

Development of consistent word production in German-speaking children aged 2;0-3;5 years

Wiebke Freese¹, Sarah Masso², Annette Fox-Boyer¹, Silke Fricke³

¹University of Lübeck, Lübeck, Germany. ²University of Sydney, Sydney, Australia.

³University of Sheffield, Sheffield, United Kingdom

Abstract

During early phonological development, children pronounce words inconsistently. German-speaking children have been found to be consistent around the age of 30 months (Schäfer & Fox, 2006). In older children, a token-to-token variability (i.e. inconsistency) of $\geq 40\%$ in words over three realisations can be a diagnostic marker of two subtypes of speech sound disorders (SSD), Childhood Apraxia of Speech and Inconsistent Phonological Disorder (McLeod & Baker, 2017). To identify such children with at least 40% variability in whole word production, an inconsistency task can be used (Dodd et al., 2023; Holm et al., 2023).

The available German inconsistency task (*PLAKSS-II*; Fox-Boyer, 2014) has proven to be not sensitive enough as not all items pick up token-by-token variability. The task has been revised based on retrospective item analyses and a newly developed phonological complexity score for German (Masso et al., in preparation). This project aimed to a) further investigate the development of consistency in German-speaking children, and b) evaluate the reliability of the revised inconsistency task. Sixty German-speaking children without suspected SSD across three age groups ($n=20$ per age group: 24-29, 30-35, 36-41 months) were assessed three times with the revised inconsistency task. The first and second testing points were 8-14 days apart, while $t3$ followed up children 3 months after $t1$.

Data collection is complete. The development of consistency will be analysed cross-sectionally by comparing the three age groups at $t1$, as well as longitudinally using data from $t1$ and $t3$. Gender will be investigated as a potentially influential factor. $T1$ and $t2$ data will be used to present test-retest, inter- and intra-rater reliability.

The data on the development of word consistency in German will provide SLTs with comparative data from typically-developing children. This is a vital foundation for identifying children with atypical inconsistency (Williams & Stackhouse, 2000). The revised inconsistency task has the potential to offer SLTs an evidence-based tool to identify inconsistent speech errors in children with suspected SSD. Both aspects will support accuracy in differential diagnosis of developmental SSD in German.