# Aluntit & Kurnas

# The effect of bilingualism on novel word learning in children

Lara Barak, Tamar Degani, & Rama Novogrodsky

Department of Communication Sciences & Disorders, University of Haifa, Israel

larastek@gmail.com

- ***Can bilingualism facilitate novel word learning in children?***
- ***How does bilingualism interact with concept familiarity?***

➢ Bilingual children and adults with typically developed language (TD) have been shown to perform better than monolinguals in novel word learning tasks, suggesting that bilingualism enhances language learning abilities (Hirosh & Degani, in press; Kaushanskaya et al., 2014).

➢ Bilinguals suffer from reduced frequency of their lexical representations and competition from the other languages they know (Armon-Lotem, 2012; Kreiner & Degani, 2015).

## *The Current Study*

➢ We neutralize the effect of lexical frequency by focusing on learning novel words, for which all children have no previous frequency of use.

➢ Therefore, we compare bilingual and monolingual children on a novel word-learning task.

➢ We manipulate competition from existing languages by teaching novel words with familiar or unfamiliar referents.

➢ **Unfamiliar** referents - no competition because no semantic or lexical representations exist in the lexicon

➢ **Familiar** referents - competition may arise from existing labels in the known languages.

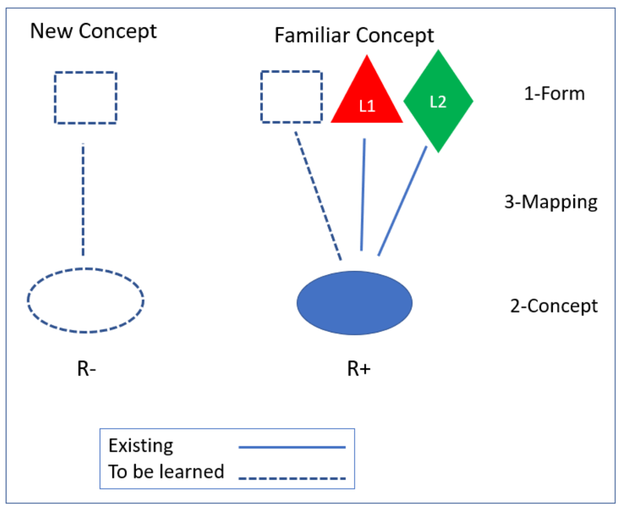

### *Participants:*

➢ Fourty-one children aged 4:06-6:06 were tested in 2 groups
  - ➢ **Monolinguals** with TD (n=24)
  - ➢ **Bilinguals** with TD (n=17)

➢ Further, 48 children aged 4:06-6:06 will be tested in 2 additional groups: monolinguals with SLI, bilinguals with SLI.

### *Stimuli:*

➢ 12 novel real words:
  - ➢ **6 familiar** referents - for which children know a label in their L1 (and L2).
  - ➢ **6 unfamiliar** referents - with no known labels.

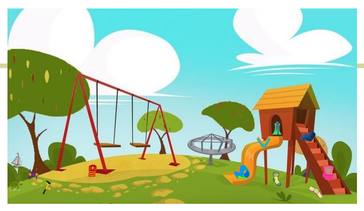

## *Task & Procedure*

1st exposure to the novel words

2nd exposure to the novel words

3rd exposure to the novel words

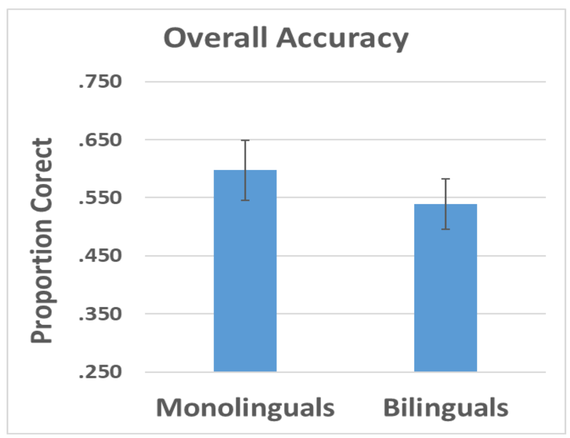
4th exposure & naming trial with auditory feedback (correct word presented)

