Dialect mismatch: Implications for academic achievement

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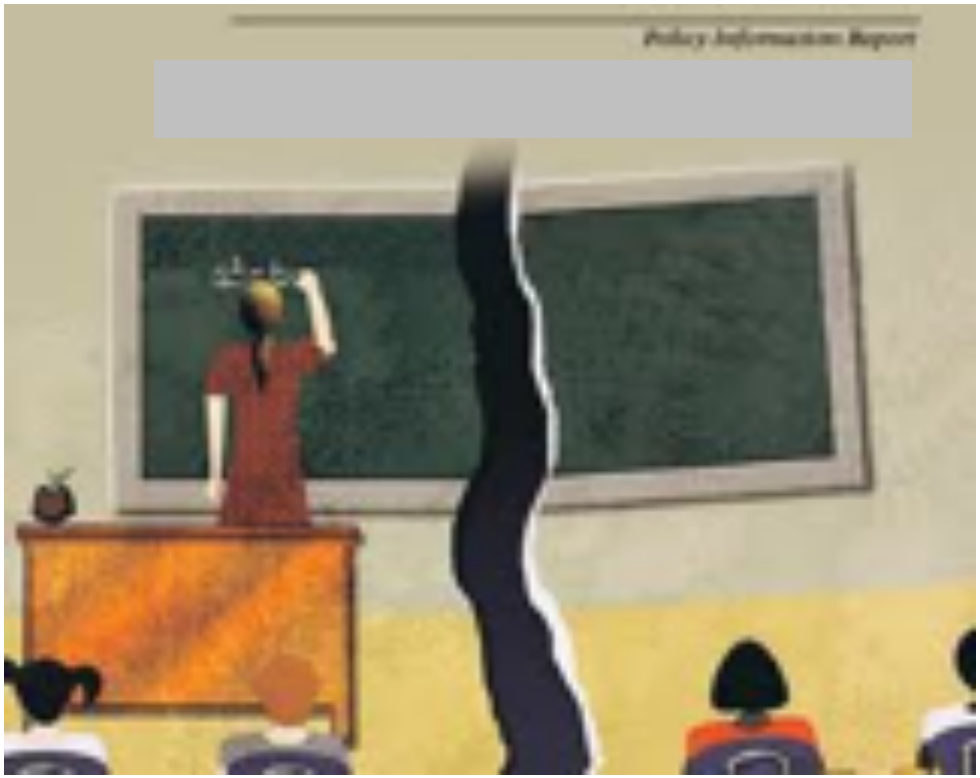
Organization of talk

- Study 1
  - Does speaking a non-mainstream dialect make it more difficult to understand MAE?
- Study 2
  - Can we teach pre-kindergarten children about MAE in a short-term program?

The biggest problem in education in the U.S.

The achievement gap



Poverty results in many stressors on children

Stressors: Poor nutrition, poor medical care, higher levels of family stress, etc.

Poverty also results in poorer access to resources

Resources: School funding, quality of teachers, quality of medical care, etc.

Linguistic consequence of poverty

- Non-mainstream dialect
  - *Not* a result of poor education, poor language skills, etc.

Dialect mismatch

Dialect of instruction	≠	Home dialect
Mainstream American English (MAE)		Non-mainstream dialect of English

African American English

- Phonological differences
- Morphosyntactic differences
- Pragmatic differences

How dialect mismatch may contribute to the achievement gap

1. Teacher expectations
2. Cognitive effort
3. Direct impact on decoding, etc.

Previous research

- Children with higher dialect density (kindergarten to second grade) have poorer language and literacy skills (Patton Terry & Connor, 2012; Patton Terry et al., 2012).
- Children who are less able to dialect-shift from AAE to MAE have poorer language and literacy skills (Craig et al., 2013).

- All of this work correlates measures of dialect density (or dialect shifting) with standardized measures of language and literacy.

Study 1

- Study 1: Comprehension of MAE
  - How well do AAE-speaking children comprehend words that have endings that are contrastive in MAE but not in AAE?
  - What predicts children's performance on this task?

Study 1: Participants and general procedure

- Participants
  - 105 African American children
  - 4- to 8-year-olds
  - Most spoke AAE.
  - Mostly from low-SES families
- General Procedure
  - 1 to 3 sessions
  - All children received a hearing screening, language sample, and standardized tests of receptive and expressive vocabulary.
  - Parents filled out demographic questionnaire.

