



LOYOLA
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Vocabulary instruction in second language acquisition: The effects of iconic gestures on vocabulary retention

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Gesture and Second Language Acquisition

- How do gestures affect the second language learner?
 - Conveyors of speech-related meaning
 - Enhance learning in general
 - Promote lexical learning
- Similarity between iconic gestures and memory representations
 - Connection between word and gesture helps memory
 - Information encoded in various ways makes it easier to retrieve

Background

- Allen (1995)
 - Learning emblematic gestures simultaneously with French expressions leads to greater recall.
- Kelly et al. (2009)
 - Co-speech hand gestures help people learn and remember the meanings of new words in a new language.
- Tellier (2008)
 - Gestures enable children to better memorize vocabulary in L2 when they demonstrate active knowledge of the new words.

Problem...

Input does not mimic the reality of a second language classroom!

So...

- How does co-speech gesture affect the retention of words in a second language when there are...
 - congruent gestures?
 - incongruent gestures?
 - no gestures?

Hypotheses

- Vocabulary taught with congruent gestures will elicit higher vocabulary retention than no gestures.
- Vocabulary taught with incongruent gestures will elicit lower vocabulary retention than no gestures.

Study Design

Subjects

- 60 participants
- 4 sections of Spanish 101

Procedures

- In-class vocabulary teaching demonstration
 - Two treatments one week apart
- Four testing measures:
 - Cued-recall quiz immediately following treatment
 - Cued-recall quiz 30 minutes after treatment
 - Chapter exam
 - Final exam

Methodology

10 Nouns

- Pantalla (*screen*)
- Micrófono (*microphone*)
- Ratón (*mouse*)
- ...



10 Verbs

- Dormir (*sleep*)
- Preferir (*prefer*)
- Jugar (*play*)
- ...



10 Adjectives

- Enfermo (*sick*)
- Triste (*sad*)
- Aburrido (*bored*)
- ...



