Systemaattinen kirjallisuuskatsaus: suunnittelu, toteutus ja raportointi

Minna Stolt, TtT, professori (ma.)

Hoitotieteen laitos, Turun yliopisto

Satakunnan hyvinvointialue

26.2.2025 Hoitotieteen professiokohtainen tutkimusfoorumi

UNIVERSITY OF TURKU

Reviews are much needed

Original article

Nearly 80 systematic reviews were published each day: Observational study on trends in epidemiology and reporting over the years 2000-2019

Falk Hoffmann [a], Katharina Allers [a], Tanja Rombey [b c], Jasmin Helbach [a], Amrei Hoffmann [a], Tim Mathes [b], Dawid Pieper [b]

Show more ∨

+ Add to Mendeley   ⁰⁰ Share   💬 Cite

Highlights

- In 2019, a total of 80 systematic reviews are published per day.

- This is a large increase compared to 2000 and 2010 (4 and 14 per day).

Review Article

Meeting the review family: exploring review types and associated information retrieval requirements

Anthea Sutton* (iD), Mark Clowes, Louise Preston & Andrew Booth

School of Health and Related Research (ScHARR), The University of Sheffield, Sheffield, UK

Abstract

Background and objectives: The last decade has witnessed increased recognition of the value of literature reviews for advancing understanding and decision making. This has been accompanied by an expansion in the range of methodological approaches and types of review. However, there remains uncertainty over definitions and search requirements beyond those for the 'traditional' systematic review. This study aims to characterise health related reviews by type and to provide recommendations on appropriate methods of information retrieval based on the available guidance.

Methods: A list of review types was generated from published typologies and categorised into 'families' based on their common features. Guidance on information retrieval for each review type was identified by searching PUBMED, MEDLINE and Google Scholar, supplemented by scrutinising websites of review producing organisations.

Results: Forty-eight review types were identified and categorised into seven families. Published guidance reveals increasing specification of methods for information retrieval; however, much of it remains generic with many review types lacking explicit requirements for the identification of evidence.

OF TURKU

Number of reviews is increasing

- **Systematic reviews are much needed to synthetize existing evidence.**

- **Requirement to produce new knowledge/evidence.**

Content

1. Give examples of the review process
2. Provide hints and tips how to conduct a review
3. To point out some pitfalls to avoid
4. Reporting of reviews

❖Review question(s)
❖Databases
❖Search terms
❖Screening
❖Data analysis
❖Reporting

UNIVERSITY OF TURKU

Literature review process
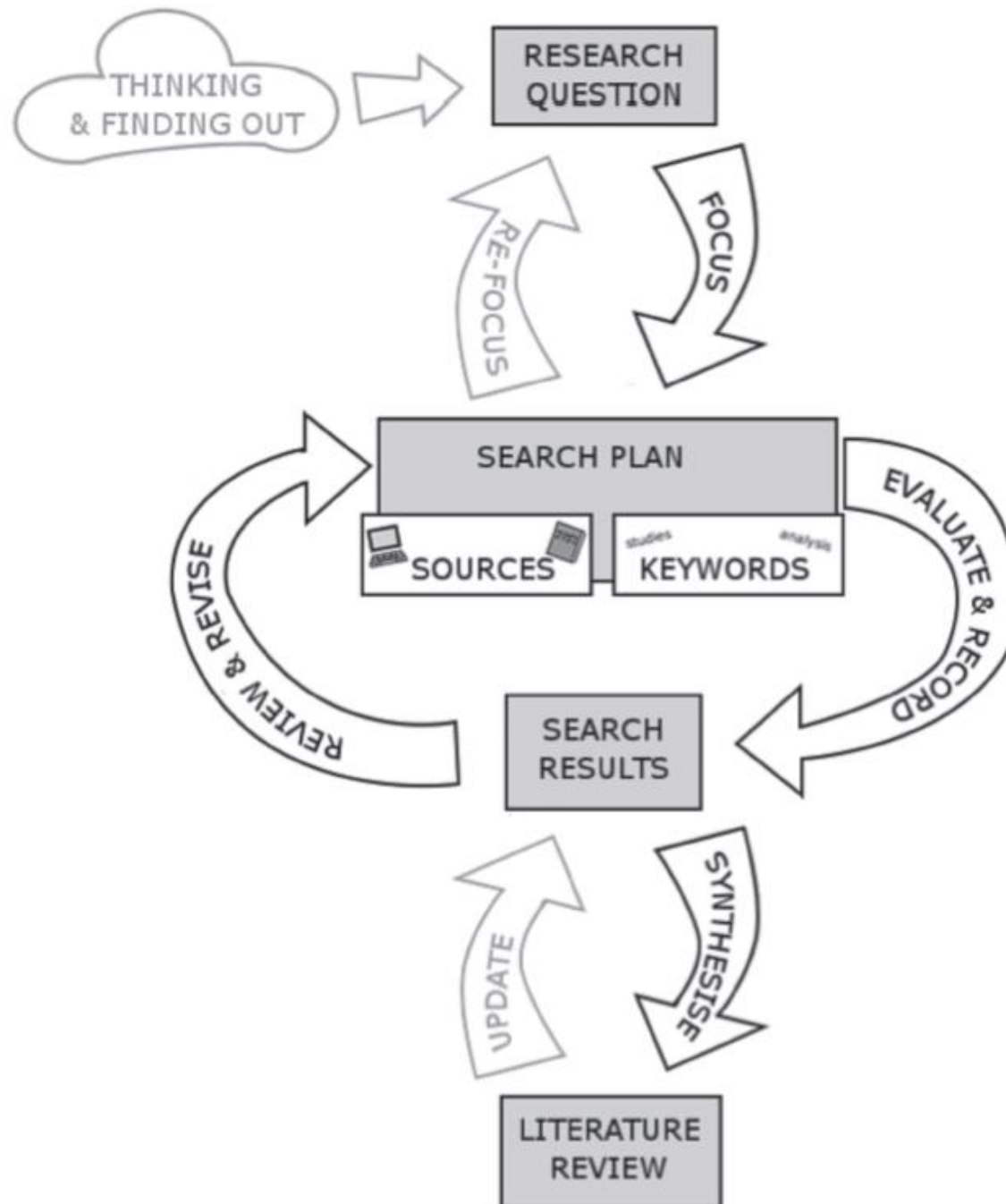
UNIVERSITY OF TURKU

