

EXECUTIVE FUNCTIONING BACKGROUND GOAL

Executive functions (EF) are neurologically-based skills that have to do with managing oneself in order to achieve a goal.

Examples: Focusing on relevant information and ignoring distractions in a busy classroom. Suppressing the impulse to hit a peer during a conflict.

Bilinguals typically outperform monolinguals on non-verbal EF tasks.

This may be related to how bilingualism and executive functioning are related neurologically.

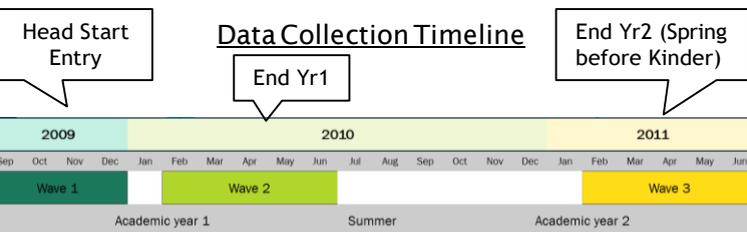
Do more **balanced dual language learners (DLLs)** experience **larger EF gains** than people who have less balanced proficiency between languages?

METHODS RESULTS

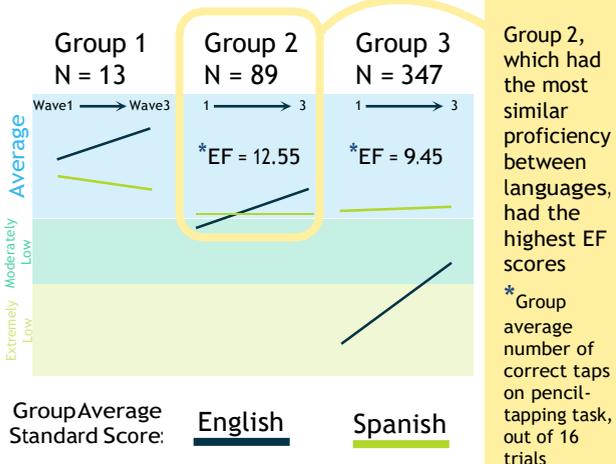
FACES¹: 2009 Data
A national evaluation of 3-year-olds from low income families enrolled in Head Start

Measures
Spanish (TVIP²)
English (PPVT³)
EF (Pencil Tapping Task)

A regression, controlling for gender and age, tested if there were EF group differences. (Group 1 was not included because only 4 cases had EF scores)



Average group standard scores (see figure) showed growth in English and consistent Spanish in all 3 groups



Children who were 3-yrs-old at Wave 1 were selected for analysis (N = 449)

- Parallel-Process Growth Mixture Model modeled raw Spanish and English receptive vocabulary scores
- Control variables: Maternal years in the U.S., Maternal education, Child gender.

A 3 group solution was selected as best fitting.

What it Means
In terms of executive function, it appears to be beneficial to be a more balanced bilingual

APPLICATION

Encourage parents of DLLs to speak their non-English language while volunteering in classrooms

Direct teachers to free language learning resources to learn key phrases in languages represented in their classrooms

Communicate with families about their important role as the primary source of home language

Show families their heritage language is important by hosting cultural activities or family events

Develop policies that encourage consistent home language use

Implement interventions to increase home language exposure

1 - Family and Child Experiences Survey:2009. 2 - Test de Vocabulario en Imágenes Peabody. 3 - Peabody Picture Vocabulary Test
Project funded by U.S. Dept. of Hlth. & Hum. Ser. - ACF Grant #90YR0103-01. Dissertation Co-chairs: Drs. Lisa Boyce & Aryn Dotterer. Committee members: Drs. E. Helen Berry, Ronald B. Gillam, & Lori A. Roggman For dissertation can be found at <https://digitalcommons.usu.edu/etd/7472/>