Condition 1: Congruent Gesture

el teclado



Condition 2: Incongruent Gesture

contento



Condition 3: Control Group

los audífonos

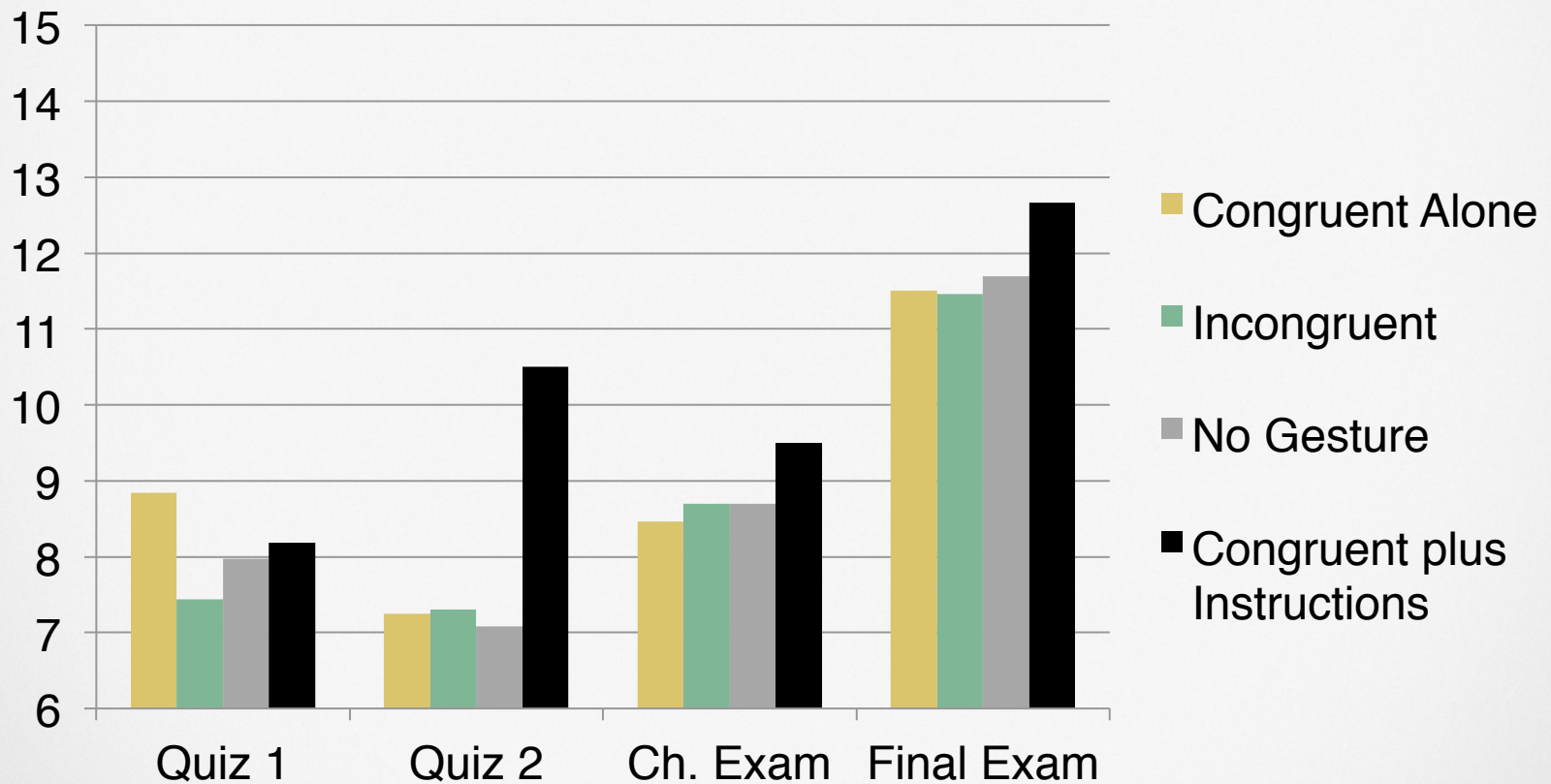


Condition 4: Congruent Gesture (with verbal emphasis about gesture)

enojado



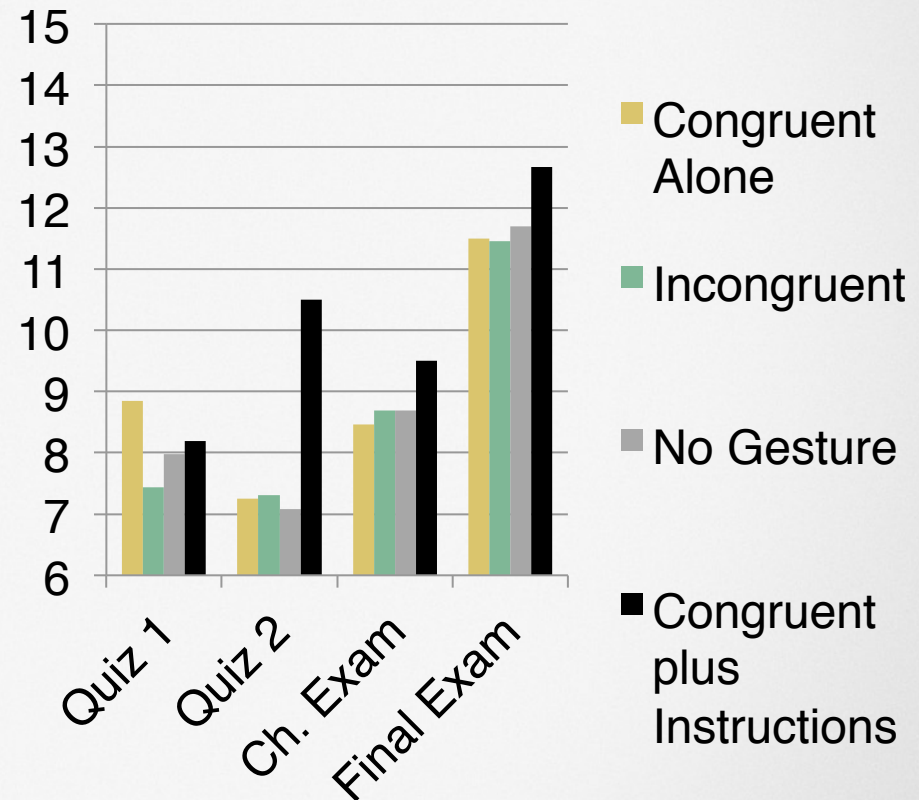
Results



Discussion & Conclusion

- **Use of gesture helps vocabulary acquisition!**

- Quiz 2 – effectiveness of gesture retention method
 - Just supplying gestures is not enough.
- Loss of effect over time
 - Multiple effective learning methods
 - Increased importance of outcome



Future Directions

- Increase sample size
 - Congruent plus Instructions
- Condition 5 – Self-generated gestures
 - Will having student actively produce the gestures influence vocabulary retention?
- Nouns vs. Verbs vs. Adjectives
 - Are certain parts of speech more likely to be retained with or without gestures?

Thank you!

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