African-American English (AAE) is a distinct English dialect characterized by phonological and morpho-syntactic features including African-American children, who may or may not be speakers of AAE, are consistently over-represented in Special Education (US Department of Education, 2001).

Staun Cassassano (2008) showed that listeners process words differently depending on whether they are paired with African-American or European-American people’s faces. When paired with an AA person’s face, words like [mɑːt] are equally likely to be processed as mass or mass. They are only processed as mass when paired with an AA person’s face. Evans et al. (2009, this conference, link to poster via QR code above) showed a similar effect when people rated the accuracy of children’s productions of words paired with AA and EA faces. Words like [kʊl] were rated as more accurate productions of /kʊl/ when paired with AA faces than when paired with EA faces.

One problem with that experiment was that the use of accuracy judgments may have led listeners to invoke prescriptive views of AAE rather than actual knowledge of AAE. In this poster, we examine whether we can observe an effect of speakers’ imputed race once we ask listeners to identify the word that was produced rather than how accurately it was produced.

Research Questions

• Imputed race of child speakers affects listeners’ word-recognition responses?

• We predict that words with final /l/ will be more likely to be rated as examples of final /l/ words (i.e., [1̩l]), will be rated as [sɑk] when paired with AA faces than with EA faces because AAE speakers do not consistently produce a contrast between /l/ and /f/ in word-final position

• We predict that words with final stop will be

• Does knowledge of AAE features or explicit attitudes toward AAE mediate these effects?

Methods

Participants

• 20 adults with no history of speech, language, or hearing impairments.

Attitude Survey

• Listeners indicated their agreement to 25 statements using an equally appearing interval scale. Listeners answered 22 questions that tested knowledge of the features of AAE, focusing equally on morphosyntax and morphology.

AAE Knowledge Assessment

• Listeners answered 22 questions that tested knowledge of the features of AAE, focusing equally on morphosyntax and on phonology. These questions were taken from Hess (2010). Listeners were instructed to answer these questions in terms of what they had heard other African-American children say.

Listening Task

• All pairs were taken from a larger study on dialect variation (see Edwards, Gross, MacDonald, Brown, & Sedelmaier, 2010). Talkers were African-American children between 4 and 9 years old from the Madison, WI area. We selected 160 speech samples, 10 each of 16 different words from 4-coda clusters and 8-final words. Reductions or omissions are allowed in AAE for all but the stop + plural cluster. Final consonants are dropped in tokens for each word variant from completely present to completely reduced. Tokens were classified as “accurate” (i.e. fully produced codas) or “inaccurate” (i.e. reduced or omitted codas) by both skilled judgment (2) and the results of a task in which 20 naive listeners rated the words’ accuracy.

One token was paired with a picture of either a AA or EA child’s face. Listeners indicated their responses using a visual-analogy scale (Figures 1 and 2). Pairs of tokens with faces were counter-balanced across listeners.

Results

• Unlike in Evans et al., imputed race did not affect listeners’ responses. In Evans et al., imputed race affected accuracy judgments for stimuli with final /l/, final /f/ and final-stop + plural /l/. In contrast, word-recognition patterns in the current study were unaffected by race for the final /l/ and final /f/ words. A significant effect for final-stop + plural /l/ words was in the opposite—than-expected direction.

• No correlations were found between measures of knowledge of AAE or attitudes toward AAE and distinction patterns. In Evans et al., there were some significant correlations between accuracy ratings and both implicit and explicit attitudes.

• We conclude preliminarily that the effect of imputed race on the perception of children’s speech is most robust in tasks that use involve an evaluation of accuracy rather than a low-level percept of the word that the child is saying.

• Our finding is consistent with the research that would be found using different methods. The visual-analogy scaling task we used in this study might be inappropriate for a word-recognition task. An open-set response might be more appropriate.

References


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Figure 1. Accuracy ratings (left) and word-recognition judgments (right) for final /l/ words. Listeners in Evans et al. rated these as more accurate when paired with African American children’s faces (left), but listeners in this study did not identify the productions differently (right).

Figure 2. Accuracy ratings (left) and word-recognition judgments (right) for final-stop + plural /l/ words. Listeners in Evans et al. rated these as more accurate when paired with African American children’s faces but listeners in this study did not identify the productions differently (right).