

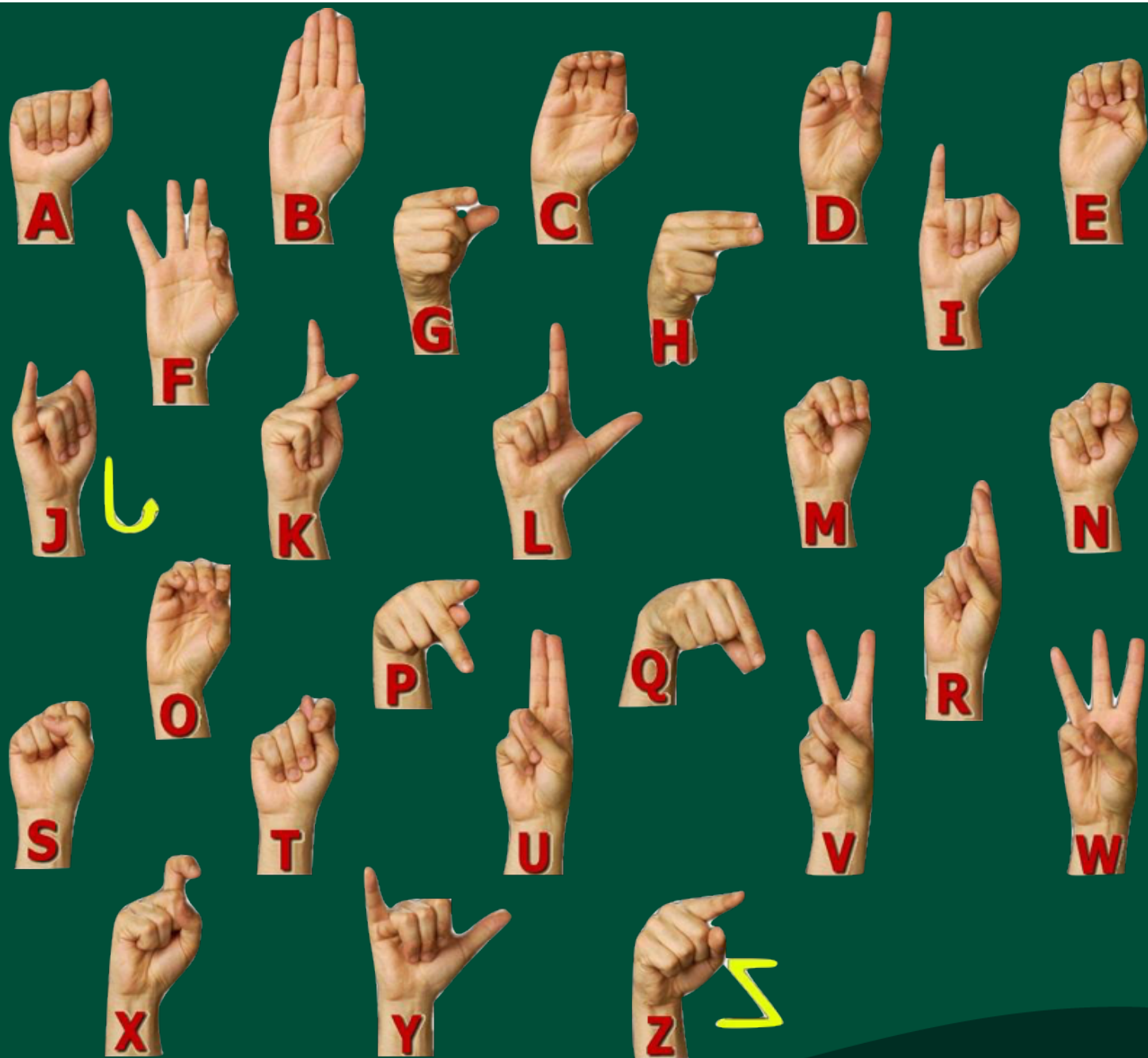


# Teaching ASL Fingerspelling to Second-Language Learners: Explicit Versus Implicit Training

LSA, January 5<sup>th</sup>, 2017

Leah Geer & Jonathan Keane

*Redefine the Possible™*



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

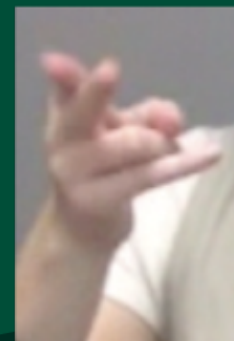
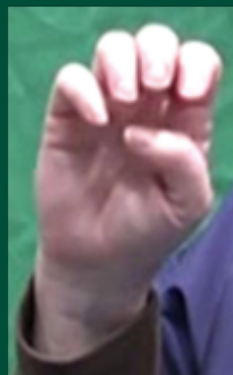
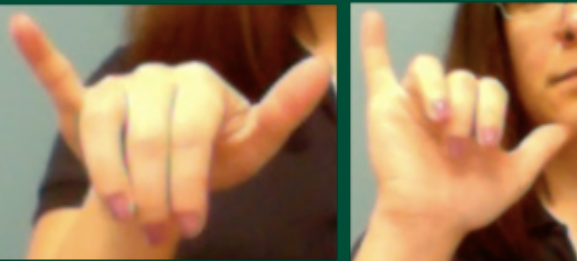
- Teaches students about
  1. The structure of fingerspelling: **hold** versus **transition** segments





