Abstract

Phonological awareness and vocabulary size in bilingual and monolingual children Barbara Mertins & Katrin Odermann

The ability to think about language at the metalinguistic level is considered as an important prerequisite for children's cognitive and linguistic development (Roehr-Brackin, 2024; Schneider, 2017). The phonological awareness is one of the first components in the acquisition of metalinguistic skills in children and it correlates positively with the vocabulary size (Bleses et al., 2011; Fowler, 2001). Additionally, previous research provided evidence for an early development of metalinguistic awareness in bilingual children (Bialystok, 1992; Reder et al., 2013). However, studies investigating the development of vocabulary in bilingual children have shown mixed evidence: some research indicates a smaller vocabulary in bilingual compared to monolingual peers (Cote & Bornstein, 2014). Other findings reveal comparable vocabulary size in both groups (Hoff et al., 2012). Yet other studies suggest a larger vocabulary size for bilingual children (Bosch & Ramon-Casas, 2014). When interpreting these results, it is important to take into account the cognitive underpinnings of the bilingual mind (Bialystok & Craik, 2022; Grosjean, 1994) instead of treating bilingual vocabulary in terms of a single mental lexicon for each language (Perani et al., 1998). For the assessment of the vocabulary size, this means that both languages must be included, a step most of the previous research has not implemented in their designs.

In this paper we will present data from a large-scale study with German (N=20), Turkish/German (N=20) and Tamil/German (N=20) preschool children (4-6 years). The study includes data from a PPVT test administered for both languages, a phonological awareness test in German (Odermann, 2023) as well as a parental questionnaire (Odermann & Mertins, submitted) evaluating the degree of bilingualism and the socioeconomic status of the family.

The underlying hypotheses for the study were: 1. Balanced bilingual children's vocabulary is larger in both languages compared to the monolingual group for German and the other nonbalanced bilingual children. 2. Bilingual children develop phonological awareness earlier than monolingual children. 3. The socio-economic status of the parents affects the vocabulary size and the development of metalinguistic skills in all three groups.

The first results show that the vocabulary size in children with higher input and competence in German and the other language is larger compared to their peers dominant in only one language. The balanced bilingual group also has a larger vocabulary than their monolingual peers. Additionally, balanced bilingual children outperform all other groups in the phonological awareness test. The socioeconomic status of the family can account for some differences in both tested domains across all groups.

In line with previous research (Bialystok, 1992; Delucchi Danhier & Mertins, 2018), we argue that the cognitive underpinnings of bilingualism (co-activation, code-switching, inhibition/activation) in combination with the parental socio-economic status, which in turn affects the quality and quantity of the linguistic input provided to the children, substantially influences the development of the metalinguistic awareness and vocabulary size. For bilingual children, we advocate for the vocabulary assessment in both languages and for a shared mental lexicon approach.

Keywords: bilingual acquisition, vocabulary size, mental lexicon, monolingual fiction

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