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Validation of the Attitudes Toward Mathematics Inventory (ATMI) in the Moroccan Context.

Communication Info

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Abstract

Purpose Students' attitudes toward mathematics play a key role in teaching and learning processes, as a positive attitude correlates with better academic performance [1]. This study aims to examine the validity and reliability of the Attitudes Toward Mathematics Inventory (ATMI) among Moroccan high school students using multivariate statistical methods [2].

Methods The factorial structure of the ATMI was evaluated using two methods: the exploratory factor analysis (EFA) revealed a multidimensional structure of the scale [3], followed by the confirmatory factor analysis (CFA) which was performed to test the adequacy of the model and assess its stability.

Results The results indicate that the ATMI has good psychometric properties, including satisfactory fit indices and high internal consistency (Cronbach's alpha for subscales and composite reliability (CR)) [4].

Conclusion These results suggest that the ATMI is a valid and reliable instrument for assessing high school students' attitudes toward mathematics in the Moroccan context, providing useful information for evaluating psychosocial factors related to learning and success in mathematics.

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