



SOCIAL SENSITIVITY IN BILINGUAL CHILDREN

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OVERVIEW

BACKGROUND

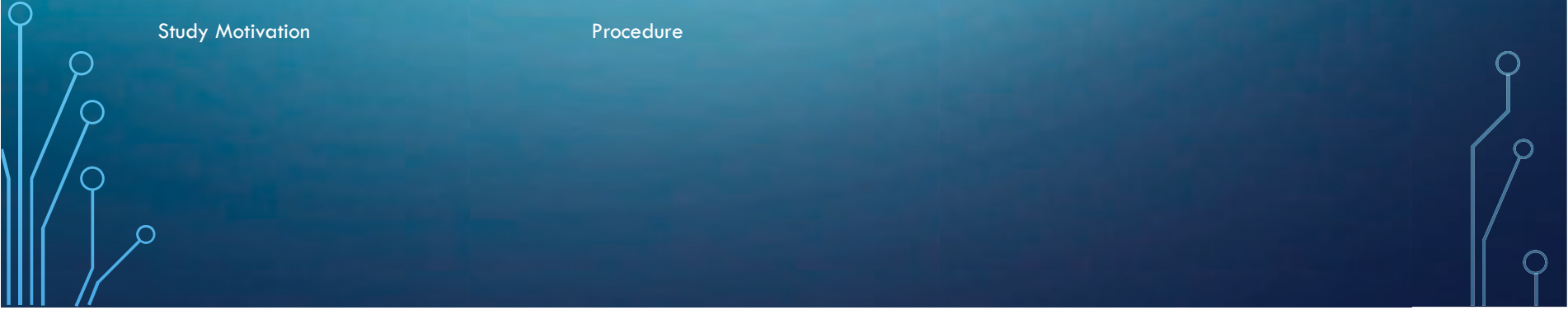
- Key Terms
- Previous Findings
- Knowledge Gap
- Study Motivation

METHODS

- Design
- Hypothesis
- Materials
- Procedure

OUTCOMES

- Data Analysis
- Expected Outcomes
- Alternative Outcomes





BACKGROUND



KEY TERMS

Executive Functioning

Social Cognition

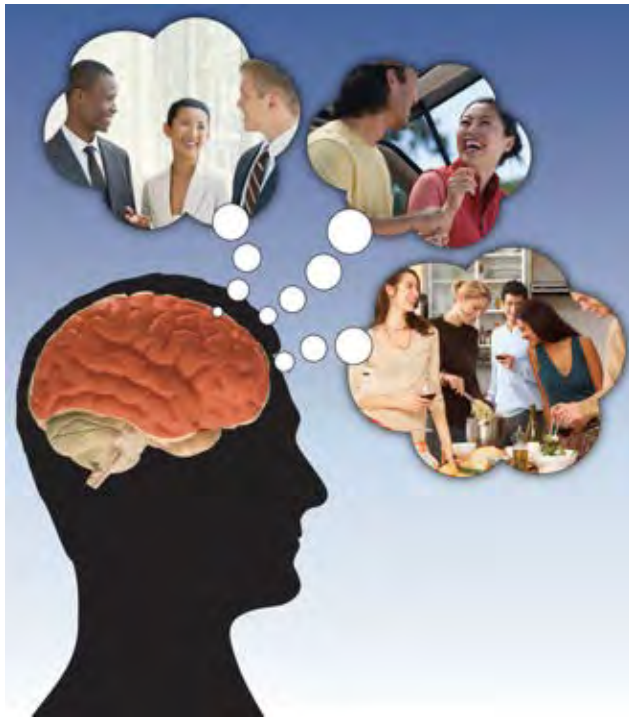
Referential Communication

Theory of Mind

Social Sensitivity

EXECUTIVE FUNCTIONING

- The ability to achieve one's goals using sets of cognitive processes such as inhibitory control, selective attention, working memory, planning and organization

