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# Child-Directed Speech in African American vernacular English

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## INTRODUCTION

**ABSTRACT**

One of the most timeless and universal activities, in which human beings across cultures participate, is speaking to children. This investigation sought to determine if African American mothers use CDS in addressing their 10-18 month olds and to characterize their CDS. Additionally, this study asked whether there is evidence for differences in CDS as a function of socioeconomic status. Results indicated that all mothers used a simplified speech register with their children, including special diminutives. Future research should further characterize the CDS of AAVE speakers in order to document typical language of children acquiring AAVE.

**BACKGROUND**

Every culture has systematic rules governing how people communicate with infants and young children. In many cultures, a different speech register is used by adults and older children when they are interacting with babies and toddlers. This speech register has been called "baby-talk," "parentese," "motherese," "caregiver speech," "infant-directed speech" or "child-directed speech" (CDS). In middle class European American culture, CDS is characterized by simplified vocabulary, melodic pitch, higher pitch, increased pitch range, repetitive questioning, and slower or deliberate tempo (e.g., Cooper, Abraham, Berman, & Staska, 1997; Fernald & Simon, 1984; Oksaar, 1983).

Child-directed speech has been studied in languages such as English, Mandarin Chinese (Grieser & Kuhl, 1988), Dutch, Russian, German, Spanish (Blount & Padgug, 1976; Kempe, Brooks, & Pirott, 2001), Italian, French and Japanese (Fernald, Taeschner, Dunn, Papousek, & Boysson-Bardies, 1989). It has been found to serve a variety of social and cognitive functions. That is, it helps to establish the child's attention and regulates arousal (Cooper, Abraham, Berman & Staska, 1997; Fernald, 1984; Fernald & Simon, 1984), marks word and clause boundaries (Fernald & Mazzie, 1991; Albin & Echols, 1996), contributes to the development of pitch and temporal order discrimination, assists in auditory pattern recognition (Fernald & Simon, 1984), promotes vocabulary acquisition, and supports the development of pragmatic skills (Ochs & Schieffelin, 1984; Fernald & Simon, 1984).

Child-directed speech is not specific to one culture. It has been studied in a variety of languages. However, it has been studied very little in African American vernacular English (AAVE). The AAVE studies that have been conducted have suggested that African American mothers from low SES (socioeconomic status) backgrounds do not use CDS (Heath, 1983).

**PURPOSE**

This purpose of this study was to determine if African American mothers use CDS in addressing their 10-18 month olds and to determine some of the characteristics of their CDS. Additionally, this investigation sought to determine whether or not there is evidence for differences in CDS as a function of socioeconomic status (SES).

## METHODS

**PARTICIPANTS**

The research participants included 3 African American mothers from middle socioeconomic status (SES) and 3 African American mothers from low SES backgrounds. Socioeconomic status was determined by participation in the Women, Infants, and Children (WIC) Program. That is, all mothers in the study from low SES backgrounds received WIC and all mothers from middle SES backgrounds did not. All mothers had no history of treatment for speech or language problems, according to self report. Table 1 summarizes the demographic information for the participants.

**Table 1. Demographic Information of Participants**

| Participants | SES | Age | Number of Children |
|---|---|---|---|
| S1 | Mid | 30 | 2 |
| S2 | Low | 33 | 3 |
| S3 | Low | 21 | 1 |
| S4 | Mid | 31 | 1 |
| S5 | Mid | 33 | 2 |
| S6 | Low | 19 | 1 |

**METHODS**

One hour audio samples were collected from each participant and analyzed Praat, a program for doing phonetic analyses and sound manipulations. Praat was used to measure type and number of phonological features. Phonological features were coded in a point tier in Praat each time they occurred.

Data were then transferred to Microsoft Word and analyzed in the Systematic Analysis of Language Transcripts (SALT).

SALT was used to obtain criterion referenced measure which include: mean length of utterance (MLU), number of utterances, number of different words (NDW), and total number of words (TNW).

## DISCUSSION

Data analysis of additional research participants, which will substantiate these tentative findings, is currently under way. However, present data clearly reveal a CDS register in AAVE speaking mothers.

The most interesting finding of the analysis was the use of unique diminutive with reduplicative morphology ("ea-eat," "no-nose") in AAVE CDS across both SES groups. This is not characteristic of European-American CDS, although it is observed in CDS in other cultures.

Differences noted from Heath (1983) may stem from several factors:

1. Different data collection methods.
2. The examiner is an African American speaker of AAVE.
3. Differences in the cultural beliefs and practices of African Americans in the Southern town of Trackton and the Northern city of Columbus.

Additional research is needed to further characterize the CDS of AAVE speakers to gather normative data on the development of AAVE.

## RESULTS

**What are the characteristics of CDS?**

CDS in AAVE speaking mothers was characterized by use of:

- Higher, more exaggerated pitch
- Directives and repetitive commands
  - E.g., "comere," and "say __"
- Diminutives with reduplicative morphology
  - E.g., "ju-juice," and "te-teef"
- Special lexical items
  - E.g., "sheepy" for "sleepy"
- Repetitive questions
  - E.g., "You ready to ea-eat?"
- Name substitutions for pronouns
  - E.g., "Mommy sorry."
- Simplified speech register

**Is there evidence for differences in AAVE in CDS as a function of socioeconomic status (SES)?**

All mothers showed a significantly higher TNW [$\chi^2$ (6) = 502.88 , $p<0.01$] in the ADS condition than the CDS condition.

All mothers showed a significantly higher NDW [$\chi^2$ (6) = 64.67, $p<0.01$] in the ADS condition than the CDS condition.

All mothers showed a significantly higher number of utterances [$\chi^2$ (6) = 121.21, $p<0.01$] in the ADS condition than the CDS condition.

Middle SES mothers in the present study had greater MLUs than did mothers from low SES backgrounds in both ADS and CDS.

Middle SES mothers also produced a higher number of utterances and TNW than did low SES mothers in both conditions.

## REFERENCES

**Selected References**

Albin, D. D. & Echols, C. H. (1996). Stressed and word-final syllables in infant-directed speech. *Infant Behavior and Development, 19*, 401-418.

Blount, B.G. & Padgug, E.J. (1976). Mother and father speech: Distribution of parental speech features in English and Spanish. *Papers and Reports on Child Language Development, 12*, 251-277.

Cooper, R. P., Abraham, J., Berman, S., & Staska, M. (1997). The development of infants'preference for motherese. *Infant Behavior and Development, 20*, 477-488.

Fernald, A. & Simon, T. (1984). Expanded intonation contours in mothers' speech to newborns. *Developmental Psychology, 20*, 104-113.

Hart, B. & Risley, T. (1995). *Meaningful differences in the everyday experience of young American children*. Baltimore: Paul H Brookes Publishing Co.

Heath, S.B. (1983). *Ways with words*. Cambridge: Cambridge University Press.

Kempe, V., Brooks, P.J, & Pirott, L. (2001). How can child-directed speech facilitate the acquisition of morphology? *Proceedings of the VIIIth International Congress for the Study of Child Language*. 1237-1247

Mills, M. (2004). Phonological features of African American vernacular English in child-directed versus adult-directed speech. Unpublished master's thesis. Columbus, OH: The Ohio State University.

Ochs, E. & Schieffelin, B.B. (1986). Language acquisition and socialization: Three developmental stories and their implications. In R.A. Schweder & R.A. Levine (Eds.), *Culture theory*. NY: Cambridge University Press (pp. 285-305).