Study 1: Participants and general procedure

- Dialect density
  - Measured from 50-utterance recorded language sample.
  - Sample elicited in conversation with a native AAE speaker.
  - Both morphosyntactic and phonological dialect features coded by a native AAE speaker.
  - Dialect density = number of dialect features/total number of words.
  - Dialect density ranged from 0 (3 children) to .28, mean = .06.
  - Only 85 children (out of 105) produced useable language samples.

Study 1. MAE comprehension: Stimuli

- Phonological contrast:
  - Final consonant cluster deletion
  - *coal* vs. *cold*
  - *coal* is ambiguous in AAE, but not in MAE
- Morphosyntactic contrast:
  - Plural marking
  - *cat* vs. *cats*
  - Plural is optional in AAE

- Stimuli recorded in AAE and MAE

Experiment 1. MAE comprehension: Procedure

- Training phase:
  - Each target picture named in AAE.
  - Child asked to name each target picture (*say* _____ *please*).
- Testing phase:
  - Point to _____ (in MAE).

"Point to goal"

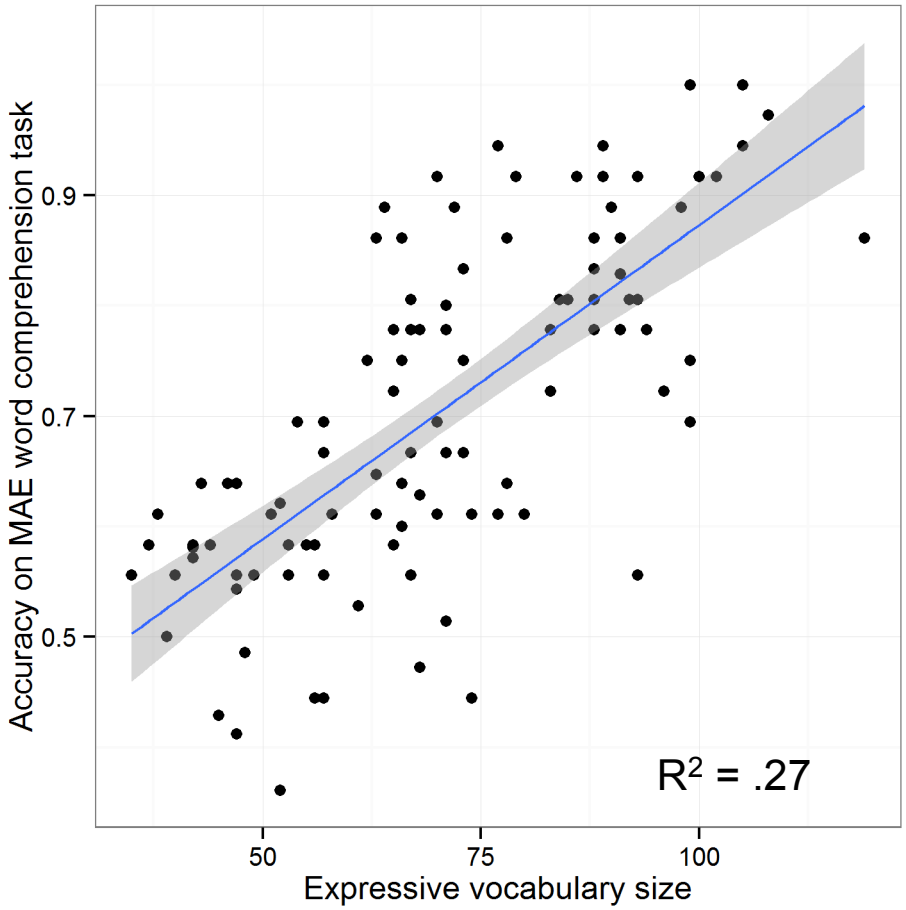
Distracter **Filler** **Target**

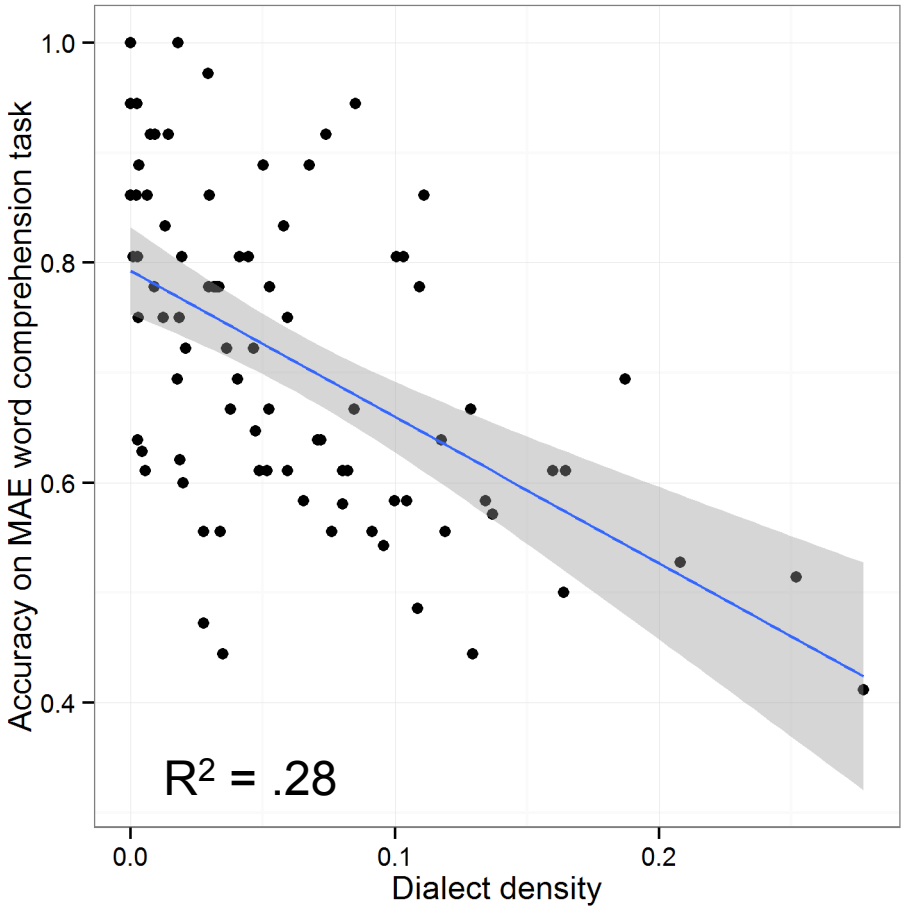
Experiment 1. MAE comprehension: Results

	Singleton Consonant (Ambiguous Condition)	Consonant Cluster
Phonological	61 (31)	81 (19)
Morphosyntactic	65 (15)	74 (16)

- Ambiguous (in AAE) conditions were the most difficult.
- Accuracy was predicted by:
  - Expressive vocabulary size
  - Dialect density

