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Using game authoring platforms to develop screen-based simulated functional assessments in persons with executive dysfunction following traumatic brain injury

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Title:**Using game authoring platforms to develop screen-based simulated functional assessments in persons with executive dysfunction following traumatic brain injury****Highlights:**

1. Functional assessments are helpful in clinical decision-making.
2. No practical, widely available everyday functional assessments currently exist.
3. Serious game platforms such as eAdventure can be used to develop screen-based simulated functional assessments.
4. The development of the SBS-COT required three professionals who required a total of 49 hours to finish the SBS-COT, which cost approximately US\$1,821, taking into account the cost/person-hour.
5. The SBS-COT shows good feasibility as a pre-screening test of executive dysfunction assessment as well as good acceptability and usefulness for therapists and patients.

Abstract:

The assessment of functional status is a critical component of clinical neuropsychological evaluations used for both diagnostic and therapeutic purposes in patients with cognitive brain disorders. There are, however, no widely adopted neuropsychological tests that are both ecologically valid and easily administered in daily clinical practice. This discrepancy is a roadblock to the widespread adoption of functional assessments. In this paper, we propose a

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