

Characteristics of Childhood Apraxia of Speech in Francophones

In 2007, the ASHA Ad Hoc Committee defined Childhood Apraxia of Speech (CAS) as a “neurological childhood speech sound disorder in which the precision and consistency of movements underlying speech are impaired in the absence of neuromuscular deficits” (ASHA, 2007). Based on the extensive literature review, three main characteristics of CAS were identified (ASHA, 2007), children with CAS produce (1) inconsistent errors on phonemes in repeated productions, (2) longer or disrupted coarticulation, and (3) inappropriate prosody. Since these characteristics describe difficulties in motor planning, they should be observable across different languages.

For speech-language pathologists practicing in French contexts, the identification of CAS is challenging since there are differences in definitions of this disorder. Recently, researchers have sought to summarize recent findings based on English-speaking children in French-language publications (Charron & MacLeod, 2010; Parisse & Maillart, 2010). The extent that research findings based on English apply to other languages, such as French is not clear. As a result, children may be over identified with the diagnosis of CAS in certain settings and under identified in others. In fact, our analyses francophone children with CAS have suggested inappropriate prosody does not distinguish them from their typically developing or phonological disordered peers (matched by percent consonants correct) (MacLeod & Findlay, 2015).

The goal of this presentation is to continue the investigation of francophone children with CAS by focusing on the segmental level. Although English and French have similar sized consonant and vowel inventories (MacLeod et al., 2011), the languages differ on several aspects which may have implication in the clinical identification of speech sound disorders. We investigated the following research questions: (1) do children with CAS produce more inconsistent errors for consonants or vowels compared to their phonologically disordered (PD) peers or typically developing (TD) peers? (2) are the errors produced by children with CAS more dependent on the phonetic context (i.e., consonant or vowel that precedes/follows the phoneme in error) compared to their PD or TD peers? Based on the research in English speaking children, we hypothesize that children with CAS will produce more inconsistent errors than their peers, and that their error patterns more influenced by the phonetic context than their peers.

This pilot study investigated the speech of 15 children with speech sound disorder aged 4 to 6 years of age. Based on SLP assessments, 6 children were hypothesized to have CAS, and 9 children were hypothesized to have a PD. In addition, 15 TD children speech were matched based on percent consonants correct to the children with disorders. All children were within normal limits on the French version of the Peabody Picture Vocabulary Test. The children participated in a picture-naming task that targeted all French phonemes in word initial, medial and final position (MacLeod, 2014). The children’s productions were phonetically transcribed for analysis. We will discuss the results from two perspectives: First, we will reflect on the applicability of the CAS definition to languages other than English; and second, we will reflect on the clinical implications of these findings.

References (5 max)

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