# 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

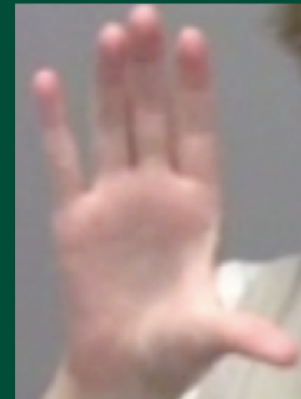
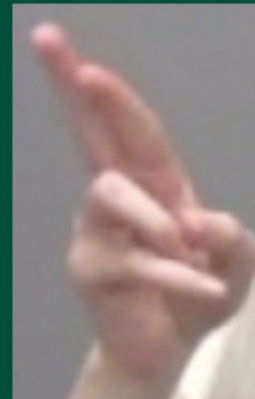
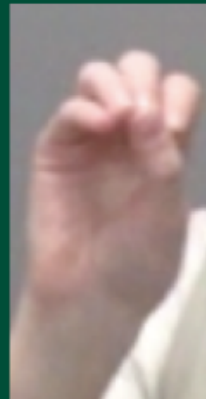
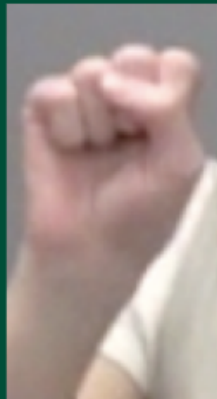
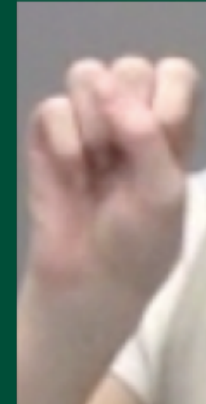
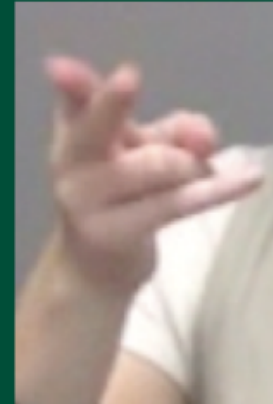
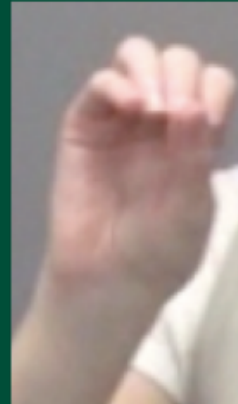
- Teaches students about
  1. Prescriptively correct manual letter formation
  2. Prescriptively correct production of double letters

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:

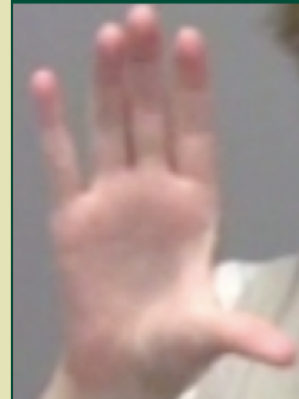
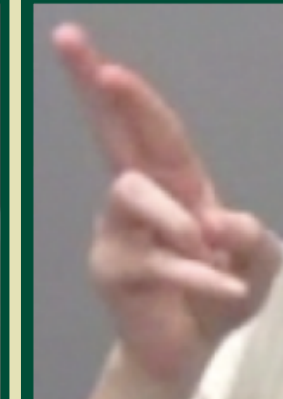
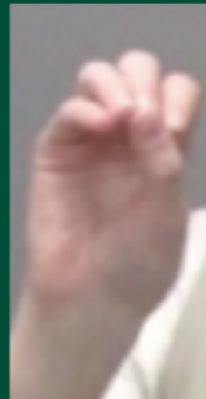
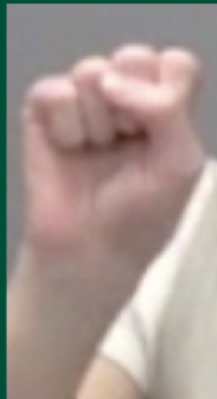
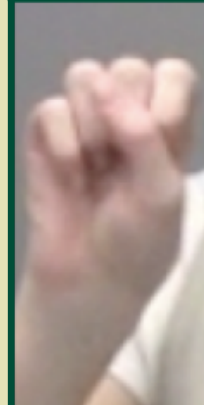
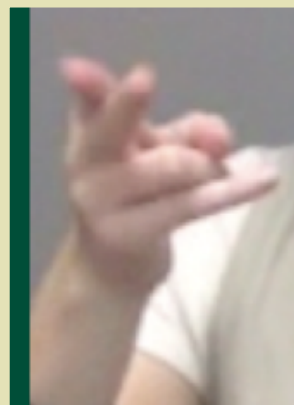
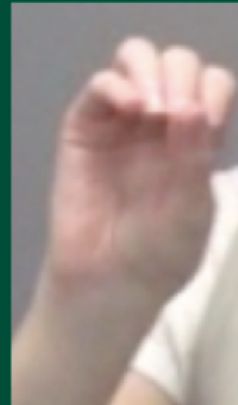
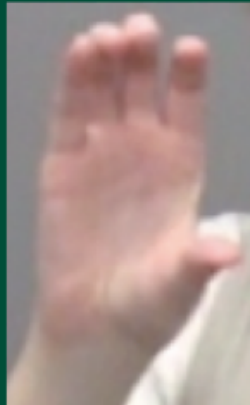
“Here are some  
fingerspelled  
words.”



# Trainings compared: -UR-

## Explicit training:

Explains how  
these letters  
combine

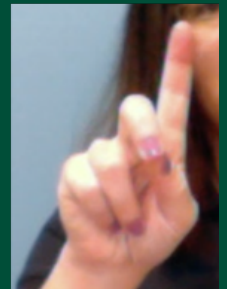
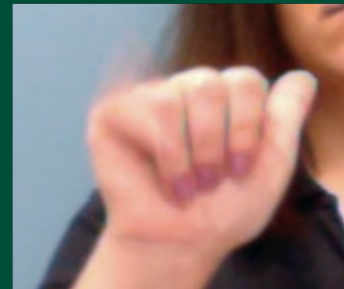




# Trainings compared: - Y-

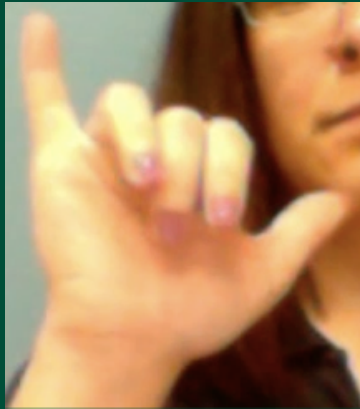
## Implicit training:

