



## PERRIN

**Pediatric Rehabilitation Research in the Netherlands** 

# Childhood factors predict participation of young adults with cerebral palsy in domestic life and interpersonal relationships A prospective cohort study

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#### Aim

To determine childhood (9-13 yrs) predictors of adult (21-27 yrs) participation in domestic life and interpersonal relationships in individuals with cerebral palsy

#### Methods

Participants (n=67)

- 13-year follow-up of cohort of children (age 9-13 years) in adulthood (age 21-27 years)
- GMFCS
  - level I: 45%level II: 10%level III: 12%
  - level IV: 13%level V: 19%
- Intellectual disability: 31%

#### <u>Outcome</u>

Domains: Domestic life and interpersonal relationships *Measures*:

- Vineland Adaptive Behavior Scale (VABS), assessing performance in participation
- Life Habits questionnaire, assessing difficulty and assistance in participation performance

#### <u>Analysis</u>

• Stepwise multiple linear regression

#### Conclusion

- Children with low manual ability, epilepsy or intellectual disability are at risk for restrictions in participation in domestic life and interpersonal relationships in adulthood
- Addressing mobility capacity, fine motor skills, communication and interpersonal relationships in pediatric rehabilitation might promote young adult participation

Studied predictors from all ICF components

Health condition
GMFCS, MACS, CP-type

#### **Body functions**

Epilepsy
Hearing impairment
Vision impairment
Intellectual disability (ID)
Speech problems

## Activities Capacity: GMFM Performance: Moto

Performance: Motor skills, Communication (VABS)

## Participation Daily living skills Social participation

(VABS)

#### <u>Personal factors</u> Gender, Ethnicity, Behavior

problems,
Self-competence

#### Environmental factors

Participation as a young adult

Parental education, parental marital status, educational type, siblings, Life stressors and resources, housing type

#### Results

#### **Childhood factors**

#### **CP-related factors**

Manual ability (Manual ability classification system)

Body functions and structures
Intellectual disability

#### Level of activities

Gross motor function measure score
Manual ability (VABS score fine motor skills)
Communication skills (VABS score)

#### CP-related factors

Manual ability (Manual ability classification system)

Body functions and structures
Intellectual disability
Epilepsy

#### Level of activities

Gross motor function measure score Communication skills (VABS score) Interpersonal relationships (VABS score)

#### Barrier Facilitator

Legend

### Predict







Domestic life





Center of Excellence for Rehabilitation Medicine Utrecht



Interpersonal relationships









