Participate in Research A personalizable access technology for children with cerebral palsy and complex communication needs



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Date Posted: February 2022 REB #18-777 - eREB 0288 Revised: March 31, 2021 **Do you have a child with cerebral palsy and complex communication needs?** Consider participating in a research study about developing a novel access technology personalizable at home

What is this study about?

We have created an access technology which users will be able to personalize at home to recognize their specific vocalizations, keywords and/or facial movements. We want to evaluate the performance and usability of this new technology.

Who can participate?

We are looking for participants who:

- are between 6 and 18 years old,
- have cerebral palsy (GMFCS level IV-V, CFCS level IV-V, MACS level IV-V, VSS level II-III-IV),
- are able to reliably indicate yes/no,
- have an existing access technology used at least 3 times/week for communication or writing.

What's involved?

<u>Part 1</u>

- Up to 10 sessions of 45 minutes at Holland Bloorview or virtually.
- Sessions 1-up to 5: You will personalize an access technology software by recording audio/video data of your child performing simple activation tasks (e.g., blinking, saying "next" or "iiiih").
- Following 2 sessions: You will review and annotate your child's words and/or movements. For these 2 sessions, your child's presence will not be required.
- Last 3 sessions: Your child will play a custom video game to test the performance of the personalized access technology software.
- During each session, we will record audio and video and at the end of the last session, we will ask you to fill a usability questionnaire.

<u>Part 2</u>

- This will take place at home over a period of up to 3 weeks.
- Your child will be asked to play a custom video game to test the personalized access technology software, a minimum of 3 times for 30 minutes each time.
- We will record audio and video and ask you to fill a usability questionnaire and a video game questionnaire.

What are the benefits of participating?

- You will receive a personalizable access technology software that you and your family can customize together so that it meets your specific needs.
- Your participation will help improve the design of the personalizable access technology.

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