
Socioeconomic Status and Gender Influences on Children's Dialectal Variations

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This investigation compares dialect use by African American children differing in socioeconomic status (SES) and gender. Subjects were 5- and 6-year-old boys ($n = 30$) and girls ($n = 36$), who were kindergartners attending schools in the Metropolitan Detroit area. Comparisons of the amount of dialect in the children's spontaneous discourse revealed systematic differences relative to SES and gender in the frequencies but not the forms of dialect in use. Children from lower-income homes, and boys, were more marked dialect users than their middle-class peers or girls. The sociolinguistic implications of the findings are discussed.

KEY WORDS: African American English, socioeconomic status, gender differences, children

Most large urban centers in the United States include a significant and growing number of African Americans, most of whom (Battle, 1993; Smitherman-Donaldson, 1977) are speakers of the nonstandard dialect, African American English (AAE). Early linguistic and sociolinguistic investigations of the dialect revealed its systematic, rule-governed structure (Dillard, 1972; Fasold & Wolfram, 1970; Labov, 1970; Wolfram & Fasold, 1974). These studies were focused primarily on the discourse of adolescents and adults, usually in the form of ethnographic descriptions of the rich linguistic and interactive characteristics of communication among inner-city gang members. This line of inquiry convincingly refuted prevailing notions of the time that AAE was a deficient form of Standard American English (SAE). AAE has been studied to a lesser degree in younger children but the linguistic constraints governing the use of various forms have been found to be systematic as well (Ball, 1994; Baratz, 1970; Wyatt, 1996).

In addition to its focus on adolescent and adult use of dialect forms, much of what we know about AAE is based upon the performance of low income speakers. Unfortunately, African Americans are impoverished at disproportionate rates in the United States (Cole, 1980; U.S. Department of Commerce, 1990) such that an African American child is three times more likely to be growing up in poverty than other children in the U.S. (Brooks-Gunn, Klebanov, & Duncan, 1996). It is important to understand dialect use in this large and primarily poor segment of the African American population. It would be incorrect, however, to ascribe the characteristics of dialect use among speakers from low socioeconomic status (LSES) backgrounds to African Americans in general, if indeed the information available to date only characterizes African Americans

living in poverty. Dialectal variations in the discourse of children differing in socioeconomic status (SES) should be pursued.

Few studies involving African American children have examined dialect performance relative to subjects differing by SES. Those studies that have been conducted have reported differences in performance based upon this important social status variable. Dillard (1972) reported that pre-adolescent and adolescent children from a middle-income racially integrated community used less dialect and more SAE than low-income age-peers from a predominantly African American, block-long community, in New York City. Ratusnik and Koenigsknecht (1976) found that instances of third person singular /s/ and /z/ exclusions, copula and auxiliary deletions, and double negatives were increased in frequency for 4- and 5-year-old children from lower-SES compared to middle-SES homes in Chicago. The Ratusnik and Koenigsknecht study focused on phonological features primarily, however, so only three morphosyntactic forms were examined of the potentially much larger set produced by African American children. In one of the few published reports of the large variety of dialectal forms used by young African American children, Washington and Craig (1994) defined and described 16 different AAE forms in the freeplay discourse of 45 normally developing preschoolers. All of our subjects were from low-income homes, however, so no SES comparison was possible.

Most of the literature on dialect use by African Americans not only derives from the study of older adolescent and adult inner-city gang members, but characterizes males primarily. Dialect use by females remains largely unknown. Cross-cultural sociolinguistic approaches to the study of language variation have reported that male speech includes many more nonstandard variants than female speech (Labov, 1972, 1990; Romaine, 1978; Wolfram & Fasold, 1974). More specifically to African Americans, Wolfram (1969) and Abrahams (1973) have observed that the talk of women is closer to SAE than that of men. Romaine (1978) provides evidence that gender differences in nonstandard variants may be observed as early as 6 years of age for other dialects of English.

Our understanding of dialect use by African American children will remain critically incomplete without a gender comparison. It is difficult to predict the nature of the relationship between gender and dialect. Although there are long-standing observations that some aspects of structural development favor girls (Ely & McCabe, 1994; Huttenlocher, Haight, Bryk, Seltzer, & Lyons, 1991; Koenigsknecht & Friedman, 1976; McCarthy, 1930; Morisset, Barnard, & Booth, 1995; Winitz, 1959), most recent research finds few differences and then primarily in discourse behaviors (Craig & Evans, 1991; Ely,

Berko-Gleason, & McCabe, 1996; Macaulay, 1978; Sheldon & Rohleder, 1996). It remains unclear whether a primarily morphosyntactic system like AAE will evidence systematic differences relative to gender, and further, whether the asymmetries in dialect use noted between African American men and women will be apparent for young children as well.

