

Performance-based instruments to assess mental function during activity and participation in traumatic brain injury

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Background:

Performance-based measures that focus primarily on the ability to engage in ADL are routinely used by occupational therapists to assess a client's cognitive abilities.

Objective:

To perform a systematic review to investigate measurement properties of performance-based instruments to assess mental function during activity and participation in individuals with traumatic brain injury.

Material and methods:

Pubmed, EMBASE, CINAHL, PsycINFO and OTseeker were searched. The Consensus-based Standards for the selection of health measurement instruments checklist was used to evaluate methodological quality of each included study. The quality criteria adapted by Terwee were applied to extract results of each measurement property followed by a best evidence synthesis.

Results:

Twenty-eight articles, including 22 instruments, were included. The combination of the Functional Independence Measure and the Functional Assessment Measure showed moderate evidence of good internal consistency, but conflicting evidence of reliability and poor evidence of construct validity. Other instruments showed limited or unknown evidence.

Conclusions:

Results reveal a lack of high-quality evidence within the aim, though it is recommended to use tools with the highest possible evidence for positive ratings.

This review contributes with psychometric evidence on instruments to use in occupational therapy practice and research and contributes to methodological considerations before choosing an instrument.