Including race as a factor in speech and language research and practice

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Abstract

Background: In the United States child speech and language disorders are identified when talkers fail to meet expected developmental communication milestones or when the child's speech or language productions varies from expected norms. However, the primary data used to establish the milestones and norms was collected from standard American English (SAE) speakers, the language form used primarily, though not exclusively by middle class white Americans of historic European descent. The population of the United States is diverse and includes as one of the largest minority groups, Black Americans of historical African descent. Black Americans have lived in the United States since its founding however the study of African American English (AAE), the language form used by most, but not all Black Americans has only been rigorously evaluated as a legitimate communication form since the mid-1960's. Importantly, since at least 1964 it has been observed that white American speakers of non-standard American English dialects acquire the standard form as part of their formal education process (Labov, 1964). In contrast, the use of African American English has been identified as an impediment to academic success (e.g., Spears, 1978). While it is accepted that white students may acquire SAE during the educational process Black students that use AAE may be identified as speech and language disordered.

Aims: The primary objective of this paper is to describe how racialized assessments of speech and language in research and practice continue to perpetuate deficit theories of linguistic and cultural competence for Black children who use AAE. Methods: This work is a brief overview of the extant research on child AAE speech and language acquisition and its implications for research and practice of typical development and speech sound disorders in the United States.

Main Contribution. The main outcome of the paper is to show how racialized analyses of speech and language disadvantage minoritized language users and can result in either over or under-referral for speech services. Similar racialized or structurally deficit approaches to analyses of speech and language for minoritized language users in other countries may result in those language users also being viewed as deficient.

Conclusions. The primary conclusion of this work is to advocate for the inclusion of minoritized language users in the establishment of developmental communication milestones and expected norms.

Keywords: minority language, AAE, United States, Black Americans, non-mainstream

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Children learn speech from environmental input. Initial speech input is received from parents and family. When children enter the educational system speech input is received from peers and educational professionals. Importantly, typically developing children enter the educational system with a fully functional communication system. This is true even if the child's communication system varies substantially from the standardized communication system used in the formal educational process. Therefore, the speech and language professional must be cautious when identifying a communication disorder in a child whose communication system varies from the standardized system. African American English (AAE) is a mutually intelligible dialect of American English that shares many similarities with Southern American English (SoAE). The two dialects developed simultaneously in the United States, between 1776 and 1865 primarily in the southern slave holding regions of the country where the largest populations of enslaved people from the African continent interacted with their white slaveholders and other immigrants from Europe who also used English. AAE and SoAE continued to develop as putatively separate dialects into the modern era. Additionally, as AAE speakers moved from the former slave holding southern states following the country's Civil War (1861-1865) to large urban centers in the north and west so did well described features of the AAE. By 1910 the first wave of the Great Migration of Black Americans from the southern United States to better economic opportunities in the north and far west had begun. The largest numbers of Black Americans that moved northeast relocated to cities such as Baltimore, Maryland; Washington DC; Albany, Buffalo and New York city in the state of New York. Those that moved to the mid-west and west relocated to cities such as Chicago, Illinois; Detroit, Michigan; Minneapolis, Minnesota; and Oakland and Los Angeles, California. The second wave of the Great Migration

ending in 1970 saw an increase in Black American population from 10.6% to 54.2% in the

northeast city of Newark, New Jersey. As the population of southern Black Americans moved

across the United States, they took their language forms with them. However rather than

resulting in a dilution of the AAE English forms as Black Americans integrated into new

communities legalized segregation policies enacted by cities and states where Black Americans

relocated resulted in the creation of hyper-segregated communities of Black Americans. This

segregation continues to the modern day. According to United States Census data from 2000 and

2010 most white Americans live in residential communities that are majority white and the

majority of Black Americans live in residential communities that are majority non-white. As it is

well established that children acquire the language of their local community, it should be

unsurprising that Black children continue to use AAE as their first dialect. Concomitant to the

establishment of the hyper-segregated Black American communities was the establishment of the

profession of speech language pathology in the United States. In the mid-1940's through the

mid-1950's as the US economy transitioned from one of agriculture and manufacturing to an

information and communication-based economy, the economic development and business

interests were interested in defining a standardized form of communication based on the speech

of middle-class white Americans. Any speech that varied from the middle-class white American

form was considered deficient and the most deficient form was AAE, described as infantile