The purpose of this investigation was to examine dialect use by young African American children differing by these two potential influences on language performance, SES and gender. Information of this type would contribute generally to our increasing understanding of children's use of AAE, and more specifically to the development of informative research designs and much needed culturally valid assessment instruments.

Method

Subjects

The subjects were 66 African American children (30 boys and 36 girls) living in the metropolitan Detroit area. All of the subjects were dialect users although the amounts of dialect evidenced in their discourse varied. African American children comprised more than 75% of the student body in the school districts participating in this investigation.

The subjects ranged in age from 63 to 76 months and all were kindergartners. All of the children were apparently normally developing based upon teacher and parent judgments. None were enrolled in special education services of any kind although special education services were available for kindergartners who met district criteria. Each child passed a bilateral hearing screening at 25 dB for 500, 1,000, and 4,000 Hz (ANSI, 1978) prior to data collection. No formal language measures were administered to these children in an attempt to confirm their normal developmental status in ways other than teacher and parent reports. Unfortunately, no valid formal tests of the language development of African American children are available to date (see Washington, 1996, for a recent discussion of this issue), precluding the collection of a quantitative language performance-based, subject selection criterion of this type.

School administrators contacted all African American families in their districts who had children enrolled in kindergarten. Subjects were selected on a continuous enrollment basis for participation in this study based upon their ability to meet the following SES criteria. Half of the children were from low and half from middle socioeconomic status homes. LSES was determined by a child's eligibility for the free or reduced-price lunch program based upon the federal guidelines. The family incomes of the children who participate in the free and

reduced price lunch program must be between 135% and 185% of the federally established poverty guideline for a family of four during the year in which the data were collected. The MSES subjects were selected from a pool of subjects 4 through 6 years of age identified by the school districts who attended schools in which fewer than 20% of the families were eligible for free or reduced-price lunches. None of the 33 children designated MSES in this investigation participated in the free or reduced-price lunch programs. Gender was allowed to vary within SES strata. Table 1 summarizes the subject distribution for gender and SES.

Data Collection

Spontaneous, free-play language samples were collected during adult-child discourse with an African American female examiner who spoke AAE to the children. The examiner was one of a team of five experienced African American researchers, with more than 2 years experience testing children. Examiners and subjects were not paired in any specific manner. Rather, the availability of a given child and each examiner's schedule were used to determine adult-child pairings. Each child wore an individual microphone and the samples were audiorecorded using a microphone mixer, in a quiet room in the child's school. Sample durations were approximately 15 to 20 minutes.

Each child was presented three toy sets and allowed to select one for play during the interaction in an attempt to standardize interest levels in the play materials across subjects. The toy sets included: Barbie and Ken dolls with a Burger King play set, action figures and props, and the Fisher-Price School. The choices were successful in maintaining the interest of each child.

Scoring

The language samples were transcribed orthographically using the CHAT conventions of the Children's Data Exchange System, CHILDES (MacWhinney, 1994). Instead of utterances, however, the transcripts were segmented into Communication Units (C-units), using the scoring criteria of Loban (1976). The first 50 wholly intelligible C-units were segmented into secondary CHAT files for analysis using the CLAN programs. The 50 C-unit corpus was selected because it is sufficiently large for data reduction purposes and is readily obtainable in a 15- to 20-minute sampling period from even the youngest children in this age range. The C-unit was defined as "a group of words that cannot be subdivided without the loss of their essential meaning" (Loban, 1976, p. 9). In addition, the syntactic segmentation of multiple main clauses linked by simple coordinate conjunctions were separated into C-units if all clauses included subjects,

Table 1. The gender, lower (LSES), and middle socioeconomic status (MSES) of the subjects.

	LSES	MSES	Total
Males	13	17	30
Females	20	16	36
Total	33	33	66

based upon Hunt's (1970) criteria. A departure from the scoring system defined by Hunt (1970) occurred for sentences containing select AAE forms. Specifically, sentences containing AAE forms such as the zero copula/auxiliary and that involve deletion of the main or auxiliary verb forms were counted as one C-unit. C-units have advantages over other units of analysis like the T-unit (Hunt, 1970) and the utterance (Brown, 1973; Miller & Chapman, 1981). Unlike T-units, C-units preserve short discourse units like one-word responses to adult questions and comments in addition to scoring sentences with a subject and main verb. These procedures stabilize sentence lengths in children of school age, like those in the present investigation, who are capable of producing long strings of clauses joined by simple conjunctions.

