

SCOPING REVIEW PROTOCOL

Title: Use of KIDSCREEN health-related quality of life instruments in the general population of children and adolescents - A scoping review

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BACKGROUND

In the Norwegian Government's strategy for good mental health for the period 2017-2022, one of the main recommendations is to gain more knowledge on quality of life (QoL) in different parts of the population (1). Mental health problems is regarded as one of the most serious public health concerns of our time (2). According to the World Health Organization (WHO) 10-20 percent of children and adolescents under 18 have mental problems, and the problem is increasing (3). Approximately half of these are assumed to have diagnosable mental illnesses, which require treatment (4). Ensuring good health and improving QoL for all is also one of The United Nation's (UN) sustainability goals (5). Increased knowledge about health related quality of life (HRQoL) will contribute with new content in physical and mental health and encourage development and interventions in public health (6). This review is a part of the *Starting Right* study (<https://www.godtbegynt.no>) whose goal is to solve health and societal challenges, specified as improving public health, enhancing quality of life, and reducing social inequalities in health. One of the validated instruments used in *Starting right* is the KIDSCREEN 27 questionnaire, which is one of the most used questionnaires for measuring HRQoL in Europe. The KIDSCREEN instrument exists in three different versions, both for children and parents consisting of 52, 27, and 10 items. KIDSCREEN 27 measures physical well-being and psychological well-being in relations to parents, friends, social support and school (7).

HRQoL is a subjective term and multidimensional construct including physiological, psychological, and functional aspects of general well-being (8). The increased focus on children and adolescents' subjective experience represents an evident shift in the last decade, from objective to subjective measures (9)

It is important to assess children and adolescents' HRQoL systematically, to be able to identify children and subgroups that might be at risk of poor HRQoL (9). This is crucial in the trajectory of fulfilling the United Nations Sustainable Development Goal 3 of ensuring good health and improving HRQoL for all (5, 10). Few population-based studies on children and adolescents' HRQoL have been carried out (11). However, numerous studies on cancer and chronic illnesses have been conducted (9). Furthermore, HRQoL has recently become a major health outcome in the public health area (12, 13).

To the best of our knowledge, the application of KIDSCREEN instruments in studies of children and adolescents in the general population have not previously been systematically reviewed. The general population refers to all individuals aged 6–18 years old recruited from a population with no specific disease or clinical condition. However, the KIDSCREEN instrument is increasingly being used in public health- and large-scaled population-based studies. Hence, the need for a review of how the instrument has been used in this context is highlighted.

STUDY AIM

The aim of the present scoping review is to provide an overview of and map studies using KIDSCREEN in the general population of children aged 6–18 years, as well as to describe the country of origin, the study design, whether HRQoL is a main focus, the version of KIDSCREEN instrument(s) being used, the age group, if a cut point for KIDSCREEN is discussed, and the study context.

RESEARCH QUESTIONS

- In which Country is the study performed?
- Which study design is used in the study?
- Is HRQoL a main focus in the study?
- Which version of the KIDSCREEN instruments has been used?
- Which age group is included?
- Does the study describe a cutpoint for HRQoL?
- Which study context was the instrument used?

SEARCH STRATEGY

To prepare the searching process, an identification of the main concept of the study aim was guided by the elements of the PICO structure (14, 15), see table 1.

Table 1

Population	Children and adolescents age 6-18 years old
Interest	Studies using KIDSCREEN instruments
Comparison	----
Outcome	In which country is the study performed? Which study design is used in the study? Is HRQoL a main focus in the study? Which version of the KIDSCREEN instruments has been used? Which age group is included? Does the study describe a cutpoint for HRQoL? Which study context was the instrument used?
Context	General population

To identify studies using KIDSCREEN questionnaires, a systematic literature search was carried out in the following databases: CINAHL, SocINDEX, MEDLINE, Embase, APA PsychINFO, Eric and Scopus. The databases are chosen to cover a broad sample of the literature. The search strategy will include “kidscreen” as the main keyword, to identify relevant studies. The search will be performed in collaboration with an experienced librarian. The Preferred Reporting Items for Scoping Review checklist will be used to form the base of the upcoming review (16).

INCLUSION AND EXCLUSION CRITERIONS

Eligibility criteria will be conducted to ensure consistency, validity, and reliability.