Experiment 1. MAE comprehension: Results

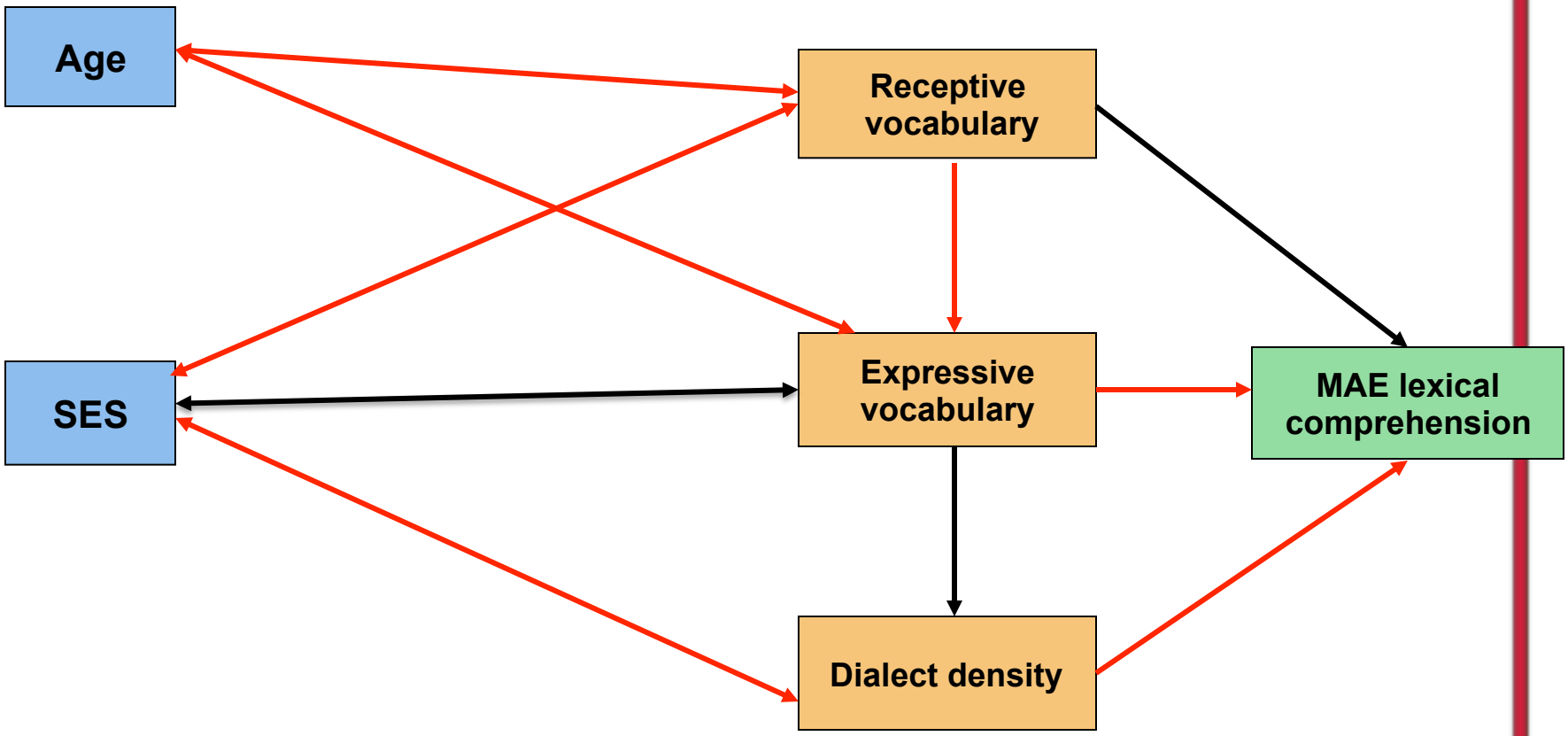




Experiment 1. Structural equation model

- What are the relationships among the measures that predict comprehension of MAE?

- Divided variables into:
  - –Input variables
  - –Mediating variables


Age
Receptive vocabulary
SES
Expressive vocabulary
MAE lexical comprehension
Dialect density

Experiment 1. MAE comprehension: Discussion

- Non-mainstream dialect speakers *do* have difficulty understanding MAE.
- This was particularly true for words that are ambiguous in AAE, even though they are unambiguous in MAE.
- Both expressive vocabulary and dialect density independently predicted comprehension of MAE.

Study 2: A pre-kindergarten readiness program for non-mainstream English speakers

Talking & Learning for Kindergarten: TALK

TALK: Purpose

Develop an effective curricular supplement to teach pre-kindergarten children about the differences between MAE and non-mainstream dialects in the context of an emergent literacy curriculum.

See www.learningtotalk.org/publications/presentations to download TALK manual.

TALK: Principles

- Use evidence-based practice language & literacy instruction
- Build metalinguistic skills
- Combine embedded and direct instruction
- Preselect NMAE-MAE contrasts and targets
- Encourage dialect shifting

TALK: Structure

- Head Start kindergarten readiness program
- Led by graduate students in speech-language pathology
- 7 weeks, 4 days per week (1 hour per day)
    - Opening circle
    - Rhyme time
    - Talk time
    - Closing circle
- Additional 1 hour per day classroom facilitation

