

# Functional Communication in Children with Cerebral Palsy

## An inter-rater reliability study

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### BACKGROUND

Assessments of functional communication skills of children with cerebral palsy (CP), classified with the Communication Function Classification System (CFCS), often differ between the child's school teacher and the speech language therapist (SLT). SLTs usually base their assessments on observations in a clinical setting, which may not be representative of communication in daily life.

### PURPOSE

To investigate whether the inter-rater reliability of the CFCS between teacher and SLT increases when the SLT observes the child, during a communicative situation in the classroom.

### METHOD

**Design:** inter-rater reliability study

**Setting:** school providing education for physically disabled children.

**Participants:** 35 children with CP (age 4 to 18 years).

**Methods:** Functional communication of the children was classified by the own SLT and teacher using the CFCS. SLTs performed two assessments: the first without additional Instructions (i.e. the way they usually classify functional communication with the CFCS) and the second after observation of the child during a communicative situation in the classroom.

#### Analyses

For both assessments of the SLT inter-rater reliability on CFCS-level between SLT and teacher was tested by using linear-weighted Cohen Kappa coefficients.

### CFCS

The Communication Function Classification System (CFCS, [www.cfcs.us](http://www.cfcs.us)) provides 5 levels to describe everyday communication.

The CFCS is analogous and complementary to the Gross Motor Function Classification System, the Manual Ability Classification System and the Eating and Drinking Ability Classification System.

#### CFCS LEVELS

- I. Effective sender and Receiver with unfamiliar and familiar partners.
- II. Effective but slower paced Sender and/or Receiver with unfamiliar and/or familiar partners.
- III. Effective Sender and Receiver with familiar partners.
- IV. Inconsistent Sender and/or Receiver with familiar partners.
- V. Seldom Effective Sender and Receiver even with familiar partners.

