African American Preschoolers’ Emergent Reading Skills and Use of African American English

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Florida Center for Reading Research Brown Bag

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Overview of the Talk

- Purpose of study
- A look at African American English
- Methods (brief)
- Results
- Discussion (open)
AAE and Literacy

- Achievement Gap
  - 25% of White children failed to demonstrate proficiency on the 4th Grade NAEP
  - 60% of African American children failed to demonstrate proficiency

- Oral language and literacy links

- AAE and Reading
  - Implicit in much research that AAE use presents a barrier to reading
    - Teacher perception and expectations
    - Mismatch between AAE and SAE

- Two recent studies
  - Charity, Scarborough & Griffin 2004
  - Craig & Washington 2004
  - Both found that for school-age children, greater use of SAE or less use of AAE was related to stronger reading skills
 Purpose of the Study

- To examine African American preschoolers use of AAE across two context
  - Pretend storybook reading
  - Sentence imitation task
- To examine the relation of preschoolers emergent literacy and their use of AAE
  - Vocabulary
  - Letter and word recognition
  - Phonological awareness
  - Morphosyntactic awareness
  - Literacy
African American English

- Also: AAVE, Ebonics, Black English, BVE, Black Language
- Rule governed and complete linguistic system that shares phonological, morphosyntactic, and semantic features with SAE or SE
- Creole roots – primarily West Africa with English
  - “African grammar with English words”
- Spoken by many African Americans
“Black Language [has] multiple varieties, oral and written, formal and informal, vernacular and literary, ... for African Americans, language use is fundamentally and exquisitely contextual.”

Participants

- 63 African American preschoolers
- 10 Head Start/State school readiness programs
  - All children at risk for academic failure
    - 8 of 56 mothers graduated from college
    - All teachers had early childhood credentials
- 2 school districts
  - Urban fringe – more concentrated poverty and less diversity
    (75% of students were African American)
  - Midsized city (15% of students were African American)
Child Outcomes

- **Language sample**
  - Pretend story book reading
  - Audio and video taped
  - Transcribed (CHILDES)
  - Coded for morphosyntactic features of AAE

- **Emergent Literacy**
  - Vocabulary (WJ)
  - Letter-word recognition (WJ)
  - Phonological awareness (rhyming)
  - Linguistic skill and Morphosyntactic awareness (sentence imitation)
  - Literacy Composite (z-score)

- **Multiple child and classroom variables considered**
  - Boys used AAE features more frequently than did girls
    - %DDM boys = 4.63; girls = 2.50
<table>
<thead>
<tr>
<th>AAE Morphosyntactic Features</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zero Copula/Auxiliary</strong></td>
<td>I (am) stuck in there.  \nThis (is) supposed to be a frog.</td>
</tr>
<tr>
<td><strong>Optional subject/verb agreement</strong></td>
<td>And then they <em>was</em> splashing the water</td>
</tr>
<tr>
<td><strong>Zero past tense</strong></td>
<td>And then he said, he cover(ed) his ears</td>
</tr>
<tr>
<td><strong>Undifferentiated pronoun case</strong></td>
<td>Yesterday my aunt forgot <em>they</em> lunch  \n(from sentence imitation)</td>
</tr>
<tr>
<td><strong>Indefinite article</strong></td>
<td>He found a(n) elk</td>
</tr>
<tr>
<td><strong>Zero possessive</strong></td>
<td>And he called the frog(‘s) name</td>
</tr>
<tr>
<td><strong>Appositive pronoun</strong></td>
<td>The bees <em>they</em> was jumping down (also subject verb agreement)</td>
</tr>
<tr>
<td><strong>Invariant be</strong></td>
<td>the people <em>be</em> helped by the king (from sentence imitation)</td>
</tr>
</tbody>
</table>
Quantifying children’s use of AAE

- Coded transcripts for features of AAE
  - Reliability 89% for tokens
- Percent DDM = number of AAE tokens divided by the number of words in the sample times 100
  - AAE tokens per 100 words
ADU: now you tell me the story.
*CHI: once <in the> [/] there <was a little boy> [/] is a little boy
<with his> [/] with a dog.

*ADU: .
*CHI: and <and they was look-ing at> [/] they was look-ing at this frog.

%AAE: $SVA
*CHI: he was sleep-ing.
*CHI: and <the frog and the frog> [/] the frog #.
*ADU: .
*CHI: the frog him got out.

%AAE: $PRO
*ADU: .
*CHI: and that was night.
*CHI: and he was gone.
*CHI: <him> [/] and then him was look-ing him.

