Assessing Well-Being in Younger Populations: A Systematic Review of Multidimensional Instruments for Economic Evaluations

Z. Guo (Zhirui), D.M.N. Diaz, S.A. Lipman & L. Hakkaart-van Roijen

Erasmus School of Health Policy & Management



Background





PhD candidate, guo@eshpm.eur.nl

eHealth Junior aims to provide mobile health solutions for chronically ill children, to improve their well-being.





- Younger populations deserve special attention, adults' PROMs may not be suitable for them
- To comprehensively evaluate health care interventions in younger populations, outcome measurement in economic evaluation may need to be expanded beyond health-related quality of life to well-being.

Methods



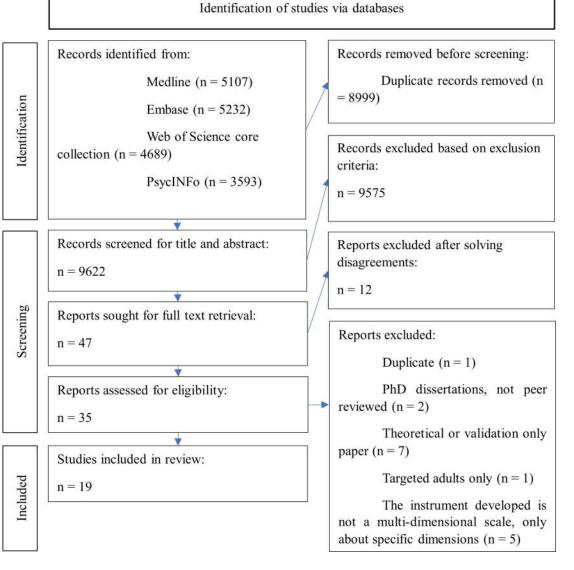
Using algorithm to re-order screening records, saving time and resources.



But some relevant ones may be omitted (not screened).

Flowchart

Data extraction form



Note: four additional instruments that were not included in the dataset were identified from the screened abstracts or were mentioned in the full text of relevant studies. Two more instruments were added during the peer review process

Bibliometrics	
Author(s)	
Name of the journal	
Discipline of the journal	
Definition of well-being	
Theory base of the instru	l-
ment	
Name and acronym	
Type of report/responder	
Context/purpose of deve	1-
opment	
Original language of the	ne
instrument	
Number of Dimensions	
Dimensions of instrument	
Total number of items	
Answer scale	
Population of the instru	1-
ment	
Adults	

Qualitative empirical data

Empirical data testing the instrument
Administration mode

Sample size

Sample age

Difficulty

Reliability

Construct validity

Concurrent validity

Other validity

Respond time

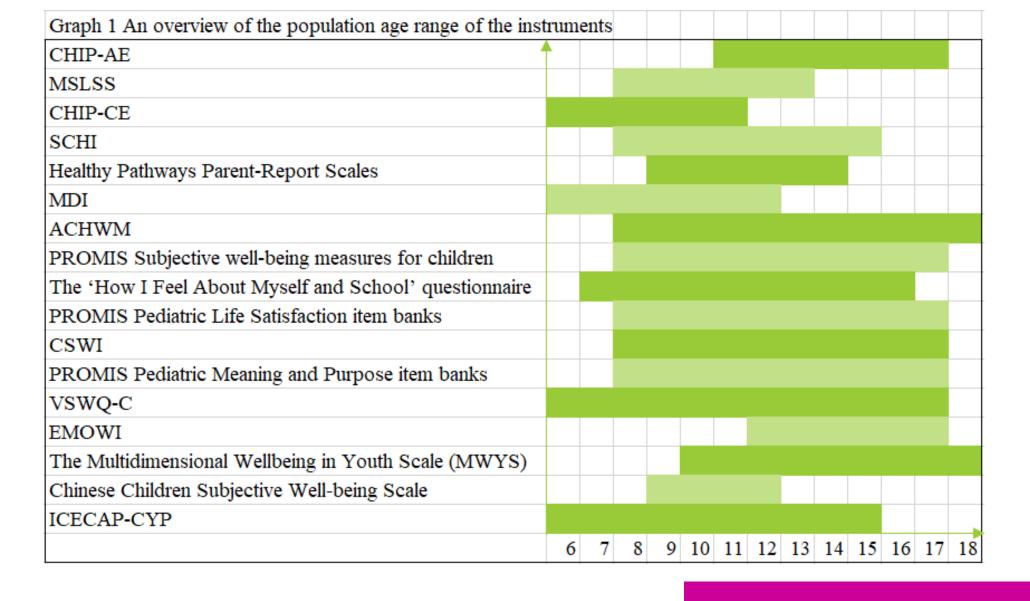
Responsiveness

Other psychometric data

Suitability for economic evaluation

Results

- On average, instruments has 5 dimensions and 38 questions
- . Dimensions that capture children's daily experiences, such as education and after-school activities are also frequently considered
- . 84% published after 2010, 60% from the UK and the US, 76% in English language, 68% of study included interview
- 40% mentioned administration mode, 84% self-report, 12% self-report + parent proxy, 60% did not specify recall period, only 2 instruments has pictorial representation
- Only 1 did not include psychometrics data (validity, reliability)
- Suitability for economic evaluation: ICECAP-CYP

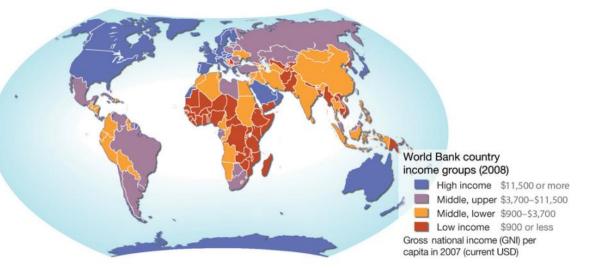




HRQoL vs. well-being? Some overlap, but former emphasize ill-being (e.g., bodily pain, discomfort, restriction of activity and mobility, disorders etc.), whereas the latter focuses on positive aspects such as happiness and satisfaction with life, as well as environmental factor such as neighborhood and living conditions.

Discussion

Low- and middleincome countries need more attention.





Testing whether the instrument is designed and formatted appropriately for the target age group (e.g., via linguistic testing of vocabulary and reading level, cognitive level evaluation, justifying recall period and administration mode, length of instrument and formatting such as pictorial representation) is often missing.

Conclusions

Out of the 25 instruments reviewed measuring the well-being of children, only 1 instrument (ICECAP-CYP) is designed and suitable for economic evaluation. Other approaches to measure well-being besides the capability approach needs further research, especially for the younger populations.