C-units were scored for the occurrence of one or more types of AAE, using Washington and Craig's (1994) definitions for children. Our earlier work identified AAE types from the discourse of children from LSES homes. The appendix provides examples of the same types of AAE, but obtained from the samples of the MSES children in this investigation.

Reliability

Transcription reliabilities were established for each sample. Approximately 10% of the discourse of each child was re-transcribed by an independent observer. A point-to-point comparison for morphemes was 91%, when the number of agreements was divided by the number of disagreements.

Seven of the subjects were randomly identified and their transcripts were re-scored by an independent observer using the Washington and Craig (1994) taxonomy for types of AAE. Point-to-point comparisons resulted in a 95% agreement for types and an 82% agreement for tokens. Agreement for C-unit segmentation was 99%.

In addition, the examiners' use of AAE was investigated in two ways to explore comparability across testers. First, the amount of variation among testers in the frequencies of AAE tokens and types was compared. In addition, the verbosity of the examiners was compared in terms of the numbers of utterances each produced during the elicitation of the 50 C-unit child sample.

Table 2. Means (*M*) and standard deviations (*SD*) for frequencies of AAE tokens and types and adult utterances for examiners and AAE tokens and types for the children relative to the examiners.

Examiner	AAE tokens		AAE types		Adult utts.	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Examiner behaviors						
1	6.6	4.8	2.0	.71	118.4	74.2
2	20.6	16.6	*4.4	1.8	98.2	63.8
3	12.8	6.4	*1.6	.89	101.6	25.8
4	14.6	6.0	3.2	1.9	124.2	38.1
Child behaviors						
1	8.2	5.4	3.0	2.2	NA	NA
2	4.4	3.4	2.4	1.5	NA	NA
3	7.4	4.9	2.6	1.1	NA	NA
4	10.6	4.3	4.0	1.4	NA	NA

**p* = .03.
NA = not appropriate.

Since the number of subjects tested by a specific examiner was determined based upon scheduling issues, the specific numbers of language samples involving any specific examiner varied. For analysis purposes, five interactions were selected for each of the four examiners (*n* = 20) who had collected at least five of the samples reported in this investigation, representing approximately 30% of the total interactions. No statistically significant differences were found across examiners for the frequencies of AAE tokens, $F(19) = 1.8, p > .05$, or numbers of utterances produced, $F(19) = 0.27, p > .05$ (see Table 2). Types of AAE varied significantly between two of the examiners, $F(19) = 3.86, p < .05$. Second, the impact of the adult behaviors on the children were estimated by

comparing the frequencies of AAE types and tokens produced by the children relative to examiners (see Table 2). Despite a difference between examiners for types, no statistically significant differences were apparent for the frequencies of AAE types, $F(19) = 0.96, p > .05$, or tokens, $F(19) = 1.6, p > .05$, produced by the children. Considered together, these findings indicate that the dialect used by the children was not affected in systematic ways by the minimal variations in dialect used by examiners.

Results

The data collection and segmentation procedures yielded a total corpus of 3,300 C-units for analysis. A summary of the AAE types used by the subjects is provided in Table 3. Two of the MSES children (3% of the total sample) did not produce dialectal forms during the first 50 C-units of their freeplay interactions. However, both children produced dialectal forms later during their freeplay samples. In order to evaluate the comparability of the dialect used in the first 50 C-units to the remainder of the freeplay discourse, 6 MSES and 6 LSES subjects were randomly selected representing 20% of the subject cohort. Dialect use during the first 50 C-units and during the remainder of the freeplay samples were compared for frequencies of occurrence of dialect. This required converting frequencies to percentage frequencies because the number of C-units in the remainder of the sample was not controlled as it was for the consistent 50 C-unit base. The percentage frequencies were arcsine transformed to stabilize variances in percentage frequency data. A paired comparisons *t*-test revealed nonsignificant frequency variations for amounts of dialect internal to these samples, $t(11) =$

Table 3. Percent of subjects using each AAE type (*N* = 64).