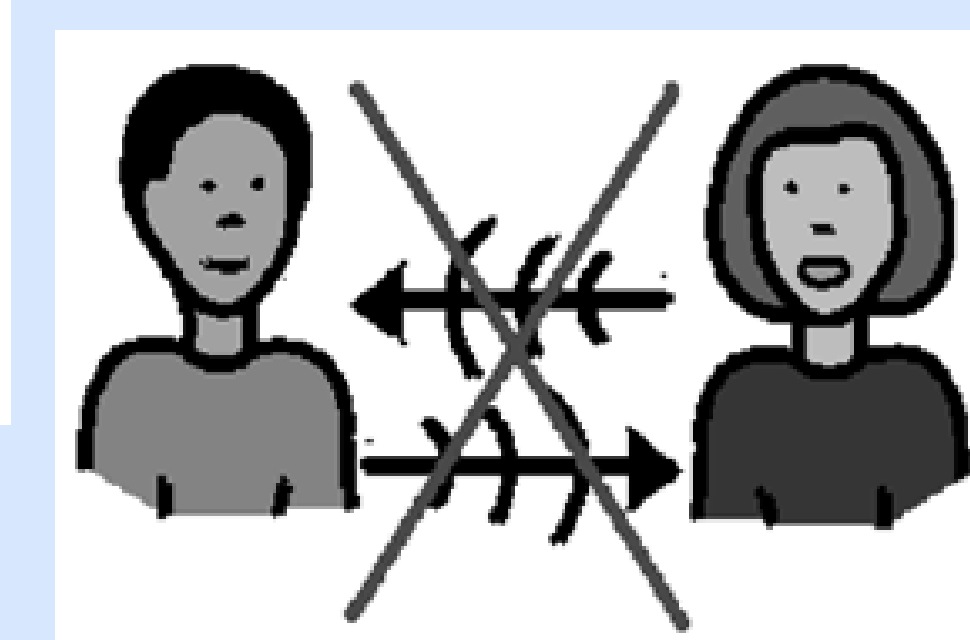
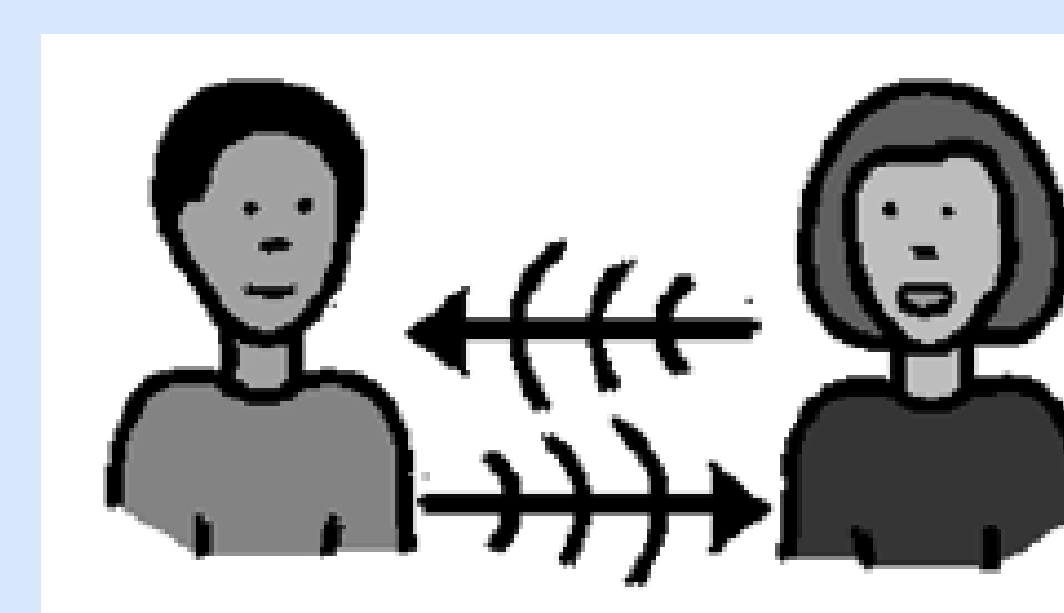
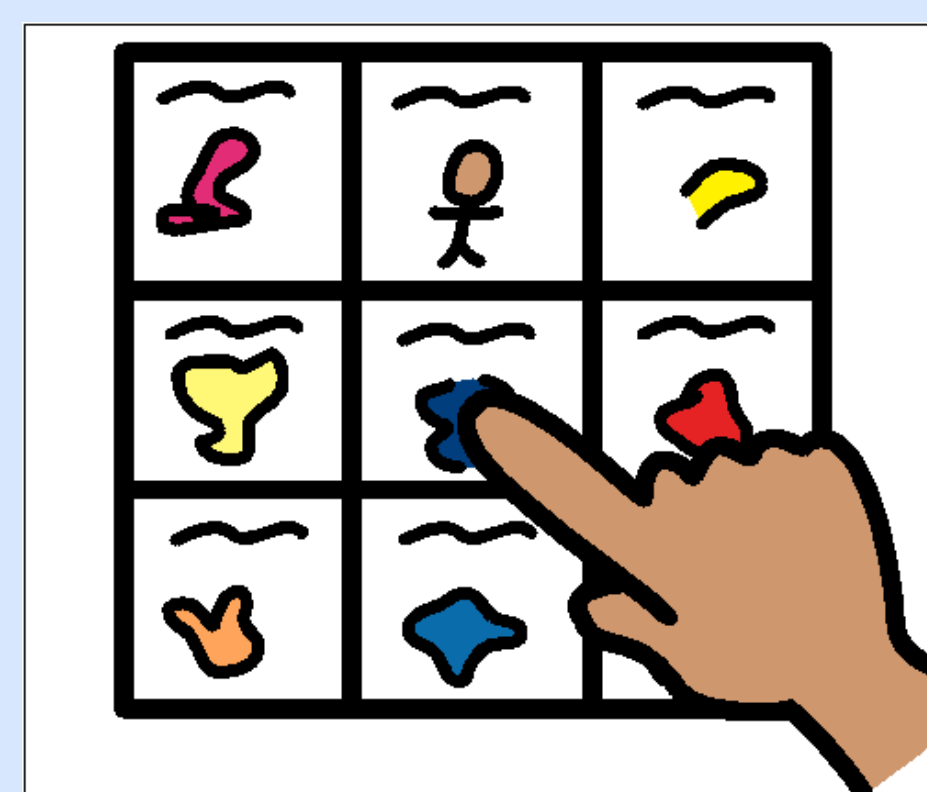
### RESULTS

#### Participants characteristics:

	N = 35	
Mean age (yrs, range)	13 (4-18)	
GMFCS (in 4 unknown)	I	3
	II	4
	III	4
	IV	5
	V	15
Alternative and Augmentative Communication (AAC)	26	

**Inter-rater reliability** (weighted Kappa, Kw) before and after observation in the class room

	N	Kw before	Kw after
Total group	35	0.60	0.70
Children with AAC	26	0.20	0.61
Children without AAC	9	0.67	0.67



### CONCLUSION:

Inter-rater agreement of CFCS classification between teacher and SLT increased after observation in the classroom, especially for children with AAC. Professionals should base their CFCS assessment on observation of functional communication in everyday situations, for example in a classroom.