“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

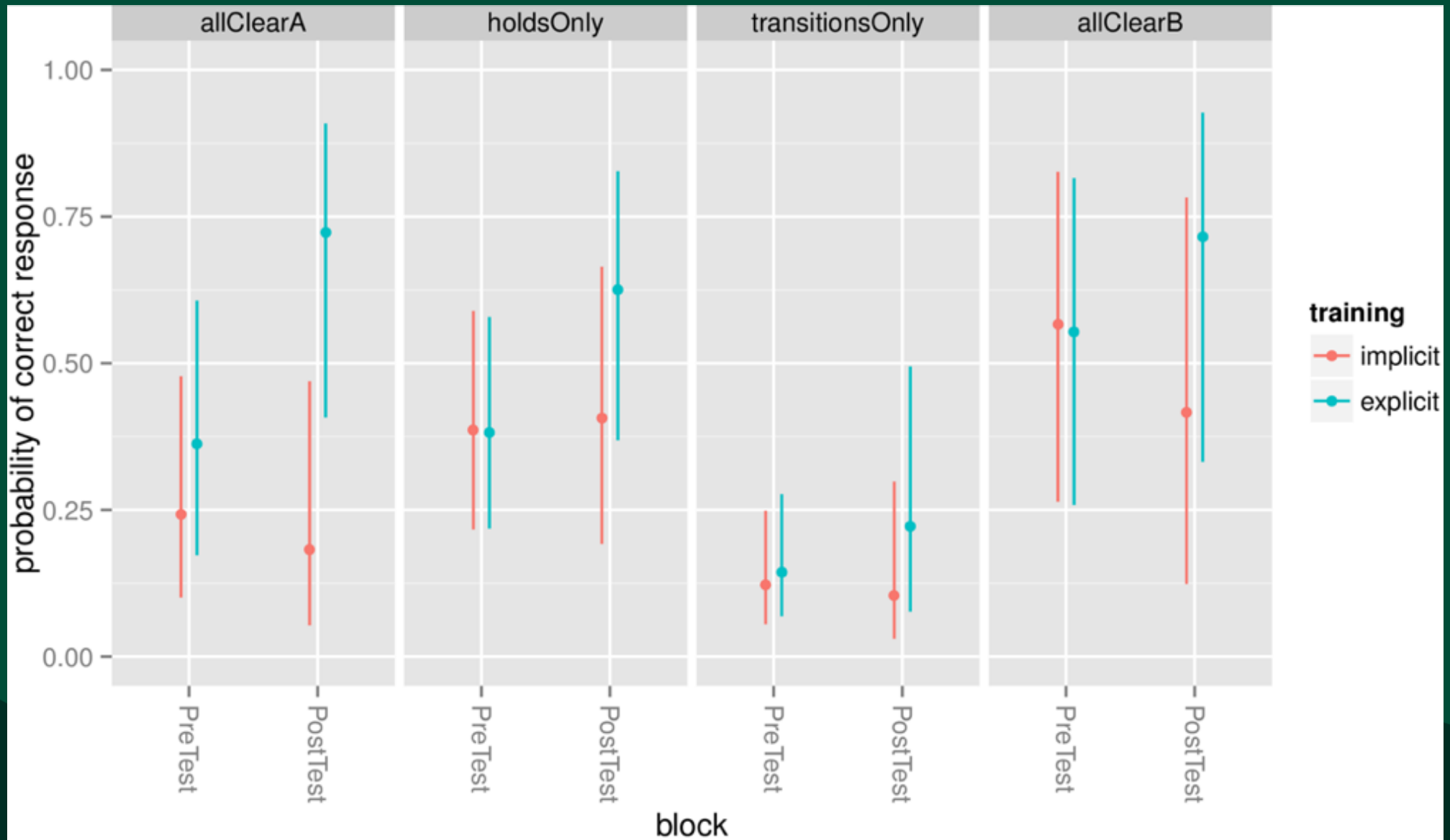
Pre-test, training, post-test

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