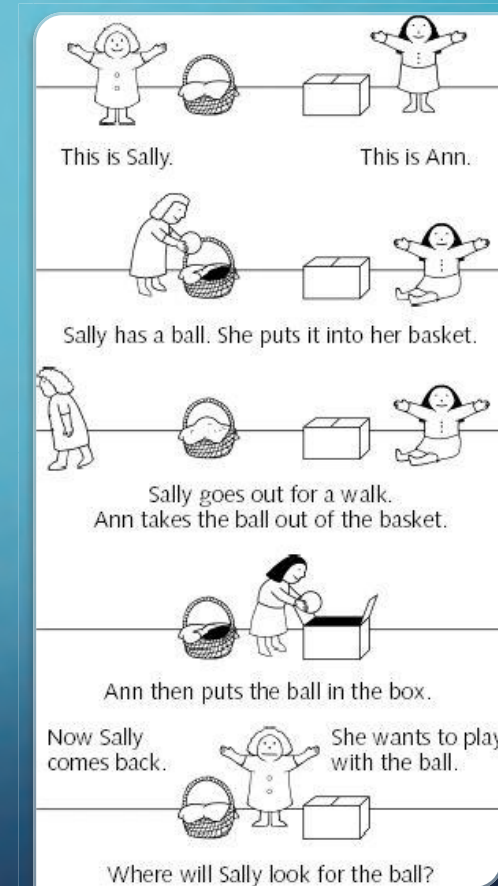


SOCIAL COGNITION

- The ability to process and retrieve information from social interactions (Goetz, 2003; Frith, 2008; Weil, 2012)
- Theory of Mind

THEORY OF MIND

- The ability to recognize and attribute mental states to oneself and to others, and how to understand that others have different mental states from their own (Perner & Lang, 1999; Goetz, 2003; Weil, 2012; Kovacs, 2009)
 - Belief, intent, desires, pretending, knowledge
 - Perspective taking skills



Source: Saxe, 2008

REFERENTIAL COMMUNICATION

- The exchange of information between individuals
 - The speaker provides enough information to the listener to ensure the listener can identify the entities, locations and movements

SOCIAL SENSITIVITY

- The ability to accurately perceive and comprehend the behavior, feelings and motives of other individuals (Rothenberg, 1970; Genesee & Lambert, 1975; Kovacs, 2009)
- Why is this important?
 - Important social skill to communicate effectively

PREVIOUS FINDINGS

- Bilingual children exceed monolingual peers in executive functioning tasks (Hukata, 1971; Perner & Lang, 1999; Bialystok, 2001; Blakemore & Choudhury, 2006)
- Bilingual children have better communication skills (Greenberg, Bellena & Biaylstock, 2003; Goetz, 2003)
- Studies in which use a monolingual, exposure, and bilingual group find similarities of advantages in both the exposure and bilingual group (Genesee & Lambert, 1975; Liberman, Woodward, Keysar, & Kinzler, 2017)

KNOWLEDGE GAP

- Research is limited to measuring one construct measure social sensitivity with monolingual and bilingual children
- Ambiguous understanding if executive functioning effects communication tasks
- No research as of date measuring children's degree of bilingualism



STUDY MOTIVATION

- Develop further understanding of how social sensitivity increases with the level of language exposure and proficiency

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METHODS

DESIGN OVERVIEW

- Children participants (5-7 years)
- 30+ participants
- Recruitment through the Children's Research Lab
- Control for SES & IQ



INDEPENDENT AND DEPENDENT VARIABLES

I.V.

- Degree of Bilingualism
- Executive Function score

D.V.

- Communication Task
- Cognitive Perspective Taking Task

STUDY HYPOTHESIS

- As the degree of bilingualism increases, scores will also increase from the executive function task, cognitive perspective taking task, and referential communication task

MATERIALS & PROCEDURE

- Parent Questionnaire
- Child Questionnaire
- Raven's Coloured Progressive Matrices
- Executive Function Task
 - The Flanker Task
- Perspective Taking Task
 - The Three Mountain Problem
- Referential Communication Task

PARENT QUESTIONNAIRE

- Language History
- Language Use
- Language Proficiency
- Education
- Additional Comments

III. Language Proficiency
In this section, please rate your child's proficiency by circling the appropriate number from 0-5.

