

Gaze controlled systems for children with multiple disabilities – an evaluation

- an ongoing study

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Sahlgrenska University Hospital

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## Background

- The only way for independent activity?
- A way of learning the concept of using pictures and symbols for communication
- Easier to understand the child's gaze direction
- Importance of functional grids and adaptations
- Importance of experience when assessing a gaze controlled system for children with severe multiple disabilities

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## Background

- Possibility to receive a gaze controlled computer?
- Uncertainty of how the computers are used and if the goals for communication and inclusion are achieved?

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## Aim

- Was the goal of a gaze controlled system achieved? Current use.
- What seems to be essential for how children and adolescents with multiple disabilities are able to use gaze controlled computers to influence their environment

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## Method

- Questionnaires to relatives and professionals of children that have done assessment at DART (n 38)
- Semi structured interviews are planned with key persons involved in assessment/ use of a gaze controlled systems – 10 children who are using a system and 5 who don't
- Talking Mats – when possible

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## Questionnaire

- A quantitative cross-sectional survey; questionnaire with 31 questions (both yes- and no-questions and questions with several alternatives)

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## Results of the questionnaire

Relatives/professionals of 20 children answered the questionnaire

- 1 did not use the computer because of illness
- 1 never received a computer after the assessment
- 1 had returned the computer

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- Age 4 – 19 (at assessment)
- 8 boys/11 girls (1 unknown)
- 3 very severe motor disorders
- 11 severe cognitive disorders

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Goal with the assessment;

- Communication 20
- Play 7
- School work 6
- Leisure time 3

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Current use;

- Communication 15 (of 17)
- Play 9
- School work 8
- Leisure time 6

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- 9 of the children use their computer every day
- 3 use the computer 4-7 times per week
- 5 use the computer 1-3 times per week

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- 14 of the children needed somebody present all the time they used the computer
- 3 of the children needed help to prepare the computer before use

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- The computer have been an important tool in daily living for 14 of the children
- There have been technical problems for 15 of the children's computers

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- 12 of the children had to wait more than a month before receiving the computer
- 1 child had to wait for more than 6 months
- 3 children had to wait for more than a year!

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## Some comments

- More time for tutoring
- Long time between assessment and receiving the computer
- More time for designing applications
- The hardware is heavy and hard to transport
- Continuous help with training
- Continuous evaluation
- Satisfied!

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## Discussion

- Few questionnaires returned
- Difficult to transfer to other groups
- Need of training and evaluation

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## Thanks!

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