

Participation in children with CP may be reduced, particularly in their community as they age from pre-school to school age.

Child and family factors related to CP can impact **how and where** children are able to participate.



Investigating predictors of participation from pre-school to school age in children with cerebral palsy

Testani, D.,^{1,2} King, G., Munce, S., Shearer, H.,¹ Wan, F.,¹ Fehlings, D.¹

¹ Holland Bloorview Kids Rehabilitation Hospital
² Rehabilitation Sciences Institute, University of Toronto

Background

- **Participation** is the context in which people can **play** and engage **within** their **home** and **community**.¹
- Children with CP engage in more **home-based** and **quiet recreation** compared to their typically developing peers.²



Objectives

- Few studies have completed complex predictor models for participation in CP.
- Recent research has examined participation at one time point however few have examined how participation changes over time.³

1 Does participation change over time?

2 Which factors impact participation?

Methods

The **Clinical Database Platforms** of CP-NET recruit children with CP from hospitals and rehabilitation centres across Ontario.

Data Collection (n= 252)

Participation and psychosocial data is collected at 2 time points
 T1) **At entry: 2 years and 11 months**
 T2) **At ages 7 to 8**

Type	Variable	Measures
Child	Functional Ability	GMFCS
	Baseline Pain	HUI-3
	Sex	Parent Report
	Age	Measured at Time 1 and 2
Family / Environment	Ethnicity	Parent Report
	Income	Parent Report

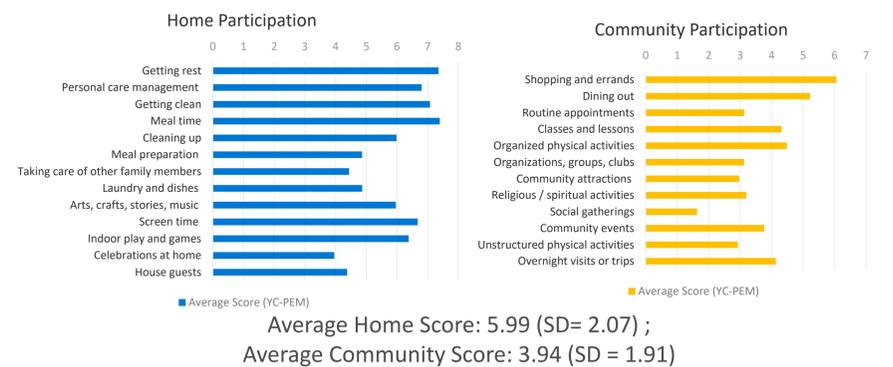
How do we measure participation?

Participation and Environment Measure Analyses

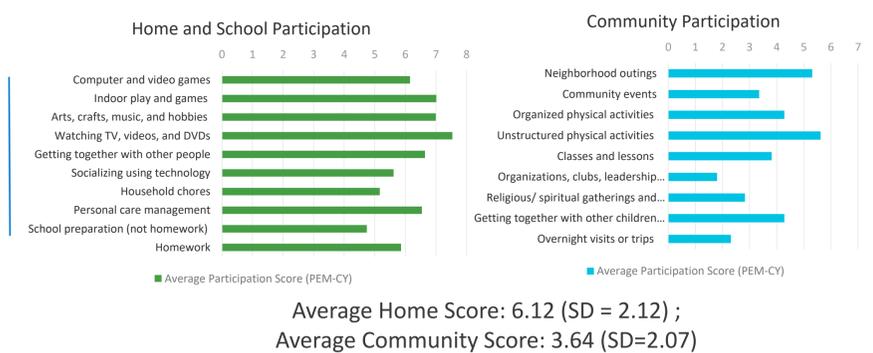
- 1) Profiles of participation and changes in participation mapped over two time points.
- 2) A linear regression assesses the association between pre-school variables (child, family / environment factors) and participation at school age.

Preliminary Results

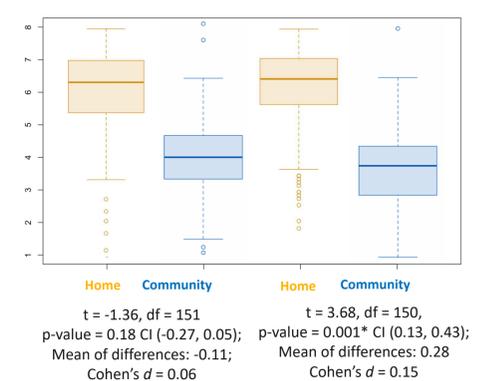
Preschool Participation



School Age Participation



Participation Change over Time



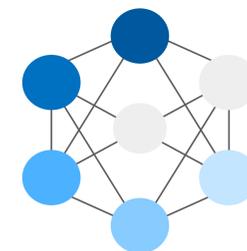
Factors associated with decreased overall participation

Associated Factors

- Higher Baseline Pain
- Lower Family Income
- Lower Functional Ability (i.e. Higher GMFCS)

Non Associated Factors

- Ethnicity
- Sex



Discussion

- ✓ Children with CP participate less frequently within their **community** compared to in their home.
- ✓ Univariate analyses suggest higher baseline pain, lower family income and functional ability are associated with **decreased participation**.

Future Directions

- A multivariate analysis will inform a more complex model for participation.
- Findings will help in creating early intervention **feasibility pilot study** to promote participation in young children with CP.

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