**Language Use in the Home Environments of Spanish-English Bilingual Children**

**Background**

**Spanish-speaking English learners in the US**
- English learners (ELs) are children designated with limited English proficiency by school districts.
- 41% of the population of Dallas ISD.
- 10% of general U.S. student population.
- Developmental dual language trajectories are not well understood (Hoff, 2013).
- Overlap between poverty and English proficiency by school districts.
- Hispanic proficiency depends on exposure, which is related to various factors (Rojas & Iglesias, 2013), including:
  - Age of acquisition
  - Maternal Education level
  - Language proficiency differences between children and parents may cause communicative problems.
  - First language attrition can cause severe problems academically, socially, and culturally (Anderson, 2012).
- Language proficiency depends on exposure, which is related to various factors.
- Maternal Education level at onset = 8 (2.8)
- Mean Maternal Education level at onset = 8 (2.8)
- Parents of 39 bilingual children attending an English immersion school for 3 academic years.
- Mean ME = 5.9 (1.5) [finished high school 10-12]
- Range of ME: 2 [finished elementary school] – 8 [vocational training, not university]
- Low ME: n = 16
  - Mean ME = 5.9 (1.5) [finished high school 10-12]
  - Range of ME: 2 [finished elementary school] – 8 [vocational training, not university]
- High ME: n = 23
  - Mean ME = 10.3 (1.34) [finished community college]
  - Range of ME: 9 [some years of community college] – 12 [finished university with BA or BS]

**Exposure matters…**
- For Spanish language development:
  - Language proficiency differences between children and parents may cause communicative problems.
  - First language attrition can cause severe problems academically, socially, and culturally (Anderson, 2012).
  - Language proficiency differences between children and parents may cause communicative problems.

**Method and procedure**

**Participants**
- Parents of 39 bilingual children attending an English immersion laboratory school.
- Mean age of participants’ children at onset = 60 mos. (6.5)
- Mean Maternal Education level at onset = 8 (2.8)

**Maternal Education (ME)**
- Parents were divided into High and Low ME cohorts by applying a median split
  - Median = 9 [some years of community college]
- Low ME: n = 16
  - Mean ME = 5.9 (1.5) [finished high school 10-12]
  - Range of ME: 2 [finished elementary school] – 8 [vocational training, not university]
- High ME: n = 23
  - Mean ME = 10.3 (1.34) [finished community college]
  - Range of ME: 9 [some years of community college] – 12 [finished university with BA or BS]

**Home language survey**
- Adapted from Francis et al. (2005)
- Ongoing collection of home language surveys (3 years)
  - Collected Fall 2014, 2015, and 2016
- Caregivers completed home language surveys in their preferred language, which gathered the following information:
  - Language input from mother, father, and older siblings
  - Language output to mother, father, older siblings, and peers
  - Highest level of Maternal Education completed
- The range of responses of relative language use included:
  - 1 = Only Spanish
  - 2 = Mostly Spanish
  - 3 = Spanish and English equally
  - 4 = Mostly English
  - 5 = Only English

**Research questions and hypotheses**

**Research Questions**
1. Will relative home language use, as reported by parents, change over the course of their children being enrolled in an English immersion school for 3 academic years?
2. Do parents, older siblings, and peers show differential patterns of relative language use over time?
3. May relative home language differ over time as a function of high vs low Maternal Education (ME)?

**Hypotheses**
1. An overall increase in relative English input and output at home was expected over the course of 3 academic years in an English immersion school.
2. It was expected that relative English language use with (and from) older siblings and peers would show the most increase over time, relative to that of parents.
3. Differences were expected to be found as a function of ME (high ME cohort = relatively higher English language use).

**Results and discussion**

**Relative language use**
- Language input and output from older siblings and peers was relatively equal in Spanish and English (x = 3.3) at Year 1; trended toward mostly English by Year 3 (x = 3.9).
- Older siblings and peers showed a greater mean change (0.6) toward English language use over time.
- Parents were less adaptive to their children speaking more English over time (mean change = 0.2).

**High vs Low ME**
- High ME parents’ mean language use change (0.4) shifted over time, from mostly Spanish to relatively equal in both languages.
- Low ME parents’ mean language use change (0.1) was negligible, remaining mostly Spanish over time.
- High and Low ME older siblings and peers mean language use change (0.6) shifted equally over time, from relatively equal in both languages to mostly English.

**Acknowledgements:** Parents and children at the Momentous Institute; Dr. Karen Thierry; members of The Bilingual Language Lab

Giselle Morales, Svenja Gusewski, Lindsey Hiebert, Raúl Rojas
University of Texas at Dallas
Caller Center for Communication Disorders