

Articulation in children with childhood apraxia of speech or phonological disorder  
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A central issue in studies on developmental speech disorders, especially with regard to childhood apraxia of speech (CAS) and phonological disorder (PD) is the distinction between phonological and motor processes. Precise analyses of the articulation might distinguish between phonological and motor processes in children with speech disorders, in that articulatory gestures constitute the transition between abstract phonological characteristics and movements of the speech articulators.

Articulographic data were collected on the productions of ten children with speech disorders (CAS or PD) and six normally speaking children. Results of earlier studies on a smaller group of children showed specific deviant patterns in articulatory movements of children with speech disorders. Normally speaking children showed more clear differentiation between movement patterns and movement stability depending on syllabic structure, as compared to the more variable and less distinct patterns produced by children with speech disorders. Also strong coarticulatory influences of the vowel context were found in normally speaking children, which was not the case in children with speech disorders.

First analyses in the larger group corroborate these results. That is, children with speech disorders show more variability, less distinct articulatory spaces, deviant coarticulation, and larger articulatory movements and peak velocities.