
Narrative ability in bilingual and monolingual children with and without Language Impairment: Results from the Dutch LITMUS MAIN

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Abstract

In this presentation, we argue that narratives could be a promising instrument to improve the diagnosis of language impairments (LI) in sequential bilingual children. Narrative ability is often divided into microstructural (e.g., phonology, morphology, syntax) and macrostructural (e.g., story structure) abilities. In addition, the use of internal state terms (IST) is important for narrative quality. In contrast to microstructural abilities, macrostructural abilities are universally acquired (e.g. Gutiérrez-Clellen et al., 2008; Pearson & de Villiers, 2005; Uccelli & Paez, 2007), and the same may hold for IST's. Interestingly, both macrostructure (Botting, 2002; Epstein & Philips 2009) and IST's are problematic for children with LI (Johnston et al., 2001; Norbury & Bishop, 2003) Therefore, macrostructure and IST's could potentially differentiate between bilingual children with and without LI.

For this study, we tested the prediction that macrostructure and IST's would be affected by LI and not by bilingualism. 122 children participated: 31 Dutch monolingual with typical development (MOTD), 30 Dutch monolingual LI (MOLI), 31 sequential bilingual children TD (BITD) and 30 sequential bilingual children LI (BILI). All children were five or six years old. The bilinguals had various first language backgrounds. Narrative ability was tested with the Dutch version of the LITMUS Multilingual Assessment Instrument for Narratives (MAIN; Gagarina et al., 2012). The children listened to a model story, followed by ten comprehension questions. Then the children told a story, also followed by ten comprehension questions. Four outcome variables were calculated: model story comprehension (MC), production (P), comprehension of produced story (PC), number of internal state terms (IST).

First, effects of LI in the monolingual and bilingual groups were investigated. In the monolingual group, a MANOVA yielded a significant outcome, $F(4,56)=8.1$, $p < .001$, $\eta^2=.37$. TD outperformed LI on all four variables (see Table 1). The bilingual data violated MANOVA assumptions. Non-parametric tests showed that the TD group outperformed the LI group on all four measures. Second, effects of bilingualism in the TD and LI groups were investigated. In the TD group, a MANOVA yielded a marginally significant effect, $F(4,57)=2.8$, $p=.032$, $\eta^2=.17$, due to slightly more IST's in the bilingual sample compared to the monolingual sample, $F(1,60)=4.3$, $p=.04$, $\eta^2=.067$.

Identifying language impairment in the context of bilingualism is problematic (cf. Paradis et al., 2011). This study demonstrates that children with TD outperform children with LI on higher order narrative abilities in a monolingual and in a bilingual learning context.

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Therefore, narrative ability could assist the accurate diagnosis of language delays in sequential bilingual children. The sequential bilingual children were not delayed in macrostructure ability compared to monolinguals, confirming that macrostructure is universally acquired. The bilingual children even used slightly more internal state terms than de monolingual children.

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