(Krapp, 1924;1925), uneducated, and unprofessional (Green, 2002; Labov, 1968). Baker-Bell

(2020) describes three current educational approaches to the presence of AAE in the classroom

paraphrased and expanded on in this text. The first approach is to eradicate the form. Here AAE

is viewed as linguistically, morally and intellectually inferior. As such the form should be

eradicated from the child's linguistic repertoire and replaced with the standardized form of

English. The second approach is to respect and tolerate the form and acknowledge both its existence and its right to exist. However, the end goal of this approach is to use AAE as a bridge to learn the standardized form, requiring the child who uses AAE to surrender to the majority and use standard English forms to communicate in the educational setting. The third approach is to critically evaluate the reasons that the first and second approaches seek to diminish and devalue the child's language form while elevating and allowing the child to use and fully develop the AAE language system (which is mutually intelligible with the standard form) for all communication purposes in the educational setting. Importantly, to contextualize this work it must be noted that in addition to AAE other non-Mainstream American English (NMAE) forms, including those used by white Americans have been classified as deficient. However as described by Labov (1964) children who usen NMAE forms do acquire and use those forms in 80% of communication opportunities by the end of high school. So, between the ages of 8 and 18. The forms emerge and are used during the child's educational tenure. Importantly in this 1964 study, the acquisition of SAE forms by NMAE speakers is framed because of their participation in the educational process. The use of NMAE forms was not defined as pathological. That is in the United States there has not been a wholesale movement to define the use of non-standardized English forms by white Americans as evidence of speech and language disorder. The same acceptance of variation has not been afforded to Black Americans who use AAE.

Materials and methods in African American English

It is well established that African American English is a well-researched and mutually intelligible variety of American English used primarily by many but not all Black Americans of historical African descent. A number of recent texts provide extensive descriptions of the variety used by children and adults in the United States (e.g., Green, 2010; Kohn et al., 2020; Lanehart,

2015, 2022; Pearson et al., 2009; Wolfram, 2019). AAE varies from standardized American English (SAE) in all five linguistic domains, pragmatics, syntax, semantics, morphology, and phonology. This text is concerned primarily with differences in speech sound production. The following paragraphs will provide comparative examples of AAE and SAE to orient the reader to the amount and type of expected variation between the forms. This will be followed by a longer description of variation in phonological and morphophonological productions. Pragmatics has been defined as the use of language for social communication (Nelson, 2010). Ideally the communication partners participate in speech acts that serve a common cultural practice including complements, criticism and neutral statements. Accurate parsing of social communication requires social cognition or the recognition of communicative intent, and perspective (Epley & Caruso, 2009). AAE speaking children just entering the mainstream educational classroom may choose to respond to the classroom teacher by speaking out and directly answering questions and prompts illustrative of the call and response back and forth patterns of communication often used in AAE environments to signal agreement and affirmation with statements made by the speaker. For example, a teacher asking the rhetorical question "Are you ready for recess?" to a seated group of children may hear the AAE speaking child shout back "I sure am." This response may be considered an inappropriate outburst in SAE yet would be considered an appropriate response in AAE. Syntax or word order to convey specific meaning may vary substantially between AAE and SAE from the use of inverted question forms in AAE "What time it is?" compared to the SAE question form "What time is it?". AAE allows for the use of negative concord, the use of two or more negative elements that co-occur but contribute only one semantic negation "Didn't nobody find out nothing 'til yesterday" or "Couldn't nobody catch me". SAE syntax requires the use of a single negative "Nobody found out anything until

yesterday" or "Nobody could catch me". It must be noted here as stated previously that many

non-standard dialects of English, including non-mainstream American English speakers use

these forms (Robinson &Thoms, 2021). These speakers and their speech however are not

routinely identified as communication impaired. More frequent in AAE is the use of aspectual be

"Dogs be barking" indicating dogs always bark, completive done "They done left" meaning they

left a long time ago, the resultant state of the verb left (Green, 2010) are further examples of

variation in AAE. Semantic, word meaning changes as illustrated in the previous paragraph on

syntax provide insight into the complex linguistic nature of AAE. Additional semantic variation

includes the use of been and steady as complementizers used in the same form as modals and

aspectual markers in other dialects of English (Labov, 2021). Morphological variation or the rule

governed sound to meaning changes that vary in AAE include non-obligatory use of plural and

possessive /s/ as in "I hear a bunch of dogØ barking" or "Is that BettyØ coat?". Additional

morphological/morphophonemic variations between AAE and SAE will be shared in the

paragraph on phonological variation in AAE that follows. The preceding paragraphs have

provided a general overview of the systematic and rule governed nature of AAE. The examples

provided show competent AAE productions for typically developing child and adult speakers of

the language form. This paragraph illustrates the variation in speech sound acquisition of AAE

children including variations that may occur in syllable shapes that can affect word shape and

lead to the presence of homophones in AAE where they don't exist in SAE.AAE and SAE share

the same consonants and vowels however the allophonic distribution of those sounds is different

both between AAE and SAE in general and in different geographic regions between local AAE

and local white American English (WAE) varieties.