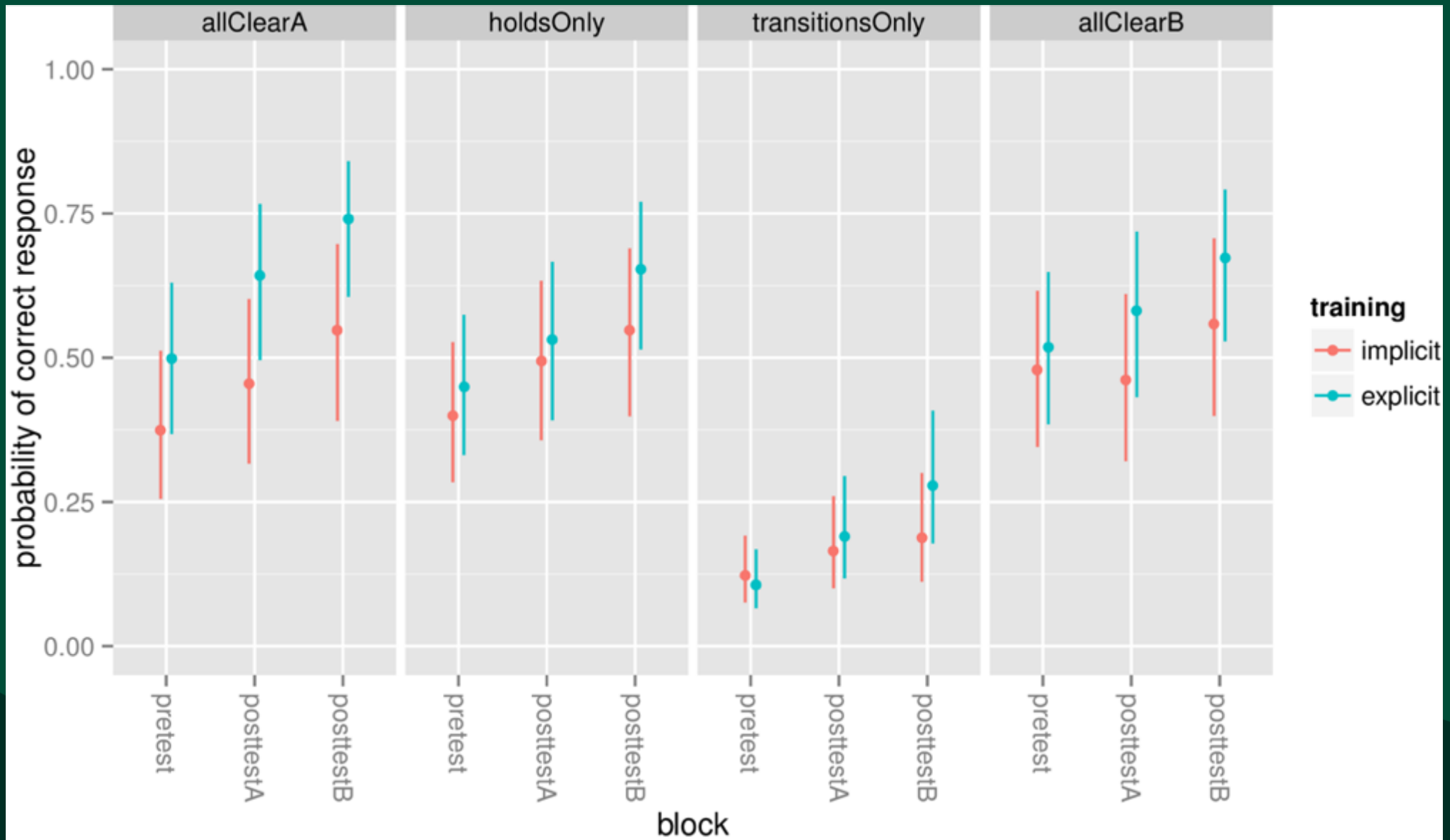
80 ASL 3 students in fall semester

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