TALK: Targeted areas

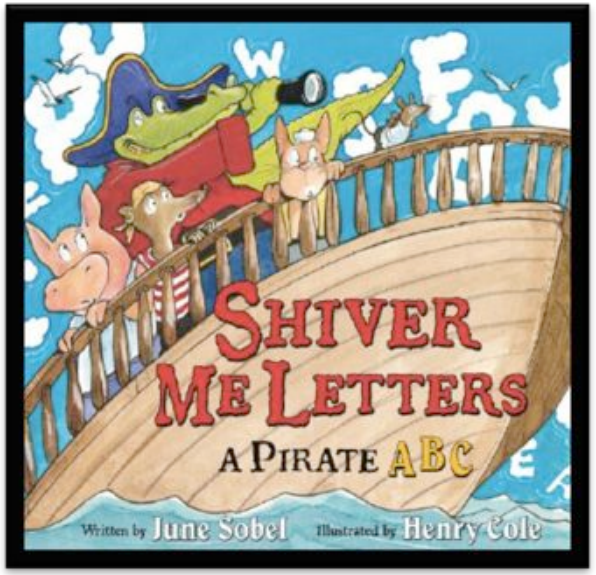
Area	TALK target example
Phonology	Word-final cluster deletion
Morphosyntax	Obligatory plural
Pragmatic	Indirect requests
Metalinguistic	Dialect shifting
Phonological awareness	Rhyming
Early literacy	Story telling

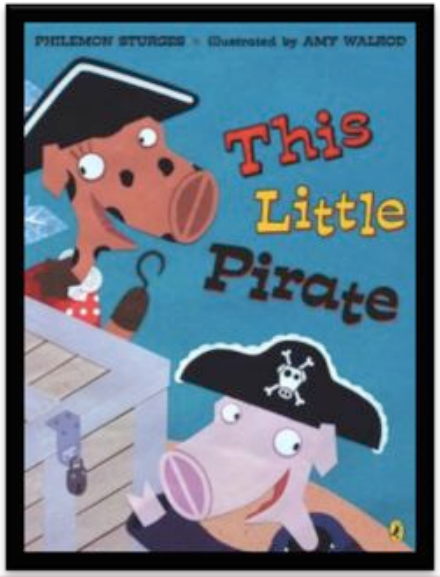
TALK: Activities

- **Weekly Themes**
  - Vocabulary
- **Talk Time**
  - –Shared book reading
  - –Dramatic play
- **Rhyme Time**
  - –Music and movement
  - –Phonological and phonemic awareness

Language

- Semantic/vocabulary
- Compound/complex sentences
- Narrative
  - Character
  - Setting
  - Feeling
  - Problem
  - Resolution
- Sequencing
  - First, second, third
  - Beginning, middle, end





Phonological & Phonemic Awareness

- Long vs. short words
- Script – Cue for rhyme
- Repeated song
- Rhyme Games
  - Matching
  - Creation
  - Production
  - Oddity

Phonological & Phonemic Awareness

- Segmenting
  - "Break it Down"
  - Compound words, syllables CVC words
  - Letter-sound correspondence through counting e.g., magic wand, Elkonin cards
- Blending