%AAE: $UPC
*CHI: he was look-ing.
*CHI: <he was> [/] he was call-ing he name.

%AAE: $UPC
*CHI: <and then> [/] and him was look-ing everywhere for him.

%AAE: $UPC
*CHI: and then him got out the window.

%AAE: $UPC
*CHI: &h him was mad.
Results

- On average, children were performing below age expectations on the letter-word recognition and sentence imitation tasks
  - TOLD Sentence Imitation AE = 4.25 years
  - On average, children were 4.9 years of age at the time of testing
Children used many features of AAE during the pretend storybook reading.
Children varied widely in the frequency with which they used AAE features.
AAE Use on Sentence Imitation

Number of Tokens

Zero copula/auxiliary
Zero past tense
Undifferentiated pronoun case
Zero plural
Invariant be

AAE Features
Children’s use of AAE features varied by context

- 87% of children used at least one feature of AAE during the pretend storybook reading.
- Only 13% of children used at least one feature of AAE during the sentence imitation task.

- In another study, %DDM was 10.8 on a picture description task with an African American examiner compared to 3.51 on the pretend storybook reading task with a White examiner.
Children’s literacy and AAE

Literacy Composite
Final estimation of fixed effects:

<table>
<thead>
<tr>
<th>Fixed Effect</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-ratio</th>
<th>d.f.</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>For INTRCPT1, B0</td>
<td>-0.409671</td>
<td>0.215710</td>
<td>-1.899</td>
<td>9</td>
<td>0.089</td>
</tr>
<tr>
<td>For GIRL slope, B1</td>
<td>-0.003104</td>
<td>0.242244</td>
<td>-0.013</td>
<td>59</td>
<td>0.990</td>
</tr>
<tr>
<td>For %DDM linear slope, B2</td>
<td>-0.182496</td>
<td>0.050128</td>
<td>-3.641</td>
<td>59</td>
<td>0.001</td>
</tr>
<tr>
<td>For %DDM quadratic slope, B3</td>
<td>0.056699</td>
<td>0.016816</td>
<td>3.372</td>
<td>59</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Final estimation of variance components:

<table>
<thead>
<tr>
<th>Random Effect</th>
<th>Standard Deviation</th>
<th>Variance</th>
<th>df</th>
<th>Chi-square</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRCPT1, U0</td>
<td>0.21612</td>
<td>0.04671</td>
<td>9</td>
<td>12.36272</td>
<td>0.193</td>
</tr>
<tr>
<td>level-1, R</td>
<td>0.87427</td>
<td>0.76435</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Statistics for current covariance components model:

Deviance = 173.084402
Results – AAE and literacy

-0.56
-0.19
0.19
0.56
0.93

Literacy Composite Z score

Percent DDM

Very frequent to moderate AAE use: Effect size = .75
No AAE to moderate AAE use: Effect size = 1.5
AAE and Metalinguistic Awareness

Rhythmic
Trends but no relation that reached significant levels for Vocabulary or Letter word

Morphosyntactic
Implications of this U-shaped relation

- AAE does not appear to present a barrier to children’s emergent literacy
  - Teacher perception
  - Mismatch hypothesis

- AAE and metalinguistic awareness
  - Dialect shifting (Craig & Washington, 2004)
  - Dialect awareness (Charity & Scarborough, 2004)
  - “shifting” or “awareness” was more evident when the expectation for SAE was very explicit but less evident when the expectation was implicit

- Preschoolers are just gaining formal school and literacy experiences
  - A time of transition
    - May not find this U-shaped relation for older school age children; we might assume that the linguistically proficient children will shift by first grade (see Holly’s paper)
  - Teach children to code-switch explicitly?
The frequency of AAE use varied across contexts -- children were much more likely to use AAE in the pretend storybook reading (87% of children) than in the sentence imitation task (13% of children). Indeed, comparing DDM across studies, the pretend storybook reading tended to elicit less AAE than did free play settings (Craig & Washington, 2002) or picture description (Craig & Washington, 2004; Washington, Craig, & Kushmaul, 1998). In the 2004 study, Craig and Washington reported DDMs of .108, or approximately one feature per every 9.26 words during picture description, for their sample of preschoolers, who attended many of the same classrooms (although at different times) attended by the students in this study. The mean DDM for the pretend storybook reading in this study was .04. This suggests that even in preschool, students are aware of different expectations for AAE and SAE use across contexts and decrease their use of AAE (and increase use of SAE by implication) as the expectations for school and book forms of SAE increase.