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Examining students' achievement in mathematics: a multilevel analysis of the Programme for International Student Assessment (PISA) 2012 data for Greece.

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Summary: The main aim of the present study was to carry out an in-depth examination of 15-year-olds' mathematics performance in Greece. By applying a multilevel model to the Programme for International Student Assessment 2012 data for Greece, this study investigated the factors, both at individual and school level, which were linked to mathematics achievement. The results revealed that gender, pre-primary education, self-beliefs about mathematics and individual and school mean socioeconomic status can statistically significantly predict students' mathematics achievement. The analysis also indicated the importance of the school which students attend in shaping their mathematics performance. Generally, it could be concluded that background characteristics, self-constructs and school level variables can explain a large proportion of the variance in students' mathematic achievement.

Classification: D63

Keywords: multilevel modelling; PISA

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