Alphabetic Principle

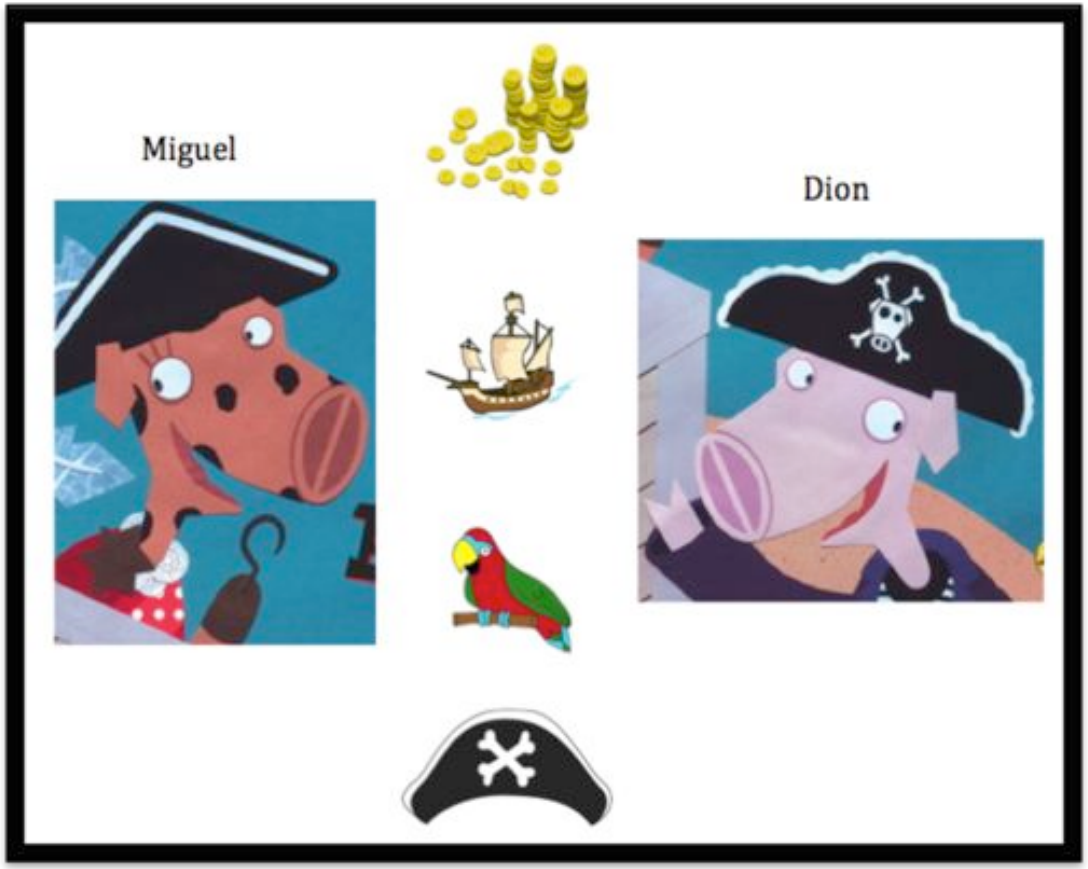
- Recognizes name
- Recites alphabet song
- Points to letters
- Says letters
- Knows letter sound correspondence

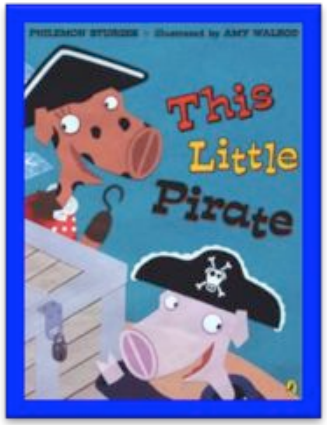
Phonological Contrasts

- Word-final pre-vocalic consonant cluster reduction
- "best" = [bes]
- Methathesis "ask" = aks
- Deletion of final /l/ or /r/ after the vowel /o/
- "door" = "doe"

