

First experiences with the PEDI-CAT in the Netherlands



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Background

The Pediatric Evaluation of Disability Inventory Computer Adaptive Test (PEDI-CAT) is an instrument assessing daily functioning of children and adolescents (0-20 yrs). The PEDI-CAT has been translated in Dutch.


Aim

The purpose of this study was to examine the construct validity of the Dutch PEDI-CAT, and to evaluate the experiences of parents in using the PEDI-CAT.

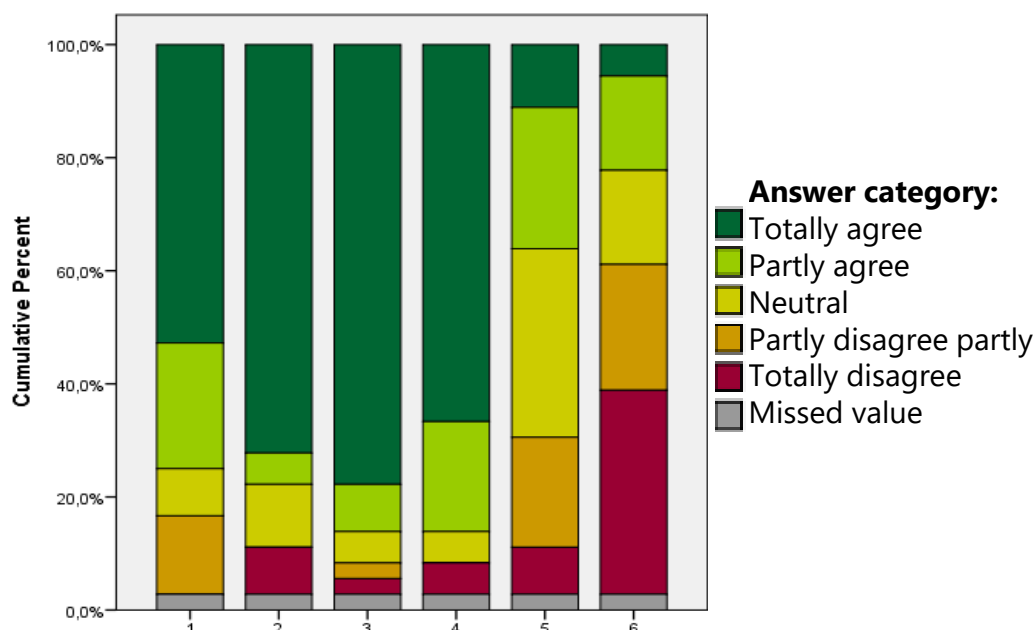
Characteristics of respondents	Children with Disabilities (n=36), n (%)	Children without Disabilities (n=45), n (%)
Parents:		
Gender (female)	33 (91.7)	35 (77.8)
- No high school	0 (0)	0 (0)
- High school graduate	5 (13.9)	2 (4.4)
- Intermediate vocational training	11 (30.5)	8 (17.8)
- Higher vocational training	20 (55.6)	35 (77.8)
Children		
Gender (female)	16 (44.4)	20 (44.4)
Age (years)		
1	2 (5.6)	19 (42.2)
2	16 (44.4)	14 (31.1)
3	18 (50.0)	12 (26.7)
Diagnosis		N.A.
- Central neurological disorders	14 (38.9)	
- Neuromuscular/progressive disorders	3 (8.3)	
- Syndromes/Chromosomal developmental delay	16 (44.4)	
- Disorder of musculoskeletal system	2 (5.5)	
- Others	1 (2.7)	

Methods

Parents of 1- to 4-yr old children with various disabilities receiving pediatric rehabilitation care were asked to fill in a questionnaire, consisting of items from the Dutch PEDI-CAT and questions focusing on their perspectives regarding digital questioning and the content of the PEDI-CAT. The data of these children were compared with data of typically developing children in the same age range.

Domain	Construct	Answer categories
Daily Activities - Eating & Mealtime - Getting Dressed - Keeping Clean - Home Tasks	Performance of activities of daily life	<ul style="list-style-type: none"> Unable: if the child can't do, doesn't know how or is too young. Hard: if the child does with a lot of help, extra time, or effort. A little hard: if the child does with a little help, extra time or effort. Easy: if the child does with no help, extra time or effort, or child's skills are past this level. I don't know: if respondent reports not knowing. 
Mobility - Basic movement and transfers - Standing and walking - Steps and inclines - Running and playing, including a separate wheelchair scale		
Social/Cognitive - Interaction - Communication - Everyday cognition - Self management	Management of important tasks of daily life	<ul style="list-style-type: none"> Adult/caregiver has full responsibility Adult/caregiver has most responsibility Adult/caregiver and child share responsibility Child has most responsibility Child takes full responsibility
Responsibility* - Organization & Planning - Taking Care of Daily Needs - Health Management - Staying Safe		

*Responsibility domain not used in present study



Topics

- The questions are clear
- I like I could fill in the questionnaire at my own location
- I like I could fill in the questionnaire at my one time
- I like it was a digital questionnaire instead of a paper
- The questions provide a good picture of daily functioning of my child
- Completing the questionnaire has provided me new insights about my child

Acknowledgements

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Results

The normative scores of the children with disabilities (n=36) were significantly lower than the scores of the reference group (n=45; all domains $p < .001$).

In general the parents were positive about digital questioning. Some parents felt items were too difficult for young children with disabilities and reported this might lead to an incorrect picture.

Table 1 The normative scores of the Dutch children with disabilities and the scores of the reference group

Domain	Median scores (min-max) Dutch children with disabilities (n=36)	Median scores (min-max) reference group (n=45)
Selfcare*	35.50 (10-58)	52.00 (34-74)
Mobility*	27.50 (10-66)	55.00 (31-76)
Social/cognitive*	40.50 (10-60)	50.00 (25-66)

* $p < .001$

Conclusions

- The 'known-groups' validity of the PEDI-CAT appears to be good for 1-to 4-yr-old children.
- Parents like the digital use, making it possible to fill in the questionnaire at their own place at their own time.
- The PEDI-CAT does not provide new insights to parents; they know their child best.