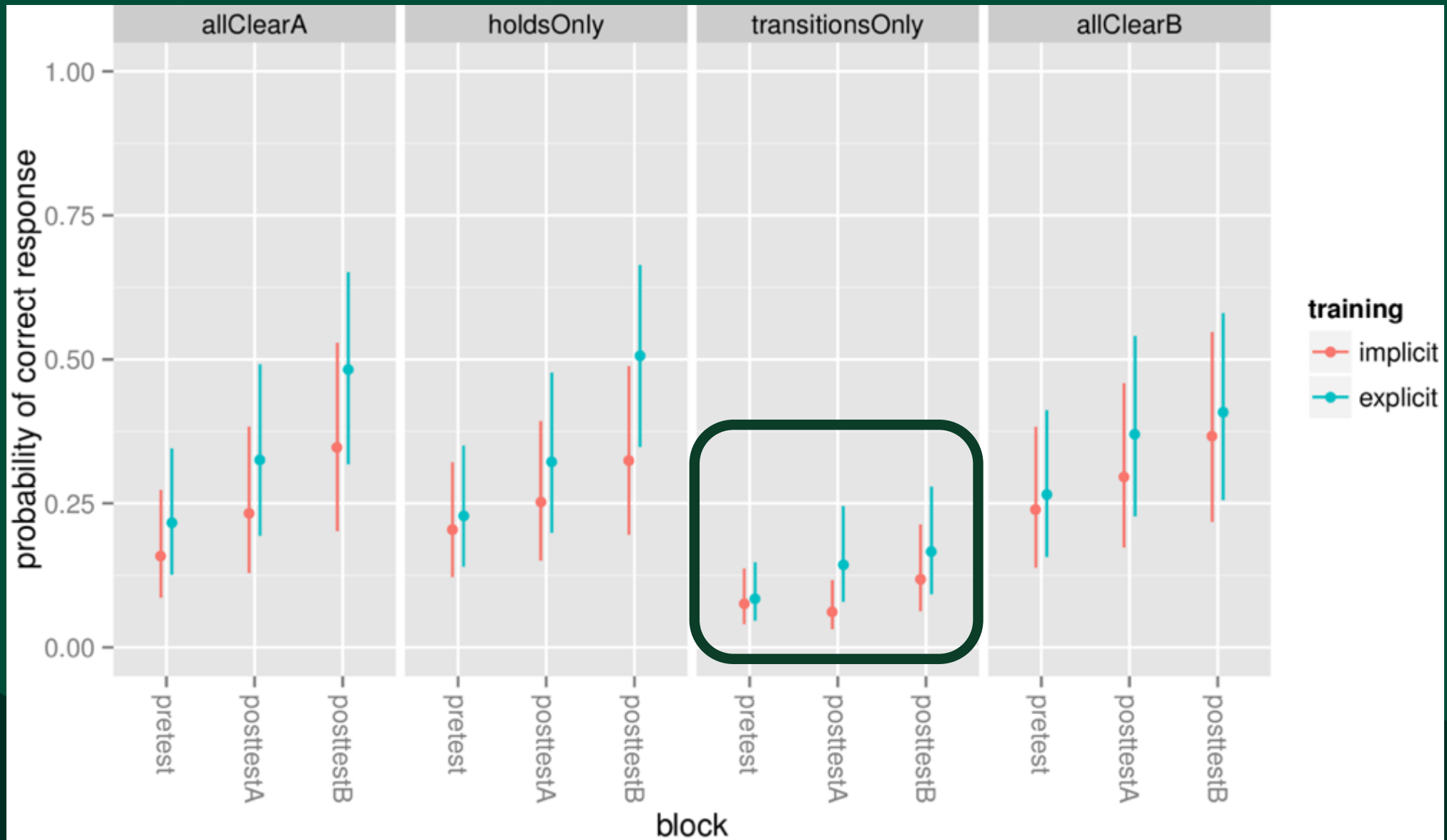
Time separating events: 3 weeks

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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