

A priori defined approach

Result

Conceptual level

Critical evaluation of items relative to a pre-defined framework

Here: Self-reported capacity to perform activities based on the ICF

Removal of 3 items

Pain intensity

Headaches

Sleeping

Rasch analysis

Identification of misfitting items, and exploration of cause of misfit

Here: DIF, disordered response thresholds, location dependence, multidimensionality, statistical redundancy

Removal of 2 items

Reading (due to considerable DIF)

Lifting (due to statistical redundancy)

NDI- 5: Excellent fit to Raschmodel

Classical test theory

Establish properties of shortened scale with CTT-based approaches

Here: Stability, responsiveness, concurrent validity

Properties of NDI-5 based on CTT statistically similar to those of original NDI-10.