Table 1 a modified version of data from Velleman & Pearson (2010) illustrating the expected age of mastery (90% correct) for initial consonants for AAE and SAE.

Consonant sound	Expected age of acquisition		Difference	Expected age of acquisition		Difference
	Typically developing			Speech sound disorder/delay		
	AAE	SAE		AAE	SAE	
/p,b,d,w,m,n,h/	4	4	no	4	4	
/t/	4	4	no	5	4	AAE later
/k, ʃ, g/	4	4	no	8	6	AAE later
/f, j/	4	4	no	6	8	
/ tʃ, dʒ/	4	4	no	**8**	10	**AAE earlier**
/l/	4	4	no	8	8	
/s/	**4**	6	**AAE earlier**	**6**	8	**AAE earlier**
/v/	5	5	no	8	10	**AAE earlier**
/z/	5	5	no	10	10	
/θ/	6	6	no	10	10	
/ɹ/	**4**	6	**AAE earlier**	12	>12	**AAE earlier**
/ð/	>12	8	AAE later	>12	10	AAE later

Of note AAE children, both typically developing and those with SSD acquired most sounds at the same age or earlier than SAE peers. Only voiceless th- sound was acquired later by typically developing AAE child speakers while /t, k, ʃ, g / and voiceless th- were acquired later by AAE speakers with SSD. These results suggest that AAE child speakers may have linguistic advantage in early speech sound acquisition of singleton consonants. Therefore, it would be expected that AAE children would perform as well as or better than SAE peer on standardized assessments of single word articulation.

Table 2 provides a modified version of data from Velleman & Pearson (2010) illustrating the expected age of mastery (90% correct) for initial consonant clusters for AAE and SAE speaking children.

Consonant sound	Expected age of acquisition		Difference	Expected age of acquisition		Difference
	Typically developing			Speech sound disorder/delay		
	AAE	SAE		AAE	SAE	
/br-, dr-/	4	4	no	10	>12	**AAE earlier**
/tr/	5	4	AAE later	10	>12	**AAE earlier**
/kl-/	4	5	**AAE earlier**	8	10	**AAE earlier**
/pl-/	4	5	**AAE earlier**	10	10	no
/gl-/	5	5	no	**10**	12	**AAE earlier**
/kr-/	4	6	**AAE earlier**	10	>12	**AAE earlier**
/sm-/	5	6	**AAE earlier**	**10**	10	**AAE earlier**
/gr-, pr-/	5	6	**AAE earlier**	10	>12	**AAE earlier**
/sp-/	5	6	**AAE earlier**	>12	12	AAE later
/st-/	5	6	**AAE earlier**	12	10	AAE later
/fr-/	6	6	no	10	>12	**AAE earlier**
/sk-/	6	6	no	12	>12	**AAE earlier**
/skr-/	6	8	**AAE earlier**	>12	>12	no
/thr-/	10	8	AAE later	10	>12	**AAE earlier**
/shr-/	12	8	AAE later	>12	>12	no
/str-/	>12	8	AAE later	>12	>12	no

Again, the AAE speaking children both typically developing and those with SSD acquired most sounds at the same time or earlier than the SAE peers. Only /tr-/ and the three element consonant clusters were acquired later by the typical AAE speaking children. For AAE speakers with SSD only /sp-/ and /st-/ were acquired later than SAE speaking peers. The data presented by Pearson et al., (2009) for young typically developing AAE and SAE speaking children acquiring English and participating in the public educational system suggests the practicing speech and hearing professional should expect the typically AAE speaking child to

