

Performance of the EQ-5D-Y Interviewer Administered version in young children

Background: The modes of administration to measure HEALTH-RELATED QUALITY of LIFE in children are limited, especially for younger children who understand the concept of health but are unable to self-complete an outcome measure due to literacy skills. The need for more INTERVIEWER ADMINISTERED versions has become incredibly important to allow for self-report instead of relying on proxy report, which has been found to be problematic in some cases. It has been suggested that children as young as FIVE YEARS are able to reliably self-report on their health. The EQ-5D-Y-3L assesses PHYSICAL (*Mobility, Self-care/Looking After Myself, Usual Activities*) and psychological well-being (*Pain/Discomfort and Feeling Worried, Sad or Unhappy*). Each dimension is scored on a severity scale of 'no problems', 'some problems' and 'a lot of problems'. There is an additional question scoring general health on a Visual Analogue Scale ranging from 0 (worst health) to 100 (best health).

AIM

Determine the VALIDITY* and RELIABILITY of the EQ-5D-Y-3L Interviewer Administered version in 5-7 year olds COMPARED to 8-10 year olds**

*The ability of an outcome measure to accurately measure what it intended to
**The ability of an outcome measure to consistently measure what it intended to (in similar conditions)

SIGNIFICANCE

The newly developed EQ-5D-Y-3L Interviewer Administered version has yet to be evaluated and has the potential to lower the age for self-report

The EQ-5D-Y-3L Self-Complete version has already been validated in South African children from the age of 8 years and were thus used as a comparator group for the performance of the Interviewer Administered version in children aged 5-7 years

METHODOLOGY



FEB - JULY 2021

Data collection (EQ-5D-Y-3L-IA, Moods and Feelings Questionnaire, Faces Pain Scale-Revised, WeeFIM and cognitive debriefing + test-retest 48 hours later)

SEPTEMBER 2021 - ONGOING

MSc Physiotherapy thesis completion

JULY 2020 - JAN 2021

Approval from HREC, WCED, Schools and Healthcare facilities

AUGUST 2021

Data capturing
Data analysis

SAMPLE

A total of n=388 divided into:

5-7 year olds (n= 177)

8-10 year olds (n= 211)

RECRUITMENT

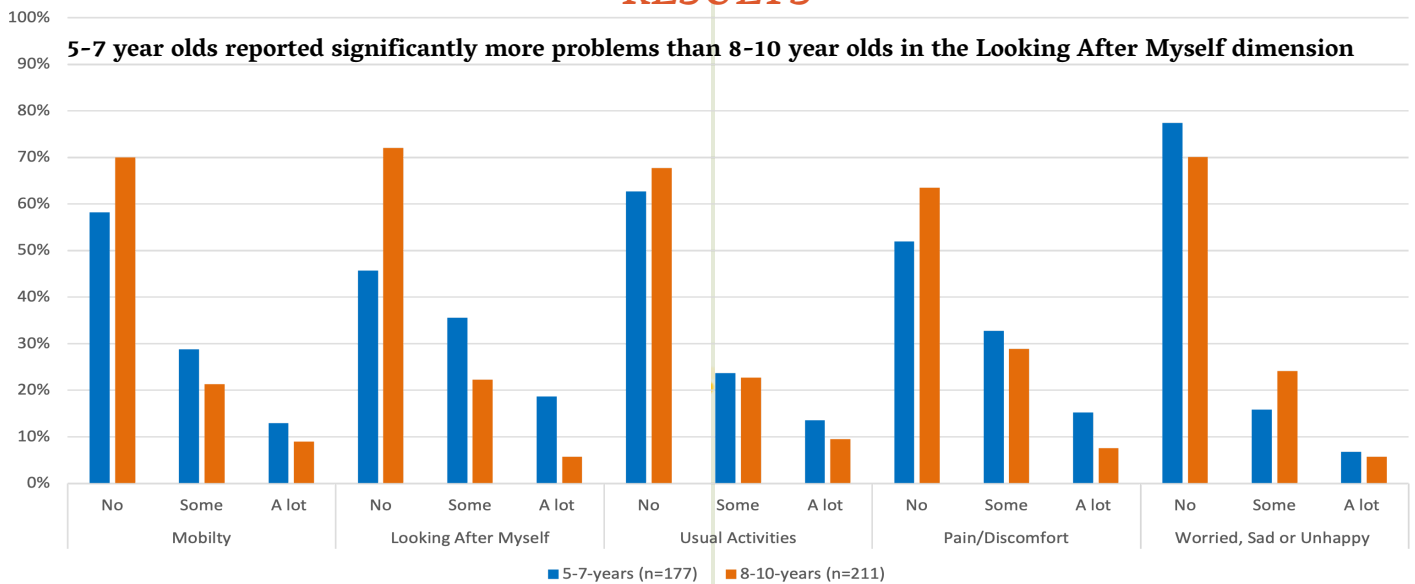
Paediatric hospitals and Schools across:

Four KNOWN-GROUPS

- > Acute Orthopaedic Conditions
- > Functional Disabilities
- > Chronic Respiratory Illnesses
- > General Population



RESULTS



Known-Group Validity

Significant differences across health conditions in both age groups for utility scores ($H=18.57, p<0.001$) and VAS scores ($H=24.89, p<0.001$)

Test-retest Reliability

Fair to moderate test-retest reliability across age groups

Pain or Discomfort showing more stability in 5-7 year olds

Convergent Validity

Moderate to high associations between dimension of *Looking After Myself* and WeeFIM items of self-care in both age groups

Significant difference between age groups for upper body dressing ($p=0.013$), lower body dressing ($p=0.003$) and self-care total ($p=0.022$)

Feasibility

Less than 5 minutes to complete AND no missing values

CONCLUSIONS



The EQ-5D-Y-3L Interviewer Administered version proved to be VALID and RELIABLE in children aged 5-7 years with no systematic differences between 8-10 year olds



Younger children reported more problems with *Looking After Myself* due to developmental difficulty by reporting problems with advanced dressing tasks such as buttons and shoelaces