Groups	AAE type															
	Zero copula/auxiliary	subj-verb agreement	finna/sposeeta/bouta	ain't	undifferentiated pronoun case	multiple negation	zero possessive	zero past tense	zero "ing"	invariant "be"	zero "lo"	zero plural	double modal	regularized reflexive	indefinite article	appositive pronoun
LSES																
Males (<i>n</i> = 13)	100	100	38	23	0	0	23	8	8	15	8	15	15	0	8	0
Females (<i>n</i> = 20)	100	80	20	5	30	15	25	20	5	20	10	15	0	0	20	20
Total (<i>n</i> = 33)	100	88	27	12	18	9	24	15	6	18	9	15	6	0	12	15
MSES																
Males (<i>n</i> = 16)	81	81	19	13	19	19	13	19	6	6	0	25	6	0	25	0
Female (<i>n</i> = 15)	73	73	20	7	13	13	20	13	7	7	13	7	0	0	7	7
Total (<i>n</i> = 31)	77	77	19	10	16	16	16	16	6	6	6	16	3	0	16	3

0.28, $p > .05$. Subsequent analyses based on the first 50 C-units were calculated only for the 64 subjects who used dialect during the sample.

A two-way Analysis of Variance was computed for frequencies of occurrence of any AAE form (tokens) by gender (2 levels) and SES (2 levels). There was no statistically significant interaction between SES and gender, $F(1, 60) = 0.069$, $p > .05$, but there were significant main effects for SES, $F(1, 60) = 12.33$, $p < .05$, and for gender, $F(1, 60) = 4.72$, $p < .05$. Table 2 presents the mean frequencies for SES and gender. The frequencies of AAE were significantly greater for the boys ($M = 11.03$) than the girls ($M = 9.05$) and the frequencies of AAE were significantly greater for the LSES children (mean = 11.76) than the MSES children (mean = 8.03).

Although tokens varied by SES and gender, the number of *different* AAE forms (types) did not. A two-way ANOVA revealed no significant interaction between SES and gender, $F(1, 60) = 1.03$, $p > .05$, and no statistically significant main effects SES: $F(1, 60) = 1.42$, $p > .05$; gender: $F(1, 60) = .022$, $p > .05$ (see Table 4).

There was a marked toy preference relative to gender although not for SES. Two-thirds of the boys (20/29) selected the action figures and props, whereas the girls rarely did (4/35) and preferred the Burger King with Barbie and Ken dolls (26/35). It seemed important to determine whether, in some unknown way, the toys were creating play contexts with more opportunities for dialect use by the boys. The mean number of tokens for boys playing with the action figures was 9.8, less than those for boys selecting the other toys ($M = 12.4$). This inverse relationship between AAE tokens and action toy sets indicates that the increased frequency of AAE in the samples of the boys was not an artifact of toy preferences.

The variation in AAE tokens also appeared unrelated to opportunities for their occurrence, to the extent that average C-unit lengths in words index the opportunity for dialect use. A Pearson Product Moment

correlation between AAE tokens and average C-unit length in words revealed a nonsignificant relationship ($r = .22$, $p > .05$).

Discussion

The results of this investigation indicate that socioeconomic status and gender are two important influences on the use of AAE by African American children. The discourse of children from lower-income homes, estimated by annual household incomes, reflected significantly more dialect use than that of children from middle-income homes. In addition, the discourse of the boys in this study reflected significantly greater dialect use than that of the girls.

The socioeconomic status of a child's family has been an acknowledged influence on various structural aspects of a child's language performance since empirical approaches to the study of language acquisition began (McCarthy, 1930; Templin, 1957). Of course SES is a general term, reflecting the potential effects of a number of co-variables. For example, in other work, educational level of the primary caregiver, rather than household income, is the better predictor of good and poor cognitive and linguistic outcomes (Hawley, Halle, Drasin, & Thomas, 1995; van Baar & de Graaf, 1994). In the present investigation, it was not possible to secure this kind of family information, so it remains unclear which aspects of a child's daily living contribute to the SES differences obtained. Further, eligibility or ineligibility for the federally funded or reduced price lunch program was our SES criterion variable. This is one of the least satisfactory ways to measure income. It would have been preferable to know the specific income levels of the families, educational level of the caregivers, and other variables often used to establish socioeconomic status. It is possible that the population from which our subjects were drawn did not select from the population as a whole. If, for example, a parent had not enrolled a child in the

Table 4. Means (M) and standard deviations (SD) for the frequencies of AAE use (tokens), the number of different AAE forms (types) and average C-unit length in words (C-MLW) by lower (LSES) and middle (MSES) socioeconomic status homes and by gender.