	0=not well at all	1	2	3	4	5=very well	6
12. a. How well does your child speak English?							
13. 1) Please indicate the type of school program your child is <i>currently</i> enrolled in:							
a. English based program							
b. English-Spanish Dual Language Program							
c. Spanish Immersion Program							
d. Other _____							
14. _____							
15. a. How well does your child write English?							
b. How well does your child write Spanish?							

CHILD QUESTIONNAIRE

ID: _____ Date: _____
Age: _____ Sex: _____

Child Language Questionnaire

1. What languages do you speak with your friends/classmates?

English	Spanish	Both
---------	---------	------

a. Do you speak another language with your friends/classmates?
i. What language? _____

2. In which language do you prefer to read?

English	Spanish	Both
---------	---------	------

a. Do you like to read in any other languages?
i. What language? _____

3. In which language do you prefer to count?

English	Spanish	Both
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a. Do you like to count in any other languages?
i. What language? _____

4. Which language do you feel more comfortable using?

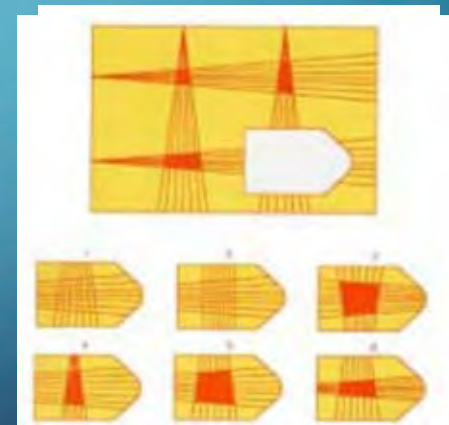
English	Spanish	Both
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5. Which is your favorite language?

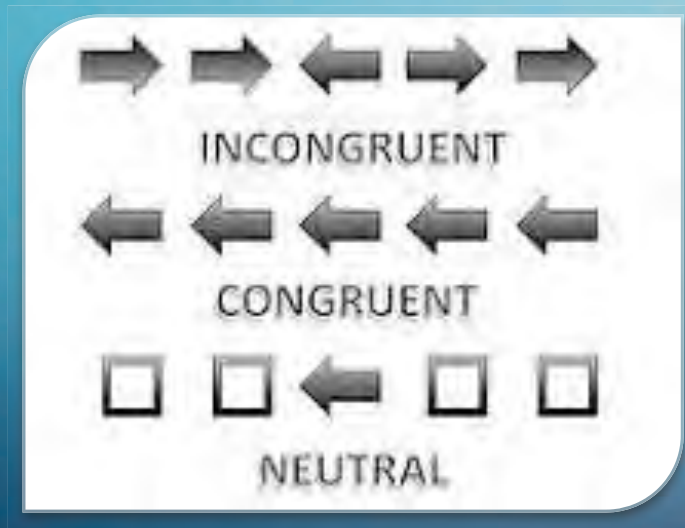
English	Spanish	Both
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RAVEN'S COLOURED PROGRESSIVE MATRICES

- Contains 36 geometric designs with a missing piece
 - Most of the items are colored
- Estimates fluid intelligence



FLANKER TASK



- Response inhibition tasks which tests the ability to suppress responses that are inappropriate to context

THE THREE MOUNTAIN PROBLEM



- Child chooses between 10 photographs in which best reflects the puppet's perspective
- Measures egocentrism and perspective taking

REFERENTIAL COMMUNICATION TASK

- Modified from the Language Communication Skills Task (Wang, 1973)
- Children will provide instructions to a puppet on where objects are located in a picture



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OUTCOMES

DATA ANALYSIS

- Mixed-Effects Regression Model to test the interaction between a child's degree of bilingualism and executive function task to the child's scores from the cognitive perspective taking task and referential communication task

EXPECTED OUTCOMES

- Interaction between executive functioning and both the cognitive perspective taking task and referential communication task
- Socially sensitive children will be older, higher degree of bilingualism, and high scores on all measures

ALTERNATIVE OUTCOMES

- No effect between executive function and both the cognitive perspective taking task and the referential communication task
- No effect of the child's degree of bilingualism and social sensitivity



**THANK YOU!
ANY QUESTIONS?**