

Gender differences in early literacy and numeracy skills among preschool children

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Research topic: This study examines some of the popular myths about gender differences in preschool literacy and numeracy skills. The skills tested included early literacy-related skills; phonological awareness, orthographic knowledge, vocabulary, and early numeracy skills; counting, symbolic and non-symbolic magnitude comparisons, simple mathematical calculations, and verbal problem solving.

Why is my study unique? There are three reasons why this study is unique: First, we examined gender differences among kindergarteners, whereas most studies to date looked at children in elementary school or high school. Second, there is no data on gender differences in Israel. Finally, this study exploits the exceptionally comprehensive Safra longitudinal data set, which covers numerous aspects of early literacy *and* early numeracy; most studies in this field have dealt with only a single domain.

Analyses and findings: Analyses performed found no significant differences between boys and girls in early literacy skills. The only significant difference was found in color naming in which, contrary to popular myth, boys outperformed girls. In early numeracy, on the other hand, significant differences were found between boys and girls, specifically, in the magnitude comparison tasks the girls showed superior performance compared to boys. On the other hand, in the simple calculations test, boys scored higher than girls. No significant differences were found in the other skills (see Figures 1 and 2).

Relevance for educational practice: There is a myth that girls' achievements in literacy are higher than boys' and that boys' achievements in math are higher than girls'. This study showed that at present boys and girls have similar achievements. It appears that, at least in kindergarten, gender is not an issue, although this factor may be influenced by the environment or by expectations at later stages of development.

Figure 1: Gender differences in early literacy skills

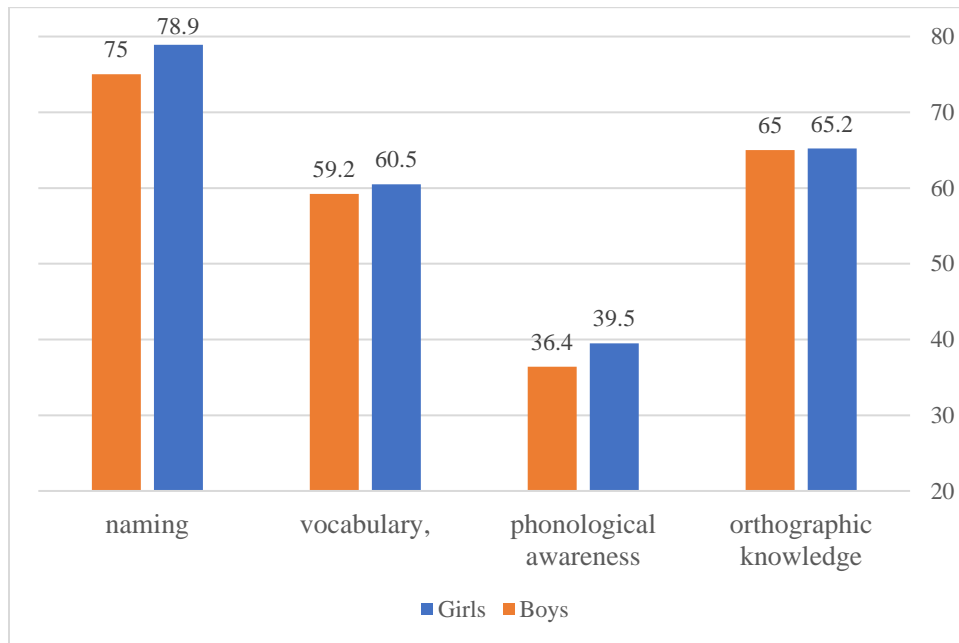


Figure 2: Gender differences in early numeracy skills