Morphosyntactic Contrasts

- Zero marking of plurals
- Zero possessives
- Absent copula
- Absent auxiliary





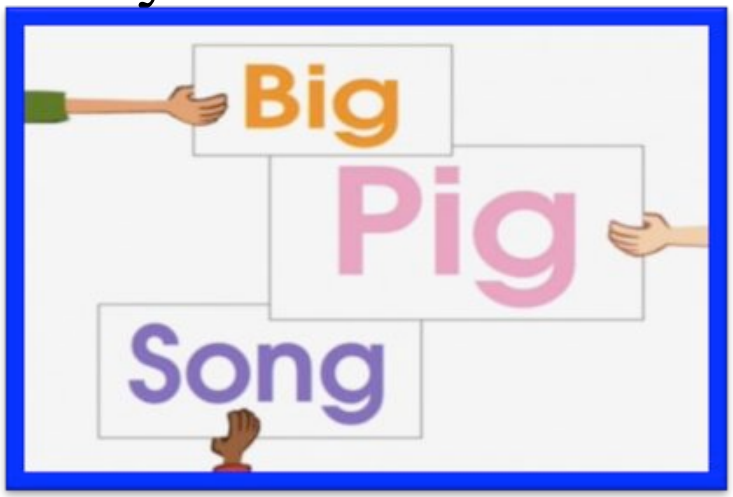
Pragmatic Skills

- Listening
- Using a school voice
- Introductions
- Talking differently

  based on context
- Politeness
- Indirect requests

Suggestions for Effective Implementation

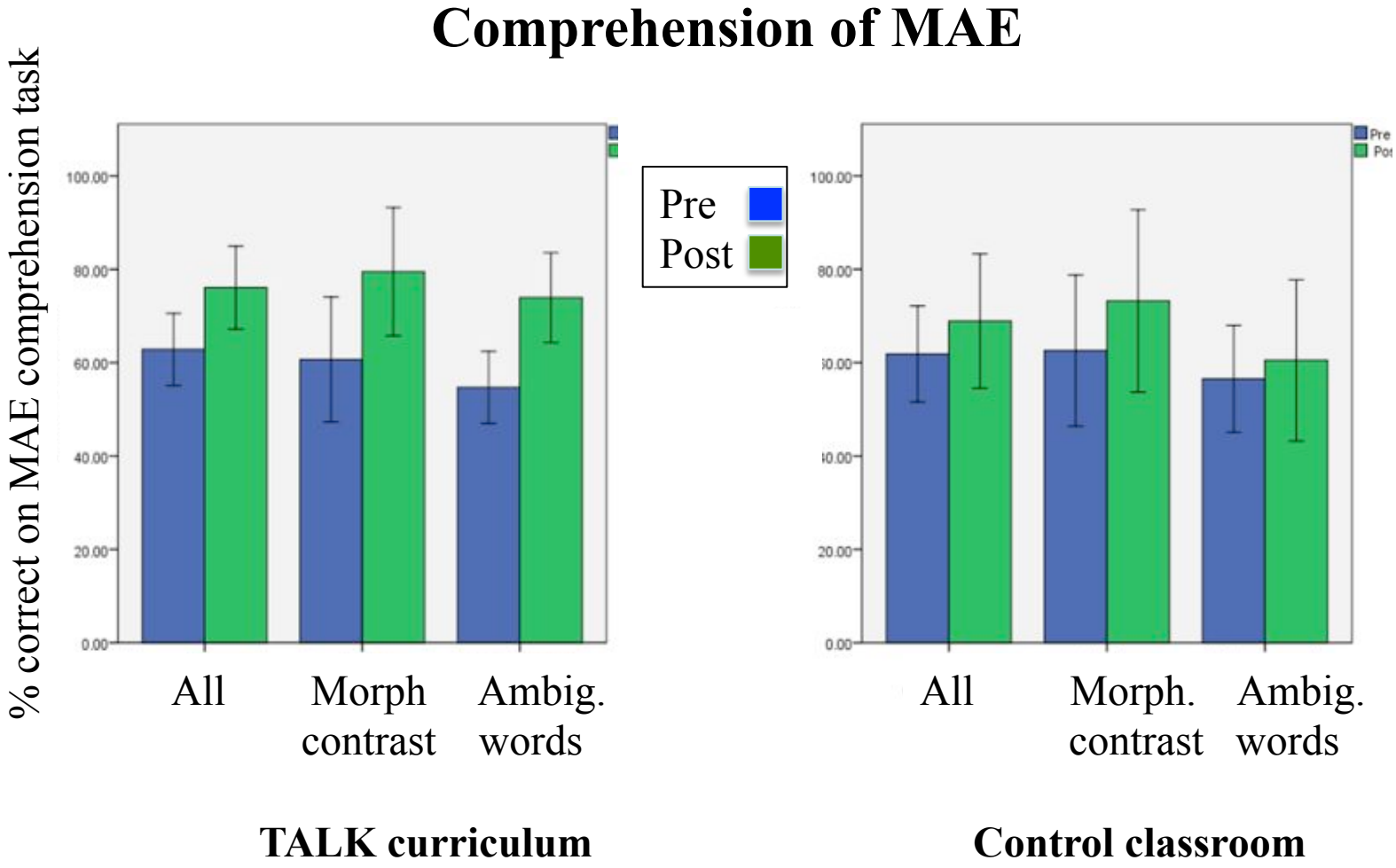
- Teacher Collaboration
- Short activities
- Techniques for smooth transitions
- Emphasis on Team Building
- Introduce themed related vocabulary
- Incorporation of media