perform as well as or better than the SAE peer. Further these data suggest that the AAE speaking child with SSD is likely to respond positively to intervention and to acquire sounds including most two element initial consonant clusters well ahead of SAE speaking peers. Syllable and word shape for AAE speaking children compared to SAE speaking peers can be quite different, however. Syllable shape at the single word level and in connected speech can be described in terms of the syllable structure and its hierarchical components of onset and rime. So that a single syllable word with both a complex onset and a complex coda such as plant requires the speaker to produce more articulatory movements than a word with a complex onset and a simple coda such as plan. AAE however does not require the use of complex codas either phonologically as in the example provided here or morpho phonologically as in the word planned. Because AAE allows for final consonant cluster reduction all three words plant, plan and planned can be produced as [plæn]. It must be noted however that the phonetic realization of the three forms is likely to be contrastive within AAE even if the phonological realization is not interpreted as such by a listener unfamiliar with AAE. When final consonant cluster reduction occurs in the production of both *plant* and *planned* the phonetic realization is more likely to be either an unreleased final voiceless stop [plænt̚] /[plænd̚] or a glottal release for both [plænʔ]. The phonetic difference between the two would be increased vowel duration preceding the nasal and voiced elements in *planned* compared to the vowel duration preceding the nasal and the vowel in *plant* (e.g., Farrington, 2018). Other aspects of phonological differences affecting syllable shape in AAE not present in SAE include devoicing of final obstruents (*bag* and *back* become homophones); vocalization of post-vocalic approximants [l/r] (*ball* becomes [ba͡ʊ] and *bar* becomes [bɑ] and in clusters (*throw* becomes [θo]); stopping of interdental fricatives *these, that, those* become [diz, dæt, doz] note the retention of final consonant in the productions is expected;

and the deletion of weak syllables in initial or medial position (*employment* becomes [_plɔ͡ɪmɪnt],

colonizer becomes [kɔl_na͡ɪzɚ] (e.g., Green, 2002, 2010; Velleman & Pearson 2010).

Results

The variation between AAE and SAE described above illustrates both systematic

difference between the two language forms and a coherent pattern to explain why listeners

unfamiliar with the language form African American English might have difficulty parsing AAE

speech. Importantly the body of research on AAE provide a coherent method for either

contrastive analyses of AAE and SAE or an independent analyses of AAE that the practicing

speech language professional can use to identify the presence of SSD in children who use AAE

as their primary language form. Active use of the provided evidence is likely to result in positive

outcomes for both the appropriate identification of disorder for children who use AAE and a

recognition of the systematic rules of the form for speech language professionals engaged with

members of the AAE speaking community. The failure to use such evidence is likely to result in

both over referral for AAE speakers who encounter professionals unwilling to use the available

evidence and under referral for AAE speakers who encounter professionals who contribute every

speech sound error to the use of AAE dialect; yet another refusal to use the available evidence. A

refusal to use the available evidence to provide service to a community can be viewed as a

racialized approach to service provision, meaning the speech language professional associates

the race of the person being served with the use of a deficit language form that can't be

deciphered and is therefore deficit. The continued use of a racialized approach to the provision of

speech language services is a disservice both to the community of AAE speakers and to the

profession itself signifying an unwillingness of the individual to learn and grow their knowledge.

The individual behavior once accepted and allowed to continue in the profession can result in

systems of racialized behavior towards the dialect users that prevent them from receiving appropriate diagnosis and treatment.

Conclusion and Discussion

The expectation for the acquisition of a standard or adult form of African American English has only just been described in the literature (Kohn et al., 2020). The work of Kohn et al., (2020) is a longitudinal descriptive analysis of the language development of one cohort of African American speakers taken from childhood in the early 1990's to the current day. This study is the single model of competent acquisition of AAE. While admirable for the breadth and depth of the work it is a single body of work representative of a single community in central North Carolina. The study of AAE began in the late 19th century (e.g., Baker-Bell, 2020) however only recently have discussion of the language form moved from attempts to eradicate AAE through a willingness to tolerate AAE to finally a burgeoning desire to elevate AAE and recognize the language form for what it is. A functional form of communication for millions of Black Americans of historical African descent. The racialized analysis of AAE is a direct result of the policies and practices of the United States that began with the inception of chattel slavery and the sale of people from the continent of Africa. Those individuals arrived in the United States with the languages of their homelands and over multiple generations of captivity, social, economic and racial segregation developed a culture and a language in parallel with that of their white American peers. Following emancipation in 1865 and the first and second waves of the Great Migration of Black Americans out of the southern United States by 1970 the well-established and fully developed language form African American English traveled across the United States and continued to grow as all languages via internal constraints and through language contact with regional white American English..