	Tokens		Combined $M (SD)$	Types		Combined $M (SD)$	C-MLW		Combined $M (SD)$
	LSES $M (SD)$	MSES $M (SD)$		LSES $M (SD)$	MSES $M (SD)$		LSES $M (SD)$	MSES $M (SD)$	
Males	13.1 (4.6)	9.4 (3.8)	**11.0 (4.5)	3.7 (1.1)	3.6 (1.5)	3.6 (1.3)	3.42 (.45)	3.18 (.45)	3.29 (.46)
Females	10.9 (5.2)	6.6 (4.1)	9.1 (5.2)	3.9 (1.7)	3.07 (1.4)	3.5 (1.6)	3.59 (.57)	3.28 (.55)	3.46 (.58)
	*11.8 (5.0)	8.0 (4.1)		3.8 (1.5)	3.35 (1.4)		3.52 (.53)	3.23 (.49)	

* $p = .001$

** $p < .05$

federally funded program that child might have been included in the MSES sample rather than the LSES sample. Whereas systematic SES differences were found despite this potentially undetected subject selection error, SES misclassification using this particular estimate probably was not an important influence on the data obtained. Clearly, the ways in which poverty co-variables affect performances by African American children warrants intensive study.

It may be the case that the dialect used by the child from a low-income home is not the critical factor in this SES/dialect relationship that warrants explanation. Whereas AAE is an established rule-governed dialect, its marked occurrence in the discourse of children with few opportunities to be exposed to others outside their own linguistic community may represent the *standard* for analysis and understanding of AAE. Accordingly, the limited use of AAE as it appears in the dialect of middle-class children may be the variation that requires explanation. Middle-income families by definition have the potential for more tangible resources and this would involve exposure to the mainstream culture and its linguistic forms. It will be important in future research to explore the development of code-switching behaviors in order to improve our understanding of the language of middle-class African American children. Perhaps in addition to examining reasons why low-income children do not code-switch (Baratz, 1969, 1970; Debose, 1992) we need to determine how and when the middle-class children do.

The finding of increased amounts of dialect in the discourse of children from low-income homes appeared unrelated to longer sentence lengths. Sentence length in this investigation was calculated for numbers of words per C-unit, a very gross measure. Perhaps sentences with multiple clauses or advanced verb forms involving multiple auxiliaries would increase the opportunity for AAE, whereas sentences increased in length for other reasons (e.g., multiple phrases) would not create opportunities for increased AAE. Future research using more qualitative analyses, for example a subordination index (Loban, 1976), or an examination of verb phrase elaborations, might allow more systematic examination of the role of opportunity in dialect marking.

Two of the children in this investigation did not use AAE forms in their first 50 C-units, although AAE forms were apparent in the remainder of their samples. Despite the potential for sampling error such as that represented by these 2 subjects, the use of a consistent segmentation base across subjects is desirable and was retained in this investigation. The first 50 C-units were obtained readily for all subjects, and served to standardize the numbers of subject productions available for analysis purposes, increasing the comparability of analyses used. It was also notable that these 2 subjects

represented only 3% of the samples overall. Ninety-seven percent of subjects produced AAE forms during the 50 C-unit segment. For these children it appears that there was no difference between the first 50 C-units and the remainder of the 15–20 minute language sample, based upon a direct comparison of 20% of the subjects. These results underscore the reliability of the 50 C-unit corpus for examining dialect in this population.

The gender differences found in this study are consistent with those reported in the prior adult literature. Cross-culturally, the discourse of males is more non-standard than that of females (Chambers, 1995; Nichols, 1983), and Wolfram (1969) found that this was also the case for African American men and women living in Detroit, coincidentally the locale for our current study of children. This gender-based variability has been hypothesized to relate to the greater mobility of women in urban work settings and consequently their greater breadth of social and geographical contacts compared to men (Chambers, 1995). It is notable that the sociolinguistic literature proposes that both men and individuals in lower income communities have more restricted environments. Females and middle class individuals have greater mobility and consequently more exposure to mainstream culture. The data from this investigation are consistent with the basis for their proposals. Our LSES and male subjects used more non-standard forms suggestive of fewer external linguistic influences. The young ages of our child subjects, however, challenge any mobility-based proposal.

What is surprising in the present investigation is that the gender distinction is apparent at such young ages. The subjects in this study were only 5 and 6 years old. Cross-culturally, this confirms Romaine's (1978) earlier proposals derived from the study of British English that gender-based asymmetries in dialect use would be apparent in young children as well as adults. Wolfram (1986) has suggested that more positive values of masculinity are associated with more frequent use of nonstandard forms. Thus, socialization practices may be the source of these gender differences, a complex set of variables requiring future research.

Interestingly, only tokens differed by SES and gender. The number of different types of AAE used by the children did not. Types may index children's dialectal competence, and, consequently, the size of children's dialect repertoire may be determined by their developmental status. Alternatively, the frequency of usage of the forms (tokens) may be governed more by performance constraints and external influences.

