

Rehabilitation tools along the reality continuum: from mock-up to virtual interactive shopping to a living lab

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ABSTRACT

The purpose of this study was to compare shopping performance using the 4-item test, between three types of environments; a real environment (small, in-hospital “cafeteria”), a store mock-up (physical simulation) and a virtual environment (Virtual Interactive Shopper-VIS), in a post-stroke group compared to a control group. To date, 5 people with stroke and 6 controls participated in the study. Participants performed the original 4-item test (“buy” 4 items) in the VIS and the store mock-up as well as a modified 4-item test (“buy” 4 items with budget constraints) in all three environments. Results were analyzed descriptively and findings to date, indicate that the post-stroke group performed more slowly than the control group. In addition, in both groups, the time to complete the test within the VIS was longer than in the store mock-up and the cafeteria. Performance in the VIS, the store mock-up and the cafeteria were correlated in the post-stroke group. Finally, participants’ responses to their experience in the VIS were positive. The preliminary results of this small sample show that the test within the VIS is complex and realistic and may be used to assess and train the higher cognitive abilities required for shopping.

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.