

So much technology, so little time: factors affecting use of computer-based brain training games for cognitive rehabilitation following stroke

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ABSTRACT

Rehabilitation following stroke typically focuses on regaining use of the affected lower and upper limbs. Impairment of cognitive processes, however, is predictive of rehabilitation outcomes. Stroke survivors and their caregivers report difficulty finding time to practice gait and upper limb training at home due to the time demands of routine activities of daily living (ADL), leaving little time for cognitive retraining. Cognitive activities have become more readily accessible to the home user through web-based games that engage brain functions often disrupted by stroke. With neuropsychological testing, it is possible to “prescribe” brain training that targets the specific cognitive functions disrupted by an individual’s acquired brain injury. We asked if computer-based brain training were made available in-home at no cost, would stroke survivors complete the training? Five stroke survivors participated, none completed the recommended 40 training sessions. Interviews with participants and caregivers reveal barriers to training including physical and cognitive limitations, as well as time and fatigue management. Training also showed effects on ADLs and mood.

Full papers will be published in the Conference Proceedings and will be available to delegates at the conference on Sept. 10.

Full papers will be released on-line in the ICDVRAT archive on March 15.