So little is known about children's use of AAE that, as cautioned by others (Adler & Birdsong, 1983; Stockman, 1986; Terrell & Terrell, 1993; Vaughn-Cooke, 1986), clinicians must exercise extreme care when assessing

the language of African American children. Nonstandard forms in a child's speech may be evidence of dialect rather than disorder. The findings of the present study indicate that LSES children or males are at particular risk for misdiagnosis if the presence of nonstandard forms is a determining factor during the assessment process. Whereas no culturally valid testing instruments are available at this time, this is not a trivial issue. In the absence of developmental information about AAE and appropriate language tests, clinicians must rely on assessment strategies that are relatively independent of the effects of dialect. Craig and Washington (1994) have suggested that the amount of complex syntax in a child's conversation is an example of this type of approach. Other examples are Stockman's (1996) Minimal Competency Core, a criterion-referenced assessment approach, and a processing-dependent approach to language assessment as described recently by Campbell, Dollaghan, Needleman, and Janosky (1997).

Future research addressing the linguistic status of African American children will need to consider SES and gender in systematic ways. The present findings indicate that research designs should control for the influences of these variables, and provide gender and SES comparisons in results as appropriate. Controls on SES and gender and more information about the ways these variables influence the language production of African American children should maximize the potential generalizability of new findings across the whole population of African American children.

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References

- Abrahams, R.** (1973). The advantages of Black English. In J. DeStefano (Ed.), *Language, society, and education: A profile of Black English* (pp. 97-106). Worthington, OH: Charles A. Jones Publishing Company.
- Adler, S., & Birdsong, S.** (1983). Reliability and validity of standardized testing tools used with poor children. *Topics in Language Disorders*, 3, 76-88.
- American National Standards Institute.** (1978). *Methods for manual pure-tone audiometry* (ANSI S.3.21-1978). New York: ANSI.
- Ball, A.** (1994). Language, learning, and linguistic competence of African American children: Torrey revisited. *Linguistics and Education*, 7, 23-46.
- Baratz, J. C.** (1969). A bi-dialectal task for determining language proficiency in economically disadvantaged children. *Child Development*, 40(3), 889-901.
- Baratz, J. C.** (1970). Educational considerations for teaching standard English to Negro children. In R. W. Fasold & R. W. Shuy (Eds.), *Teaching Standard English in the inner-city* (pp. 20-40). Washington, DC: Center for Applied Linguistics.
- Battle, D. E.** (1993). Introduction. In D. E. Battle (Ed.) *Communication disorders in multicultural populations* (pp. xv-xxiv). Boston: Andover Medical Publishers.
- Brooks-Gunn, J., Klebanov, P., & Duncan, G.** (1996). Ethnic differences in children's intelligence test scores: Role of economic deprivation, home environment, and maternal characteristics. *Child Development*, 67(2), 396-406.
- Brown, R.** (1973). *A first language*. Cambridge, MA: Harvard University Press.
- Campbell, T., Dollaghan, C., Needleman, H., & Janosky, J.** (1997). Reducing bias in language assessment: Processing-dependent measures. *Journal of Speech, Language, and Hearing Research*, 40, 519-525.
- Chambers, J. K.** (1995). Sociolinguistic theory: Linguistic variation and its social significance. Blackwell Publishing.
- Cole, L.** (1980). *Developmental analysis of social dialect features in the spontaneous language of preschool Black children*. Unpublished doctoral dissertation, Northwestern University, Evanston.
- The Council for Exceptional Children.** (1994). *Statistical profile of Special Education in the United States*. Reston, VA: Author.
- Craig, H., & Evans, J.** (1991). Gender and children's turn-taking. *Journal of Speech and Hearing Research*, 34, 866-878.
- Craig, H., & Washington, J. A.** (1994). The complex syntax skills of poor, urban, African-American preschoolers at school entry. *Language, Speech, and Hearing Services in Schools*, 25, 181-190.
- Debose, C. E.** (1992). Codeswitching: Black English and Standard English in the African American linguistic repertoire. *Journal of Multilingual and Multicultural Development*, 13, 157-167.
- Dillard, J.** (1972). *Black English*. New York: Random House.
- Ely, R., Berko-Gleason, J., & McCabe, A.** (1996). Why didn't you talk to your mommy honey?: Gender differences in talk about past talk. *Research on Language in Social Interaction*, 29, 7-25.
- Ely, R., & McCabe, A.** (1994). The language play of kindergarten children. *First Language*, 14, 19-35.
- Fasold, R., & Wolfram, W.** (1970). Some linguistic features of Negro dialect. In R. Fasold & R. Shuy (Eds.), *Teaching Standard English in the inner-city* (pp. 41-86). Washington, DC: Center for Applied Linguistics.
- Hawley, T. L., Halle, T. G., Drasin, R. E., & Thomas, N. G.** (1995). Children of addicted mothers: Effects of the "crack epidemic" on the caregiving environment and the development of preschoolers. *American Journal of Orthopsychiatry*, 65, 364-379.

