

The France-Belgium-Canada SSD Project
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The France-Belgium-Canada SSD Project aims at building an evaluation and screening tool for speech sound disorders (SSD) in French-speaking children. This project emerged from two observations: first there are no exhaustive normative data on phonological development in French-speaking children, second, there are no standardized tools to evaluate SSD in French-speaking children.

Although speech production in the first years of life is well documented, later stages are less studied. Data on French-acquiring children are scarce (Rose et Wauquier-Gravelines, 2007), apart from several works by Vinter (2001) and Monnin (2010) for hexagonal (spoken in metropolitan France) or Caledonian French and Rvachew et al. (2014) and MacLeod et al. (2011) for Québécois French. Speech therapists therefore use normative data on English, which is problematic because of the phonetic, phonological and prosodic differences between French and English (MacLeod et al., 2011).

In addition, although there are many existing language tests in French (e.g. ISADYLE, BEPL, N-ELL, EVALO, EXALANG), none is sufficiently exhaustive to provide a full assessment and an efficient screening for SSD. The existing tools usually test consonants in the /a/ vowel context exclusively, they include limited syllable structure types, they do not take prosody into account and they do not investigate all French phonemes. In addition, there is no efficient proposal in French speech therapy to assess intelligibility. The existing tools cannot provide a detailed description of the disorders: tests only provide global qualitative scores. Finally, most of the normative data are not based on acoustic measures carried out on typically developing children but rely on subjective perceptual assessment, which can be debatable. A few tests of French phonology have been proposed, however, by Bérubé et al. (2013) and MacLeod et al. (2014) on Canadian French, but they cannot be applied to hexagonal French.

The France-Belgium-Canada SSD project brings together speech researchers and speech therapists from Canada, Belgium and France in order to develop a new evaluation and screening tool for pediatric speech sound disorders in these countries. A pilot study carried out in this framework (Meloni, 2015) showed the feasibility of a test of hexagonal French phonology with a solid psycholinguistic theoretical ground. Twenty monolingual French-speaking children aged 6 to 11 years were tested in Grenoble, France. Four speech production tasks were involved, in which syllabic length, syllable structure, segment position in the constituent, vowel context, phonotactics and segmental representation were controlled for: nonword repetition, word naming, oral diadochokinesis, syllable repetition. Each task tests a specific speech production process, namely, motor programming, motor phonological representation, syllable planning and coordination, and segmental planning. All the tasks showed an increase in score from 6 to 11 years, some of the tasks not reaching 100% even for the older children. These results argue for collecting normative data that include older children. The project will build on this pilot study as well as on similar studies carried out in Canada and Belgium (MacLeod et al., 2014; Maillart et al., 2014) to further refine the production tasks and to complement them with perceptual tasks.

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