

Beyond stuttering: Speech disfluencies in normally fluent, French-speaking children at age four

Introduction

The criterion of 3% of stuttered disfluencies in a conversational speech sample is often suggested to diagnose the stuttering in children (e.g., Boey, Wuyts, Van den Heyning, De Bodt, & Heylen, 2007; Yairi & Ambrose, 2005). The stuttered disfluencies are generally defined as consisting in part-word repetitions, sound prolongations and blocks. Moreover, there is a long-lasting debate among scholars about the relevance of considering monosyllabic word repetitions as stuttered disfluencies (Howell, 2013; Wingate, 2001; Yairi, Ambrose, Watkins, & Paden, 2001). Such repetitions are frequent in typically developing young children and some authors suggest that these disfluencies shouldn't be considered as stuttered (e.g., Wingate, 2001). Nevertheless, very few normative data exist concerning the disfluencies occurring in the speech of normally fluent children (Tumanova, Conture, Lambert, & Walden, 2014), and none exist in French. However, it would be worthwhile obtaining normative data regarding the speech disfluencies of children who do not stutter given that monosyllabic word repetitions are the prime characteristics that prompt identification of early stuttering by parents (Yairi & Ambrose, 2013). The aim of the present study is to establish normative data concerning the speech disfluencies existing in normally fluent children speaking French at age 4, an age at which stuttering has begun in 95% of children who stutter (Yairi & Ambrose, 2013).

Methods

Participants were seventy monolingual, French speaking children who do not stutter, aged 4 years. They exhibited less than three stuttered disfluencies per 100 words of conversational speech, and scored 10 or lower on the SSI-IV (Riley, 2009). A medical history questionnaire ensured the absence of labelling of stuttering now or in the past by family members and a specialised speech-language pathologist confirmed the diagnosis of normally fluent children. All participants' speech-language abilities were assessed using standardized measures. Measurement of participants' speech fluency was based on a more than 300-word conversational speech sample, obtained during on the one hand, an clinician-child conversation in which children were asked to talk about their family, school, and free-time activities, and on the other hand, the retelling of a short cartoon. All speech samples were videotaped for latter transcription (Howell, Soukup-Ascencao, Davis, & Rusbridge, 2011).

Results

Data transcriptions and analyses are in progress.

First results from 20 participants attest that part-word repetitions, sound prolongations and blocks occur less frequently than once in 100 words (0.25, 0.01, and 0.03 per 100 words respectively). As expected, revisions (2.73%), phrase repetitions (1.62%), and interjections (4.66%) are far more frequent. The frequency of monosyllabic word repetitions is around 3% (3.68%). However, a more in-depth analysis revealed that the majority of these monosyllabic word repetitions (2.48%) are repeated less than three times and are not tensed.

These first results support the need to be careful when including monosyllabic word repetitions as stuttered disfluencies given that, without tension, they appear more frequently than 3 in 100 words

in normally fluent children. The types of monosyllabic word repetitions that have to be considered as stuttered disfluencies should be clarified. The final results will be discussed orally.