Study 2. TALK: Results

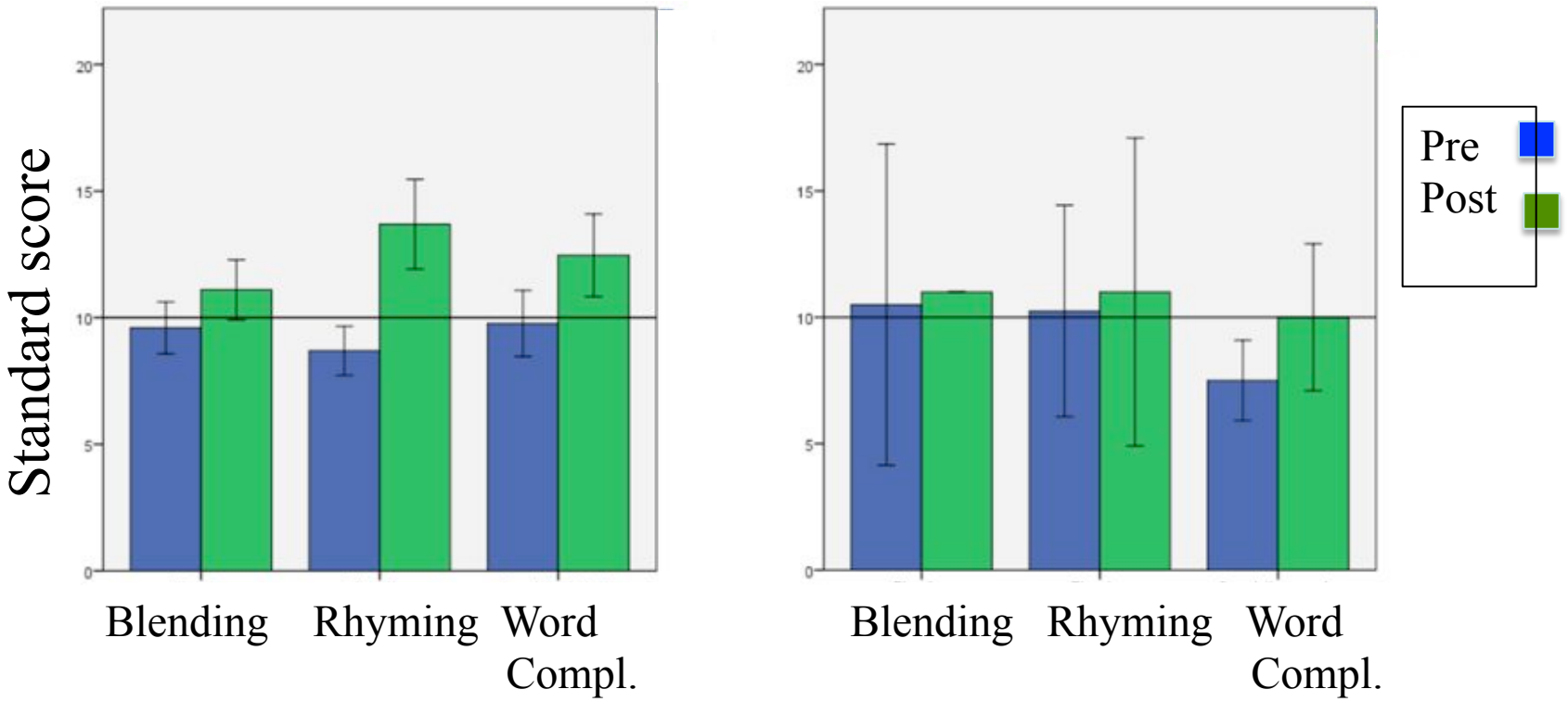
- 13 children in TALK; 8 children in control classroom
- Evaluation included:
  - Pre & post testing.
  - Parent questionnaires.
    - Very positive responses from parent questionnaires

Study 2. TALK: Results



Study 2. TALK: Results

Phonological Awareness



TALK curriculum **Control curriculum**

Discussion

- In a relatively short period of time, the TALK curriculum was effective.
  - Authentic Assessment
- Need to follow children to see if it makes a difference.

General discussion and conclusions

- Study 1: Dialect mismatch between the home dialect and the language of instruction puts non-MAE speaking children at a disadvantage.
  - Difficulty with comprehension of words that are ambiguous in native dialect, but not in MAE.
  - Both expressive vocabulary size and dialect density independently predicted performance.
- Study 2: We can teach young children a lot about the language of instruction in a relatively short period of time.

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