INCLUSION	EXCLUSION
Studies using KIDSCREEN instruments in the general population	Studies performed in a clinical setting
If studies do not include “KIDSCREEN” in title or abstract, but “quality of life,” QoL, HRQoL, or “well-being” is present, the full text must be searched to find if KIDSCREEN instruments have been used.	Studies in a foreign language
Children aged 6-18 years old	Conference abstracts
Primary studies/original research publications	Editorials
English language	Opinion articles
	Scientific statement
	Guideline
	Protocol
	Review article

SCREENING PROCESS

Six researchers will take part in the screening process. The screening process will be done in several shifts: 1) Title and abstract will be assessed for inclusion, independently, in pairs. 2) Records in line with our inclusion criteria will be read in full text. This will also be done in pairs. The first author will screen all records, to ensure consistency. Any cases of disagreements during the screening process will be resolved through consensus discussion with all the authors. Rayyan will be used for managing the screening process, and for using the opportunity to “blind on” and ensure consistency between the reviewers. The screening process will be visualised in the PRISMA flow diagram (Figure 1). The aim is to map a topic, not rank it, therefore quality assessment of each study will not be done (17)

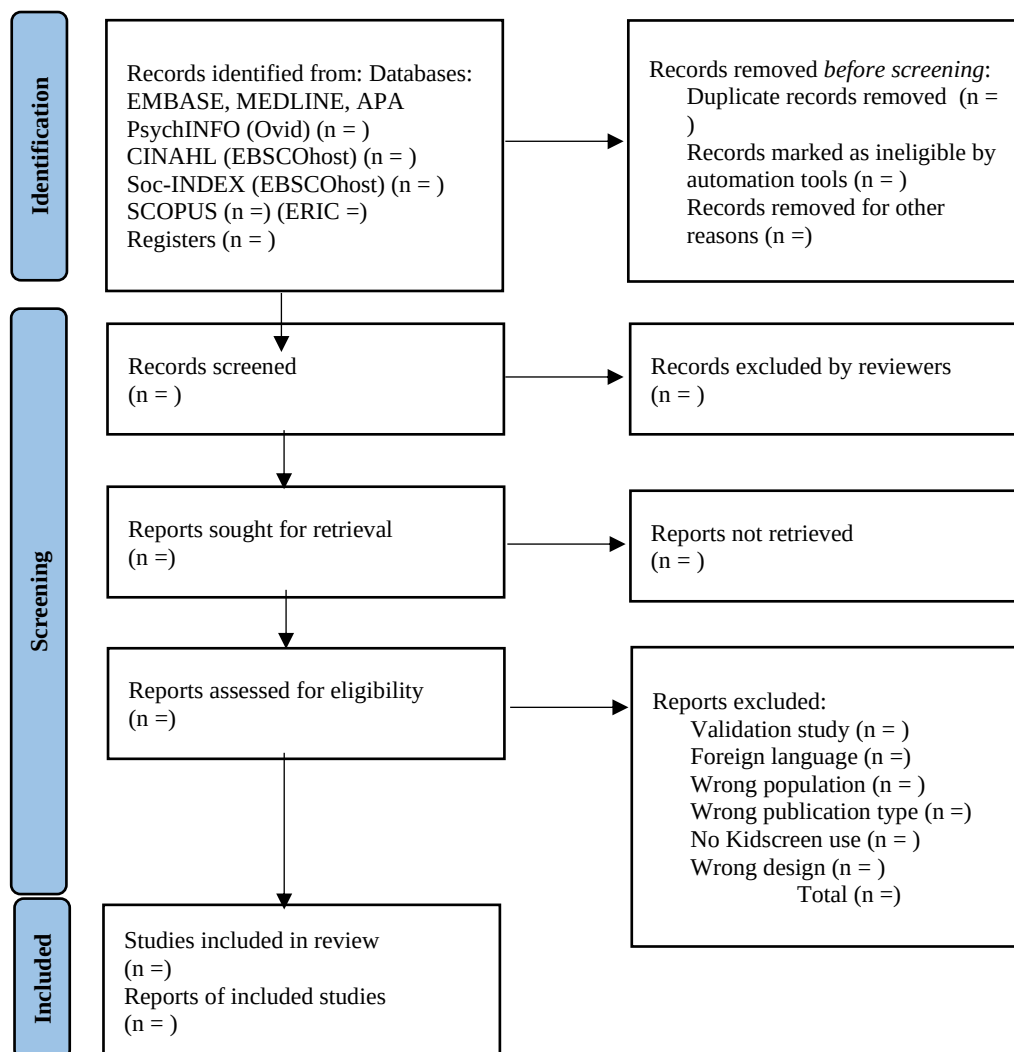


Fig. 1 Flow chart of inclusion. Source: Page MJ, McKenzie JE, Boutron I, Hoffmann TC, Mulrow CD, et. al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

DATA COLLECTION

The research team will develop the data charting spreadsheet in Excel, and we will test the suitability of the sheet by independently extracting data from 10 articles. After the initial data extraction all authors will discuss the suitability of the spreadsheet and modify it, if necessary. Further, data will be

extracted from individual studies independently, in pairs. The first author will extract data from all included reports.

RESULTS

The results will be presented in text, tables, and figures in line with the aim of the scoping review.

ETHICS AND DISSEMINATION

The upcoming scoping review will follow All European Academies' (ALLEA) four fundamental principles for research integrity: reliability, honesty, respect and accountability (17). Reliability will be ensured using a clearly declared method. The research process will be truthfully described to follow the principle of honesty. The method used in the article will get proper credit, and the investigators will take full responsibility for the studies. The upcoming review will be submitted to a peer reviewed journal.

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