Planning the review

Careful planning is the basis

- Goal and aim of the review

- Type of the review

- Formulate the review aim and questions

- Search protocol

- Data extraction and analysis plan

- Reporting

- Registration of your review protocol to PROSPERO ?

UNIVERSITY OF TURKU

Types of research questions

- Literature review is question-led
- How the data are identified, collected and presented is determined by:
  - Purpose of the review
  - Review questions
  - Intended outputs
  - Intended audience
        Booth et al. 2016, p. 13

- ***Effectiveness***: What effect does intervention X, compared with intervention Z, have on outcome B?

- ***Methodology question***: What research methods have previously been used to investigate phenomenon X? What are the strenghts and weaknesses of such method?

- ***Conceptual question***: How has phenomenon X been identified and defined?

UNIVERSITY OF TURKU

Search:
-databases
-search terms

Databases

- Depending on the aim of the review

- **Medline**: more than 25 million references to journal articles in life sciences with a concentration on biomedicine (the U.S. National Library of Medicine®)

- **CINAHL** (Cumulative Index of Nursing and Allied Health Literature): nursing and allied health literature

- **ERIC** (Educational Resources Information Center): educational-related literature

- **PsycINFO**®: psychology and related disciplines such as psychiatry, education, computers, medicine, nursing, pharmacology, law, linguistics, and social work.

- **PEDro:** Physiotherapy Evidence Database

- **Embase:** is a highly versatile, multipurpose and up-to-date biomedical database.

- **Scopus:** peer-reviewed literature – scientific journals, books and conference proceedings, topics: science, technology, medicine, social sciences and arts and humanities

- And many more…

UNIVERSITY OF TURKU

Coverage of databases: in content

- Rationale for database selection
- Empirical evidence available about database *coverage from content*
- For example:
  - Subirana M, Solá I, Garcia JM, Gich I, Urrútia G. 2005. A nursing qualitative systematic review required MEDLINE and CINAHL for study identification. J Clin Epidemiol. 2005 Jan;58(1):20-5.
  - Bahaadinbeigy K, Yogesan K, Wootton R. 2010. MEDLINE versus EMBASE and CINAHL for telemedicine searches. Telemed J E Health. 2010 Oct;16(8):916-9.
  - Rathbone J, Carter M, Hoffmann T, Glasziou P. 2016. A comparison of the performance of seven key bibliographic databases in identifying all relevant systematic reviews of interventions for hypertension. Syst Rev. 2016 Feb 9;5:27.
  - Slobogean GP[1], Verma A, Giustini D, Slobogean BL, Mulpuri K. 2009. MEDLINE, EMBASE, and Cochrane index most primary studies but not abstracts included in orthopedic meta-analyses. J Clin Epidemiol. 2009 Dec;62(12):1261-7.

