

Pehkonen, S., Lehtinen, A., Nieminen, P. & Hähkiöniemi, M. (2022). Adaptive number knowledge among primary school students of various ages. *Nordic Studies in Mathematics Education*, 27 (4), 3–24..

Abstract

Previous studies have highlighted the importance of primary school students' adaptive number knowledge, which includes knowledge of numerical characteristics and relations. In this study, students from the second (aged 8), fourth (aged 10), and sixth (aged 12) grades ($n = 205$) answered a modified version of the Arithmetic production task, which has been used to measure primary school students' adaptive number knowledge. Significant differences among grade levels were found. In addition, a latent profile analysis revealed four profiles based on the students' answers, with profile membership being associated with grade level. Similar to previous research, the current study found evidence of both age-dependent and individual differences. Furthermore, an analysis of the strategies used by the students to produce solutions revealed differences among the profiles.

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