## Preschool literacy and numerical skills in bilingual versus monolingual children

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**Research topic**: This investigation compares the early literacy and numeracy skills of monolingual and bilingual preschool children. The participants included 151 monolingual children who speak only one language (Hebrew) who were not exposed to other languages at home. The second group included 151 matched bilingual children who speak two languages (additional languages in this group include Russian, English, Spanish, Japanese, German, Arabic, Ukrainian, Hungarian, Portuguese, Farsi, Italian, Armenian, Amharic, Georgian, and French).

Why is my study unique? The question of whether bbilingualism is beneficial or detrimental to academic learning is currently the subject of heated debate, owing to inconsistent findings in linguistic and mathematical domains. This will be one of the first studies to focus on numerical *and* literacy skills among preschoolers.

Analyses and findings: The findings revealed an advantage for monolingual compared to bilingual children in oral language and early literacy skills (letter knowledge and word identification), but not in phonological awareness (see Figure 1). Additionally, a bilingual disadvantage was found only in early numeracy skills that depend on linguistic knowledge, such as number naming and counting (see Figure 2). Interestingly, stronger links were found between the early numeracy and literacy tasks among the monolingual group than among the bilingual group.

**Relevance for educational practice:** The research findings emphasize the central role of linguistic knowledge in both literacy and numeracy domains at this age. This implies that reinforcing language abilities among bilinguals should benefit early learning not only in literacy but also in the numerical domains.



