Project Summary
Centre for Leadership in Acquired Brain Injury

Dr. Anne Hunt, Dr. Nick Reed, Alison Shier, Melanie DuMoulin, Salma Kassam, Sarah Sheffe

WHAT WAS THIS STUDY ABOUT?
We wanted to know if a computer-based vision screening assessment is feasible to use with children and youth with acquired brain injury (ABI). Although visual skills are important for performing everyday activities, they are not routinely assessed following brain injury. Impairment in vision may impact a child’s performance on their daily activities and on some therapy assessments.

WHAT DID WE DO?
- We identified a computer-based vision screening assessment.
- We pilot tested the vision screening assessment with typically developing adults and youth.
- We worked with the Brain Injury Rehab Team and Concussion Centre team to recruit children and youth with brain injury to participate.
- We assessed children and youth with mild, moderate, and severe brain injuries.
- We prepared to share initial results at the Canadian Association of Occupational Therapists’ (CAOT) Annual conference in May 2015.
- We used these results to prepare for a larger study.

IMPACT FOR CLIENTS, FAMILIES AND CLINICAL PRACTICE
The results of this study will enable us to understand if using computer based vision screening is helpful for identifying vision impairments in children and youth with brain injuries. With more research, our results will inform clinical practices regarding vision screening for these children.

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WHAT DID WE LEARN?

We learned that:

- Children and youth with different severities of brain injury are able to complete the computer-based vision assessment.
- Children with mild, moderate and severe brain injuries are able to follow the test instructions.
- Some children with brain injuries need additional time to complete the test.

NEXT STEPS?

The results helped us to plan another study that will help us understand how accurate the computer-based vision test results are for children with brain injuries.

In the next study, children with brain injuries will complete the computer based vision screening. Next, they will have their vision examined by an optometrist. Then we will compare the results. This will tell us how accurate the computer vision screening test is for identifying vision impairments in children with brain injuries.

WHO ARE WE?

Our research team includes researchers, occupational therapists and students. Our team members are from Holland Bloorview’s Concussion Research Centre, and Brain Injury Rehabilitation Team and University of Toronto, Department of Occupational Science and Occupational Therapy.

- Dr. Nick Reed, Principal Investigator, CRC
- Dr. Anne Hunt, Post-Doctoral Fellow, CRC
- Ms. Salma Kassam, Occupational Therapist, BIRT unit
- Ms. Alison Shier, University of Toronto MScOT Candidate
- Ms. Melanie DuMoulin, University of Toronto MScOT Candidate
- Ms. Sarah Sheffe, Research Coordinator

THANK YOU!

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