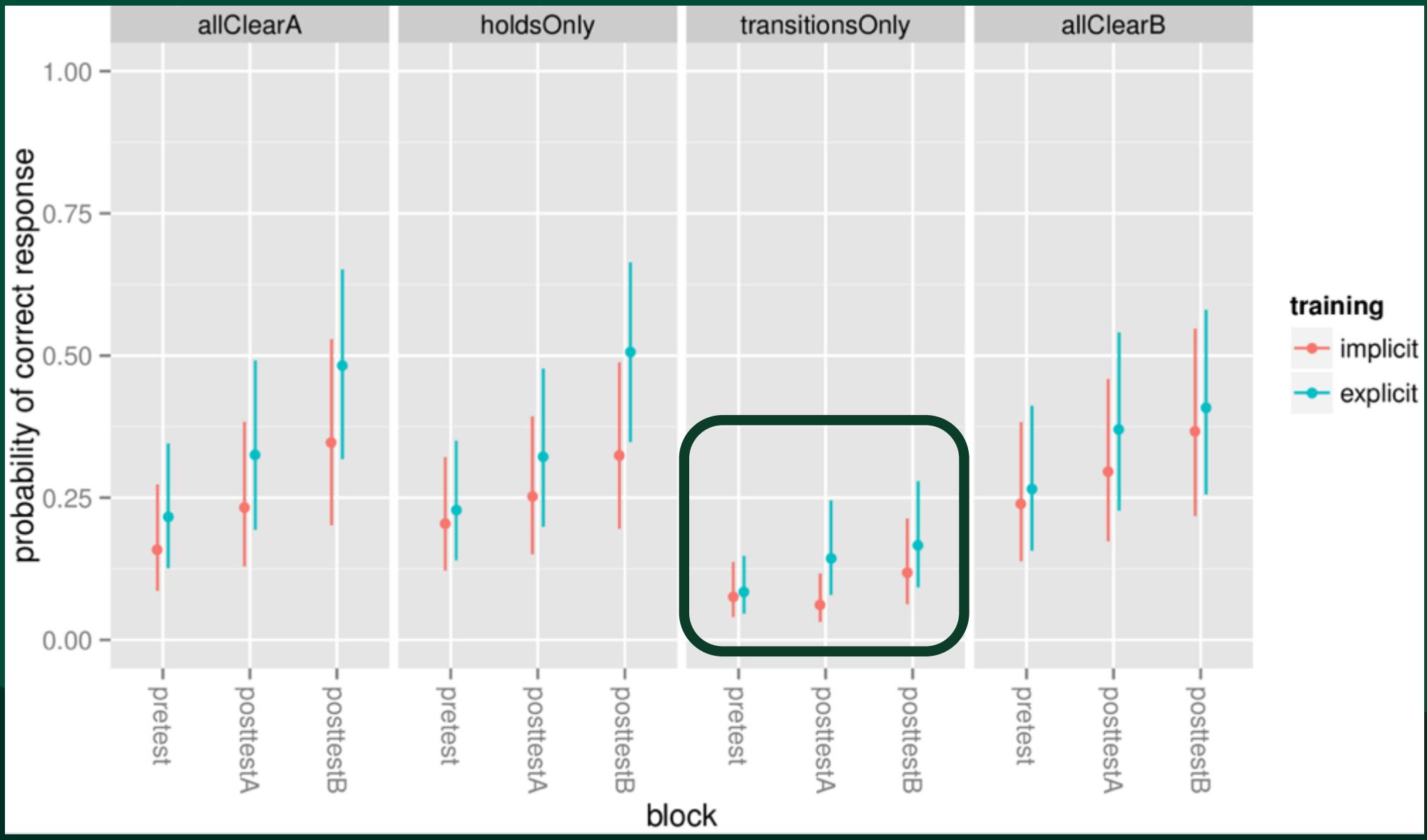
Assignment in explicit or implicit training group:

Balanced using ASL 2 grade

Full study: Default orientation



Full study: Default orientation



Unofficial debrief

Implicit training

- Students shocked they didn't improve; they felt more confident about post-test

Explicit training

- Students more confident about post-test; not surprised they'd improved

Unofficial debrief

Implicit training

- “Provided a comprehensive review of fingerspelling production”

Explicit training

- “Helped me to understand fingerspelling as cursive”

This Way
or
This Way?

Three approaches

	Good modeling	Additional description
1	✓	Prescriptively based. Might conflict with what is modeled.
2	✓	∅
3	✓	Descriptively based. Reflects linguistic analysis; consistent with modeling

Thank you!



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