Differentiating Speech Sound Disorders From Phonological Dialect Differences: Implications for Assessment and Intervention

Article Summary and Critique

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Velleman, Shelley L. & Pearson, Barbara Zurer
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Summary

North America has many people who learn non-standard dialects of English at home before they enter school. Speaking a non-standard dialect as a child has the potential for speech disorder misdiagnosis because, at times, phonological features of non-standard dialects may look similar, or the same, as key identifiers of speech sound delays/disorders in General American English (GAE). The article ‘Differentiating Speech Sound Disorders From Phonological Dialect Differences’ by Shelley Velleman and Barbara Pearson looks at how some key features of African American English (AAE) overlap with key identifiers of speech sound delays/disorders as well as determining whether the Diagnostic Evaluation of Language Variation (DELV) is a dialect neutral tool that accurately distinguishes between disorder and dialect difference. Lastly, this paper explores how speech sound delays or disorders are different in those who are learning GAE as a second dialect.

Some key features of AAE include devoicing and glottalization of stops and fricatives, reduced or omitted final consonant clusters, and unpronounced final obstruents (Velleman & Pearson 2010:178). Importantly, AAE speaking children who are learning GAE become proficient at some consonants, like /s/ and /r/ earlier than their peers who learn GAE initially. Further AAE speaking children tend to learn some initial clusters (kl-, pl-, kr-, gr-, pr-, sp-, st-, and skr-) as well as final -s, -z, and –rs earlier than children who only have learn GAE (Velleman & Pearson 2010:178). These are important differences to note, both during assessment and intervention.

In this study, there were a total of 148 children age 4 years to 12 years who participated, all of whom their school speech-language pathologists (SLPs) (who were familiar with local dialects) had predicted would have speech sound disorders or delays. In addition, all of these students scored more than 1SD below the mean on the DELV- Norm Referenced phonology subtest (Velleman & Pearson 2010:180). The phonology subtest included 66 item with 132 target consonants and the study items were made of 100 tokens from the Dialect-Sensitive Language Test (DSLT) in initial or final position, half of which were expected to be contrastive in the different dialects (Velleman & Pearson 2010:180). The examiners then described the 66 pictures using present-tense sentences (e.g. “I see a mask”) and the children were asked to repeat them.

Importantly, the result found that regardless of dialect difference, that is, whether the child was AAE-first or GAE-only, the features of their speech sound disorders were similar. Velleman and Pearson believe that it is the challenges of the targets that overcame the dialect differences for those children who have speech language disorders (Velleman & Pearson 2010:184). Therefore, the DSLT test was accurate in determining whether or not a child had a speech disorder. It was also confirmed that the two dialect groups do learn specific consonants in a different order as was mentioned above. Velleman and Pearson therefore suggest that SLPs should consider targeting /t,k,g,ʃ,ð/ later in children learning AAE first, and /j,f,s,v,tʃ,dʒ, r/ later than children learning GAE first.

This study shows how important it is to investigate dialect differences both in terms of how dialect-neutral tests actually are, and in terms of phonological milestones for assessment and intervention.
Critique

Shelley Velleman and Barbara Pearson have asked some very important questions, namely, is there a test that can accurately distinguish between speech disorder and dialect difference, and what are some phonological differences to consider when assessing and formulating an intervention strategy with children who speak African American English (AAE) dialect at home. These are important questions to ask, as their research confirmed that children learning AAE first, and acquiring General American English (GAE) in school as a second dialect, actually have quite different phonological milestones. Therefore, expectations during both assessment and intervention should be altered accordingly. Further it is important to ensure that a diagnostic tool is not biased to the standard dialect when using it to assess a child who speaks a nonstandard dialect of English.

In terms of methodology, I looked at participant selection, as well as reliability of examiner transcription. The participants were selected based on two factors: first, identification of speech sound delays or disorders by the speech-language pathologists (SLPs) in their own schools. Second, the participants scored “more than 1 SD below the mean” (Valleman & Pearson 2012:180) on the Diagnostic Evaluation of Language Variation – Norm Referenced phonology subtest. As for the first criterion, the author’s noted that the SLPs in those schools were familiar with the local dialect, which, when the difference between dialect difference and disorder is being questioned, is an important factor to note. The second criterion is where I become a little skeptical – there is a big difference between a child who scores just below one standard deviation from the mean and a child who scores well below the second standard deviation. The authors fail to note where the children stood beyond their “below 1 SD from the mean” marker. The third critique I have about the participants is regarding the typically developing children of both dialect groups that the article discusses. It is unclear what criteria these TD participants met, how many there were, or any other information about them. Finally, I look to the reliability of the examiners transcriptions. First, that the authors included information about the reliability of the examiners transcriptions at all was notable. Second, the authors note that there was 94% phoneme-by-phoneme agreement between the records from the examining SLPs and what the authors transcribed when they went over some of the audio recordings of the participants being assessed (Velleman & Pearson 2010:181).

The results that the authors discussed were quite detailed, and the final findings were that the scores from the DSLT phonology subtest indicated whether a child had a speech disorder and was not affected by dialect differences.

Reference: