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Strategies for solving three fraction-related word problems on speed: A comparative study between chinese and singaporean students.

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Summary: This paper presents the results obtained from a study comparing the strategies used by 1,070 Chinese students and 1,002 Singaporean students from primary grade 6 to secondary year 2 in solving three fraction-related problems. It is part of the author's Ph.D. study, which involves more word problems on speed. The Chinese students performed better than the Singaporean students on two of the three problems, while the Singaporean students performed better than the Chinese students on the other. The strategy analyses reveal that the Chinese students used the traditional methods like arithmetic and algebraic strategies more frequently than the Singaporean students, whereas the Singaporean students used the model and unitary methods more frequently than the Chinese students. Implications for the teaching and learning of word problems on speed, as well as problem solving, are also provided.

Classification: D53 C33 F93

Keywords: cross-national comparison; problem-solving strategies; velocity; speed; word problems; lower secondary; empirical investigations; comparative studies

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