In concert with a standard form of AAE, children educated in the United States public educational system have the capacity to acquire many aspects of the standard language form. As illustrated by Labov (1964) children who use non-mainstream forms of American English, to include the poor and the working class acquire many aspects of the standard language forms as part of the educational process. As illustrated by Velleman and Pearson (2010) there is no reason to expect that a child speaker of AAE does not have the capacity to acquire and use the sounds and syllables of the standard language form in a manner consistent with SAE peers. Further a blueprint exists to characterize observed variations between typical AAE and typical SAE speech; however, a problem persists. Although word lists and well-designed research studies of AAE exist, currently there is not model of AAE language development that a practicing speech and language professional can use to identify the presence or absence of speech sound disorder for child speakers or AAE. That is there is no text that outlines all aspects of speech sound development from single word acquisition to the acquisition and distribution of morphophonemic and morpho phonological development from the onset of babbling through age twelve, when adult forms have emerged. The data to initiate such a texts exists however to date one has not been published. Without such a guiding document the systematic misidentification of speech sound disorder in AAE speakers remains a concern. It will require the collaborative efforts of speech and language professionals interested in linguistic justice for AAE speakers and those that use other dialects of non-mainstream American English to meet this need.

Speech and language professionals practicing in other countries with substantial communities whose home language varies from the language of education and commerce can also work collaboratively to enact linguistic justice. The act of recognizing the right of existence for a language form and working to learn the systemic variation of that form from the

standardized versions used in education and commerce is a first step in elevating both the

language and the people who use it to full membership in the local society. A language contains

the culture of a people. Eradicating one also eradicates the other. The migration of people across

the globe both voluntary and involuntary has always been the plight of human existence. As

speech and language professionals we have an opportunity to elevate humanity by recognizing

that language variation is typical, nothing more, nothing less.

It is incumbent upon the governing and licensing bodies of speech and language

professionals across the globe to prioritize the training of and continuing education using the

most current data on the definition of speech sound disorder. In the United States the American

Speech-Language-Hearing Association characterizes speech sound disorder as a general term

that is used when an individual has difficulty with the perception, motor production or linguistic

organization of speech sounds and segments in a language (ASHA Practice Portal 1997-2022).

Speech sound disorders are further categorized as functional articulation (motor learning) or

phonological (linguistic learning) deficits in speech sound production with no known cause; and

developmental or acquired organic speech sound disorders. The cause of organic SSD can be

motor/neurological such as dysarthria or apraxia; structural congenital (e.g., cleft lip/palate,

orofacial anomalies) or acquired (e.g., traumatic accident or surgery to the speech production

mechanism); sensory/perceptual (e.g., hearing impairment). As speech and hearing professionals

our goal must be the accurate identification and diagnosis of functional SSD in children

regardless of their linguistic background.

In the United States as well as in other countries there is a constant in migration of people

from other countries. Few children who are involuntary immigrants to the United States speak

English. Children who arrive to a country as involuntary immigrants may have psycho-social and

emotional needs as they enter the educational system. Identifying the presence of a speech sound disorder may be challenging when the child is acquiring a language the professional doesn't know. In such instances the speech and language professionals can employ professionals and lay persons to assist in developing protocols and operational systems to ensure the child who will be learning the new language is provided with the appropriate level and type of support to complete their educational program successfully.

To begin with the speech and language professional may need to engage with a linguistics professional to determine the grammar of the home language. Cross cultural collaborations including engaging with the speech and language professionals in other countries is an uncomplicated way to learn the rules of a language you don't know. Working collaboratively the speech and language professionals can also gather data from members of the local community on expected speech and language milestones for the children in a cross categorical manner. Gathering data from parents of children ages 1-3 and comparing that from data gathered from parents of children ages 4-6 and so forth. This information may need to be interpreted through a trauma informed therapeutic perspective if the children have arrived in the community due to extreme events in their countries of origin. Finally, the speech and language professional must recognize that communication disorders in general and speech sound disorders in particular are likely to be consistent regardless of the language of use. A child who has trouble with complex onsets will have difficulty regardless of the consonants involved. A child who uses phonological patterns such as stopping of fricatives will use stops instead of fricatives regardless of the language as the phonological pattern is both linguistic and motor. The child either approximates the articulators to produce a fricative or they don't. The patterns of speech sound production may be accented or may systematically vary but in typical development they will follow an expected

pattern of acquisition. As speech language professional engaging with child language learners who may use non-standard language forms we have the opportunity to provide services in a way that elevates the humanity of the language and its user in every encounter.

