

# PEDI-CAT: Cross-cultural validation

## Scores of children in the Netherlands compared with the original USA scores



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### Background

Recently, the PEDI-CAT has been developed. It measures performance of functional skills, using Computer Adaptive Testing (CAT), for children and youths 0-20 years. The PEDI-CAT is a parent-report measure consisting of an item bank of 276 functional activities divided into four domains. The PEDI-CAT has been translated in Dutch (NL).

The aim of this study was to examine cross-cultural validity of the PEDI-CAT for children in the Netherlands.

### Methods

Parents of typically developing children (1-11 yrs old). Open invitation (schools, sports clubs, etc). 107 parents completed the Dutch translation of the PEDI-CAT, with 10-12 children in each age group.

Characteristics respondents	N (N total = 107)
Gender (female)	83 (77.6%)
Native language (Dutch)	99 (92.5%)
Level of education	
- No high school	1 (0.9%)
- High school graduate	11 (10.3%)
- College graduate	32 (29.9%)
- Post graduate	63 (58.9%)
Child's gender (female)	59 (55.1%)

### Results

Comparison of mean Dutch **normative scores** with normative scores of USA sample

Domain	T-scores (SD) NL (n=107)	T-scores (SD) USA (n=2205)	t-value
Daily Activities	49.4 (8.0)	50.0 (10.0)	-0.60
Mobility	51.9 (9.0)	50.0 (10.0)	1.85
Social/Cognitive	45.5 (7.4)	50.0 (10.0)	-4.50*
Responsibility	49.8 (7.2)	50.0 (10.0)	-0.18

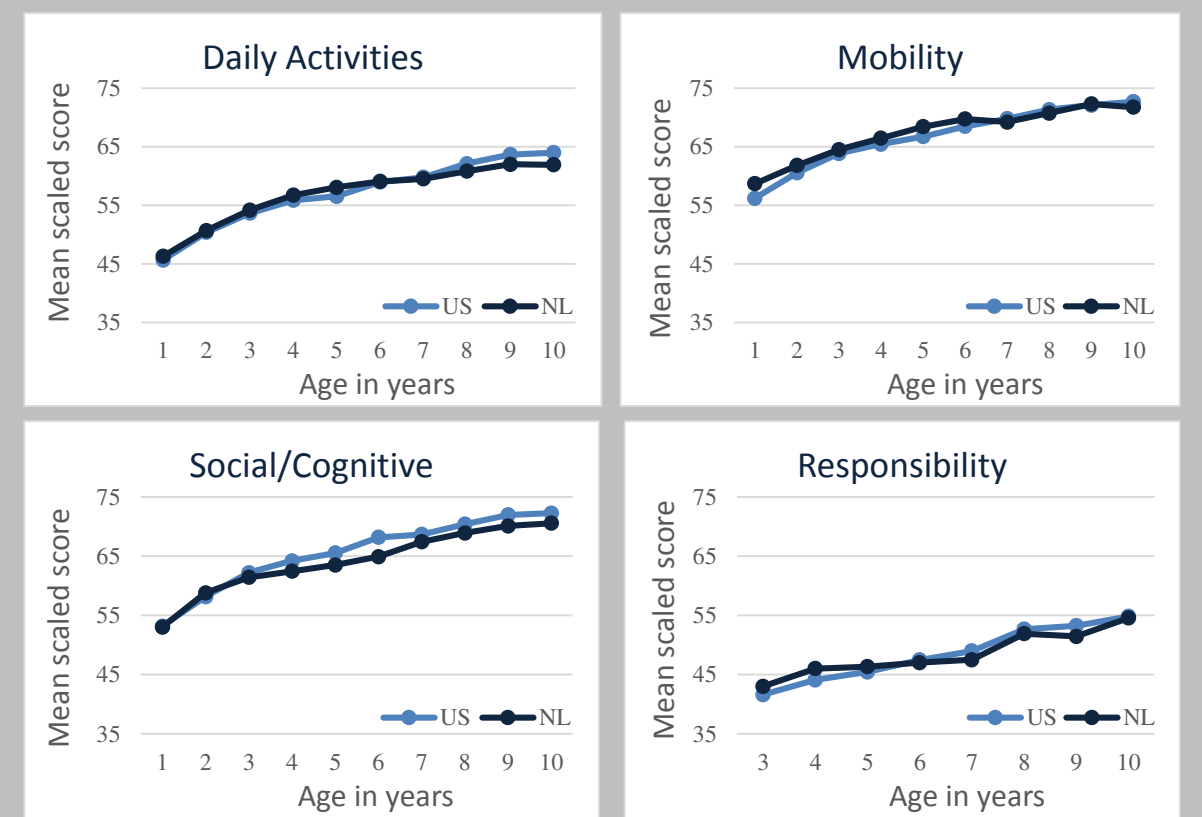
\* p < .01

### Deviating person fit scores (<-2 or >+2)

The fit score provides information about whether responses to questions were close to expected.

Domain	n
Daily Activities	7 (6.5%)
Mobility	4 (3.8%)
Social/Cognitive	3 (2.8%)
Responsibility	4 (4.8%)

Comparison of mean **scaled scores** with **scaled scores** of USA sample (all p > .05)



### Conclusions

Overall, no differences were found between the scores of children (1-11 yrs) in the Netherlands and the USA sample. In the Social/Cognitive domain some challenges arise. Dutch children showed lower normative scores compared to the original USA sample. However, only few children showed deviating fit scores.

### And next

- Enlarge sample; children and youths 0-20 yrs
- Examine equivalence of scores, person fit, item fit, and item discrimination