

## Educando para a paz

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A psychometric study of an Título executive function assessment

instrument (TDI-FE)

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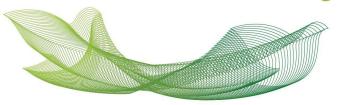
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Background This study aims to present and discuss the psychometric properties of executive functions, which were measured using the TDI-FE instrument. The analysis

Resumo instrument. The analysis

encompasses its internal structure, potential sensitivity to fatigue factors, relationships with external criteria, and diagnostic accuracy. Methods The study sample comprised 382 students from





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Brazil, aged 6-8 years. Child development variables were screened using the TDI-FE and gold standard tests (Cancellation Attention and Trail Making Tests). The proposed scale comprised four activities: a test with fruit images with three tasks, and one memory game. Results The onefactor model of EF of the TDI-FE failed to fit to the data. However, fit substantially improved once a latent fatigue factor was controlled in the model. The latent factor of EF assessed by the TDI-FE tasks was coherently associated with a series of external variables, including two popular collateral measures of EF. The diagnostic accuracy was reasonable, and a cut-off of 37 points produced 70% of sensitivity and 60% of specificity. Conclusion Results indicated that the TDI-FE demonstrated sound psychometric properties and diagnostic accuracy, then consisting of an efficient alternative for the assessment of EFs in early childhood education. The study also proved the need to control for response biases such as fatigue in the latent variable models of EF. The TDI-FE is notable because of its low cost and easy application, and it might fulfill a need for instruments for individuals from different contexts at this stage of development in Brazil.

Fomento