References

American Speech-Language-Hearing Association(1997-2020) https://www.asha.org/practice-

portal/

Baker-Bell, A. (2020). Linguistic justice: Black language, literacy, identity, and pedagogy.

Routledge. https://doi.org/10.4324/9781315147383

Epley, N., & Caruso, E. M. (2009). Perspective taking: Misstepping into others' shoes Handbook

of imagination and mental simulation (pp. 295-309). *New York, NY: Psychology*

Press, *10*(9781412958479), n397.

Farrington, C. (2018). Incomplete neutralization in African American English: The case of final

consonant voicing. *Language Variation and Change*, *30*(3), 361-383.

doi:10.1017/S0954394518000145

Green, L. (2002). A descriptive study of African American English: Research in linguistics and

education. *International journal of qualitative studies in education*, *15*(6), 673-690.

https://doi.org/10.1080/0951839022000014376

Green, L. J. (2010). Language and the African American child. Cambridge University Press. doi:

10.1017/CBO9780511975561

Katz, M. S. (1976). A History of Compulsory Education Laws. *Fastback Series, No. 75*.

Bicentennial Series.

Kendall, T., & Wolfram, W. (2009). Local and external language standards in African American

English. *Journal of English Linguistics*, *37*(4), 305-330.

https://doi.org/10.1177/0075424209339281

Kohn, M., Wolfram, W., Farrington, C., Renn, J., & Van Hofwegen, J. (2020). *African American Language: Language development from infancy to adulthood*. Cambridge University Press. https://doi.org/10.1017/9781108869607.009

Krapp, G. P. (1924). The English of the Negro. *American Mercury*, *2*(5), 190-195.

Krapp, G. P. (1925). *The English Language in America* (Vol. 1). Century Company, for the Modern language association of America.

Labov, W. (1964). Stages in the acquisition of standard English. *Social dialects and language learning*, 77-104.

Labov, W. (1968). A Study of the Non-Standard English of Negro and Puerto Rican Speakers in New York City. *Volume I: Phonological and Grammatical Analysis*.

Labov, W. (2021). Co-existent systems in African-American vernacular English. In S.S. Mufwene, J. R. Rickford, G. Bailey& J. Baugh (Eds.), *African-American English* (pp. 119-168). Routledge. https://doi.org/10.4324/9781003165330

Lanehart, S. (Ed.). (2015). *The Oxford Handbook of African American Language*. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199795390.001.0001

Lanehart, S. (2022). *Language in African American Communities*. Taylor & Francis. https://doi.org/10.4324/9781003204756

Lleras-Muney, A. (2002). Were compulsory attendance and child labor laws effective? An analysis from 1915 to 1939. *The Journal of Law and Economics*, *45*(2), 401-435. doi10.3386/w8563

Nelson, N. (2010). *Language and literacy disorders: Infancy through adolescence.* Allyn & Bacon.

Pearson, B. Z., Velleman, S. L., Bryant, T. J., & Charko, T. (2009). Phonological Milestones for African American English-Speaking Children Learning Mainstream American English as a Second Dialect. *Language, Speech, and Hearing Services in Schools*, 40(3), 229–244. https://doi.org/10.1044/0161-1461(2008/08-0064

Robinson, M., & Thoms, G. (2021). On the syntax of English variable negative concord. *University of Pennsylvania Working Papers in Linguistics*, *27*(1), 24. https://repository.upenn.edu/pwpl/vol27/iss1/24

Spears, A. K. (1978). Institutionalized racism and the education of Blacks. *Anthropology & Education Quarterly*, *9*(2), 127-136.

United States Census https://www.census.gov/dataviz/visualizations/020/

Velleman, S. L., & Pearson, B. Z. (2010). Differentiating speech sound disorders from phonological dialect differences: Implications for assessment and intervention. *Topics in Language Disorders*, 30(3), 176. doi: 10.1097/TLD.0b013e3181efc378

Wolfram, W. (2019). African-American English. *The handbook of world Englishes*, 314-330. doi:10.1002/9781119147282

Wolfram, W. A. (1969). A Sociolinguistic Description of Detroit Negro Speech. *Urban Language Series, No. 5.*