- Hunt, K. W.** (1970). Syntactic maturity in schoolchildren and adults. *Monographs of the Society for Research in Child Development*, 35 (1, Serial no. 134).
- Huttenlocher, J., Haight, W., Bryk, A., Seltzer, M., & Lyons, T.** (1991). Early vocabulary growth: Relation to language input and gender. *Developmental Psychology*, 27, 236–248.
- Koenigsknecht, R., & Friedman, P.** (1976). Syntax development in boys and girls. *Child Development*, 47, 1109–1115.
- Labov, W.** (1970). *The study of nonstandard English*. Champaign, IL: National Council of Teachers of English.
- Labov, W.** (1972). *Sociolinguistic patterns*. Philadelphia: University of Pennsylvania Press.
- Labov, W.** (1990). The intersection of sex and social class in the course of linguistic change. *Language Variation and Change*, 3, 205–254.
- Loban, W.** (1976). *Language development: Kindergarten through grade twelve*. Urbana, IL: National Council of Teachers of English.
- Macaulay, R.** (1978). The myth of female superiority in language. *Journal of Child Language*, 5, 353–363.
- MacWhinney, B.** (1994). *The CHILDES project: Tools for analyzing talk* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- McCarthy, D.** (1930). *The language development of the preschool child*. Institute of Child Welfare Monograph (Series No. 4). Minneapolis: University of Minnesota Press.
- Miller, J. F., & Chapman, R. S.** (1981). The relation between age and mean length of utterance in morphemes. *Journal of Speech and Hearing Research*, 24, 154–161.
- Morisset, C. E., Barnard, K. E., & Booth, C. L.** (1995). Toddlers' language development: Sex differences within social risk. *Developmental Psychology*, 31(5), 851–865.
- Nichols, P. C.** (1983). Linguistic options and choices for Black women in the rural South. In B. Thorne, C. Kramarae, & N. Henley (Eds.), *Language, gender and society* (pp. 54–68). Rowley, MS: Newbury House.
- Ratusnik, D. L., & Koenigsknecht, R. A.** (1976). Influence of age on Black preschoolers' nonstandard performance of certain phonological and grammatical forms. *Perceptual and Motor Skills*, 42, 199–206.
- Romaine, S.** (1978). Postvocalic /r/ in Scottish English: Sound change in progress? In P. Trudgill (Ed.), *Sociolinguistic patterns in British English* (pp. 144–156). London: Edward Arnold.
- Sheldon, A., & Rohleder, L.** (1996). Sharing the same word, telling different stories: Gender differences in co-constructed pretend narratives. In D. I. Slobin, J. Gerhardt, A. Kyratzis, & J. Guo (Eds.), *Social interaction, social context, and language* (pp. 613–632). Mahwah, NJ: Lawrence Erlbaum Associates.
- Smitherman-Donaldson, G.** (1977). *Talkin and testifyin: The language of Black America*. Boston: Houghton Mifflin.
- Stockman, I. J.** (1986). Language acquisition in culturally diverse populations: The Black child as a case study. In O. L. Taylor (Ed.), *Nature of communication disorders in culturally and linguistically diverse populations* (pp. 117–155). San Diego, CA: College-Hill Press.
- Stockman, I. J.** (1996). The promises and pitfalls of language sample analysis as an assessment tool for linguistic minority children. *Language, Speech, and Hearing Services in Schools*, 27(4), 355–366.
- Templin, M.** (1957). *Certain language skills in children*. (Institute of Child Welfare Monograph Series, No. 26). Minneapolis, MN: University of Minnesota Press.
- Terrell, S. L., & Terrell, F.** (1993). African American cultures. In D. E. Battle (Ed.), *Communication disorders in multicultural populations* (pp. 3–37). Boston: Andover Medical Publishers.
- U.S. Department of Commerce, Bureau of the Census.** (1990). *Statistical abstract of the United States* (110th ed.). Washington, DC: Author.
- van Baar, A., & de Graaf, B. M. T.** (1994). Cognitive development at preschool age of infants of drug dependent mothers. *Developmental Medicine and Child Neurology*, 36(12), 1063–1075.
- Vaughn-Cooke, F. B.** (1986). The challenge of assessing the language of nonmainstream speakers. In O. L. Taylor (Ed.), *Treatment of communication disorders in culturally and linguistically diverse populations* (pp. 23–48). Boston: College-Hill Press.
- Washington, J. A.** (1996). Issues in assessing the language abilities of African American children. In A. Kamhi, K. Pollock, & J. Harris (Eds.), *Communication development and disorders in African American children* (pp. 35–54). Baltimore, MD: Paul H. Brookes Publishing Co.
- Washington, J. A., & Craig, H.** (1994). Dialectal forms during discourse of poor, urban, African American preschoolers. *Journal of Speech and Hearing Research*, 37, 816–823.
- Winitz, H.** (1959). Language skills of male and female kindergarten children. *Journal of Speech and Hearing Research*, 2, 377–386.
- Wolfram, W. A.** (1969). *A sociolinguistic description of Detroit Negro speech*. Washington, DC: Center for Applied Linguistics.
- Wolfram, W., & Fasold, R.** (1974). *The study of social dialects in American English*. Englewood Cliffs, NJ: Prentice-Hall.
- Wolfram, W.** (1986). Nature of communication disorders in culturally and linguistically diverse populations. In O. L. Taylor (Ed.), *Language variation in the United States* (pp. 73–115). San Diego, CA: College-Hill Press.
- Wyatt, T. A.** (1996). Acquisition of the African American English copula. In A. G. Kamhi, K. E. Pollock, & J. L. Harris (Eds.) *Communication development and disorders in African American children: Research, assessment, and intervention* (pp. 73–94). Baltimore, MD: Brookes Publishing.

