False-belief Comprehension in Language Impaired and Typical Spanish-speaking Preschoolers

Mark Guiberson & Emily Folsom

University of Northern Colorado, Audiology and Speech-Language Sciences

Objective
The aims of this preliminary study were to describe false-belief comprehension (FBC) in Spanish-speaking children from lower SES backgrounds, discuss the relationship between FBC and other cognitive/linguistic measures, and identify clinical and research implications.

Background
False-belief comprehension (FBC) is a linguistic and sociocognitive milestone in which children learn to recognize that people can hold beliefs about the world that may be incorrect. In a recent meta-analysis (N = 154 studies) a moderate-large effect size was found between language and FBC in English-speaking children when age was controlled for. FBC emerges in a consistent developmental pattern across diverse cultural and linguistic communities; most children acquire FBC by 3 to 4 years of age. With Spanish-speaking children, FBC and the use of the subjunctive mood has been found to be moderately correlated. A child’s use of directives during structured games has also been found to be significantly and strongly associated with FBC in Spanish-speaking children. Researchers have also described a significant and moderate association between general verbal abilities and FBC in this population.

Method
Standardized Measures. Spanish PLS-4 & K-ABC-2 Triangles (non-verbal IQ measure)
False-Belief Measures. A Spanish adaptation of the unexpected contents false belief task was used. The standard task uses a commonly recognized container (e.g. bandage box) which the experimenter has filled with unexpected contents (e.g. crayons). Children are asked to reflect on what others would think is inside the box and what they themselves originally thought was inside the box. Adaptations and wording for false-belief tasks used in earlier studies with Spanish-speaking children were employed. A total of four false-belief trials were collected.

Results
FBC in typically developing Spanish-speaking preschoolers was significantly related to SPLS-4 Receptive Language (r = .49, p < .05), and SPLS-4 Expressive Language (r = .55, p < .01). The association between FBC and KABC-2 Triangles (r = .40, p = .056) approached significance. The strongest relationship detected was between FBC and expressive language scores, with a large effect size observed.

Conclusions
FBC was significantly correlated with non-verbal IQ, but stronger associations were detected between FBC and language measures. Spanish-speaking children with LI appeared to have more difficulty with FBC than typical peers, but significant group differences were not detected. Future studies should compare groups by age clusters (3-, 4-, and 5-year-olds).

A multidimensional approach to FBC suggests that language and sociocognitive development grow in tandem. A reciprocal causality model may explain how the links between language and sociocognitive development change depending on the stage of development being considered.

False-belief tasks may provide useful information in screening and assessment measures; however, more normative data is needed to understand FBC in Spanish-speaking children from lower SES backgrounds.

For more information contact:
Mark Guiberson@UNCO.edu
Mark Guiberson Ph.D. CCC-SLP
Assistant Professor
UNIVERSITY OF NORTHERN COLORADO
Audiology and Speech-Language Sciences
Gunter Hall 1400 • Campus Box 140 • Greeley, CO 80639
References