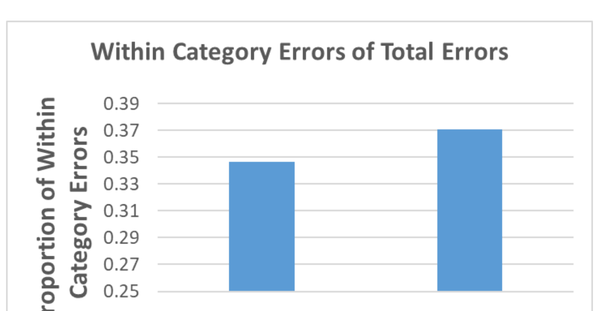


**Testing phase**
E.g. "Where is ilpa?"



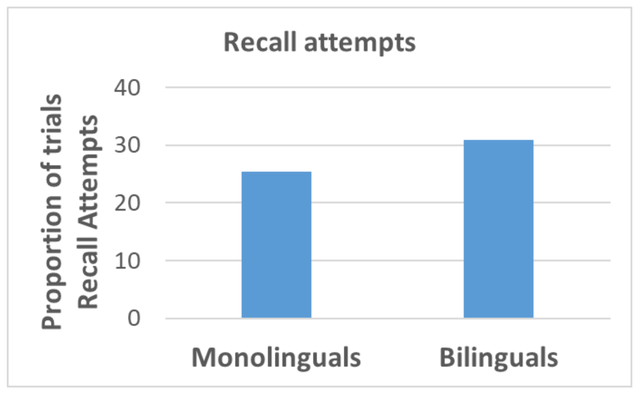
## *Preliminary Results*



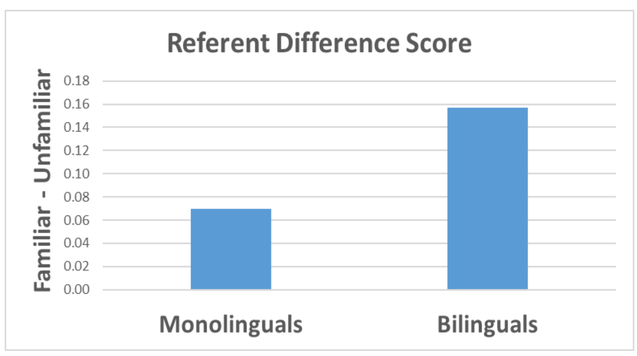




➢ Although monolinguals have overall higher accuracy, bilinguals have higher percentage of within category errors. Both group differences are not significant.

➢ For bilinguals, there is a significant correlation between proportion of within-category errors with overall accuracy *(r=0.563, p=0.019)*.




No significant group difference in recall attempts during learning. Numerically Bilinguals>Monolinguals




Difference in learning familiar vs. unfamiliar referent larger in bilinguals than monolinguals.

## *Discussion*

**Within category errors**

➢ Overall monolinguals performed better than bilinguals (numerically), but within category errors show that bilinguals preserve some partial knowledge of the words.

**Referents type**

➢ Both groups performed better on **familiar** referents, because in learning a novel word with familiar referent there is no need to learn the **concept** (2nd component) which already exists.

➢ Notably, the gap between the two referent types is smaller in the monolingual group, because it is more challenging for them to deal with the ambiguity present for familiar referents.

➢ In contrast, bilinguals deal better with ambiguity, and thus perform much better in the **familiar** (ambiguity) referent type.

## *Further Research*

➢ It is unclear whether the gap between bilinguals and monolinguals in word learning is similar among children with Specific Language Impairment (SLI).

➢ Therefore, we will examine whether the bilingual-monolingual difference is modulated by language development (SLI vs. TD).

➢ Further, we will test whether the TD-SLI difference is modulated by referent type.

➢ Difficulties in phonological form learning, conceptual learning, or establishing form-to-meaning mapping should result in differential patterns of results.

## *References*

Armon-Lotem, S. (2012). Introduction: Bilingual children with SLI - The nature of the problem. *Bilingualism: Language and Cognition*, *15*, 1–4.

Hirosh, Z., & Degani, T. (in press). Direct and indirect effects of multilingualism on novel language learning: An integrative review. *Psychonomic Bulletin & Review*, 1-25.

Kaushanskaya, M., Gross, M., & Buac, M. (2014). Effects of classroom bilingualism on task-shifting, verbal memory, and word learning in children. *Developmental Science*, *17*, 564–583.

Kreiner, H., & Degani, T. (2015). Tip-of-the-tongue in a second language: The effects of brief first-language exposure and long-term use. *Cognition*, *137*, 106–114.