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Appendix. The morphological and syntactic AAE forms scored for each subject (adapted from Washington & Craig, 1994).

Definition	Examples
Zero Copula or auxiliary "is," "are," and modal auxiliaries "will," "can," and "do" are variably included	"he goin(g) up" "how you get this on?"
Subject-verb agreement A subject or verb may differ in either number or person	"I don't got this at home so I don't know where it go" "guess where this box go?"
Fitna/sposeta/bouta Abbreviated forms of "fixing to," "supposed to," "about to," used to code imminent action (Examples of utterances that were not scored for this form were: "they <i>fixin</i> it," "what are we <i>supposed to</i> do to that," "what <i>about</i> they lunch?")	"I'm (a)bouta make him fall." "I'm (a)bouta make them sit down." "(be)cause they fitna go to a field trip"
Ain't "ain't" is used as a negative auxiliary	"no it ain't no more" "she ain't got no dress shoes"
Undifferentiated pronoun case Nominative, objective, and demonstrative cases of pronouns occur interchangeably	"all of his for he?" "my favorite toys is them jeep truck that you can get in." "and her got a camera"
Multiple Negation Two or more negative markers occur in one utterance	"but these aren't gonna come in no more" "because I don't have no other shoe"
Zero possessive Possession is coded by word order, so that the possessive "-s" marker is deleted, or the nominative or objective case of pronouns is used rather than the possessive	"because they getting they lunch" "it's they boss" "that's a fireman hat"
Zero past tense "-ed" is not always used to denote regular past constructions, or the present tense form is used in place of the irregular past form	"my mom spend my first five dollar bill" ADU: "the elevator fell" CHI: "yeah (be)cause he step on it"
Zero "-ing" Present progressive morpheme "-ing" is deleted	"they was blow up cars" "I'm talk"
Invariant "be" Infinitival "be" is used with a variety of subjects to code habitual action ("it's gonna be far away" was an example when habitual "be" was not scored); or to state a rule	"when they little they be talkin(g)" "sometimes all of the other kids be doin(g) bad things" "the wedding be close"
Zero "to" Infinitive marker "to" is deleted	"he try dump his face in it" "and I think it's gettin(g) ready snow"
Zero plural Plural marker "-s" is variably included	"we have drinks and hamburger" "because they are the fastest one in the world"
Double modal Two modal forms are used for a single verb form	"an(d) magic boy he was lying that Ryan still was did it" "she might can wear these"
Regularized reflexive Reflexive pronouns "himself" and "themselves" are expressed using "hissel" and "theyself"	"nope he just pee on hissell" "you think by touchin(g) it you're gonna hurt themself?"
Indefinite Article "a" occurs regardless of vowel context	"a elevator" "well I got a ax"
Appositive pronoun Both a pronoun and a noun reference the same person or object	"my Donatello his head turns" "the blue turtle he ain't here"