UNIVERSITY OF TURKU

Search process

- Search terms
- Databases
- Limitations
- Inclusion and exclusion criteria
- Data retrieval
- Extraction
- Critical appraisal /assessment of study quality

Search terms – sometimes difficulties

- Foot health vs. foot problem
- Search terms were musculoskeletal disorders, foot, lower limb, lower extremity, leg, disorder, problem, complaint, dysfunction, pathology, deformity, condition, nurse, nurses, nursing, and combinations of these

- Keywords or MeSH terms

UNIVERSITY OF TURKU

MeSH terms

- the Medical Subject Headings (MeSH)
- a vocabulary that gives uniformity and consistency to the indexing and cataloging of biomedical literature.
- arranged in a hierarchical manner called the MeSH Tree Structures
- updated annually

Previous Indexing:

- Foot/abnormalities (1966-1987)

All MeSH Categories
   Diseases Category
      Musculoskeletal Diseases
         Foot Deformities
            Foot Deformities, Acquired
               Bunion +
               Hallux Limitus
               Hallux Rigidus
               Talipes +
            Foot Deformities, Congenital
               Talipes +
               Tarsal Coalition
            Hallux Valgus
            Hallux Varus
            Hammer Toe Syndrome
            Metatarsal Valgus
            Metatarsus Varus

Defining search terms

- Mobility: walk, mobility, move, movement, moving, exercise, ambulatory, physical activity

- Environment, life space, architechture + MeSH terms

- Older people related synonyms

Search strategy:
(walk*[Title/Abstract] OR mobility[Title/Abstract] OR move[Title/Abstract] OR movement[Title/Abstract] OR moving[Title/Abstract] OR excercis*[Title/Abstract] OR ambulat*[Title/Abstract] OR "physical activ*"[Title/Abstract]) AND (environment*[Title/Abstract] OR "life space"[Title/Abstract] OR architect*[Title/Abstract] OR "Environment design"[Mesh] OR "Interior Design and Furnishings"[Mesh] OR "Facility Design and Construction"[Mesh]) AND ("older adult*"[Title/Abstract] OR "older people"[Title/Abstract] OR elderly[Title/Abstract] OR elder[Title/Abstract] OR resident*[Title/Abstract] OR "ageing population*"[Title/Abstract]) AND ("nursing home*"[Title/Abstract] OR inhouse[Title/Abstract] OR "residential care"[Title/Abstract] OR community[Title/Abstract] OR "long-term"[Title/Abstract]) AND (english[Filter])

Keywords search

- Selecting **keywords** – words or phrases that describe your topic as simply and distinctively as possible – can make searching much easier.

- Selecting keywords can be a straightforward process, if the words describing your topic have a single meaning, but more often you need to think carefully about the keywords you use to express your ideas.

UNIVERSITY OF TURKU

- Specific terms:
  - Start your search by using words that are specific to your research topic and, ideally, not common elsewhere.

- Similar and related terms:
  - Are there other words with similar meanings? Using these alternative terms will find a different set of results.

- Spellings and terminology:
  - Can your search term be spelt in different ways? UK and US spellings often differ, e.g. *behaviour* vs. *behavior*. Some databases and search engines don't automatically call up the US spelling or terminology.

- Singulars and plurals:
  - Some databases do not automatically look for single and plural versions of a word. Try both. Usually people and things are plural, ideas are expressed as singular.
- Combining terms:
  - You can usually search for phrases using quotation marks e.g. "nursing education", and can combine terms using AND, OR and NOT, e.g. nursing AND education (will find documents containing both words), nursing OR education (will find documents containing either word), nursing NOT education (will find documents which do not mention advertising).
- Truncating terms:
  - Most databases will allow you to search for terms that begin with the same set of letters, using a symbol such as * $ or ? For example, educat* can search for education, educative, educations, educated etc. The symbol used will vary between databases so check the help screens to find out which one to use.

Search concept tools

PICO – Reviews of interventions for health

- **P** Patient or population
- **I** intervention
- **C** comparator
- **O** Outcomes

- Useful webpage: https://guides.library.vcu.edu/health-sciences-lit-review/question

SPIDER – Qualitative evidence synthesis

- **S** Sample
- **PI** Phenomenon of Interest
- **D** Design
- **E** Evaluation
- **R** Research type

SPICE – Social science questions (designed for librarian research questions)

- **S** Setting – Where? In what context?
- **P** Perspective – For who?
- **I** Intervention (Phenomenon of Interest)– What?
- **C** Comparison – What else?
- **E** Evaluation – How well? What result?

Limitations in the search

- Think carefully are limitations needed? Review tries to locate all relevant literature…

- Language
  - English language studies usually, other languages depending on the resources

- Search level:
  - Text, abstract, title

- Time:
  - Time frame? Always have a rationale for time limit.

UNIVERSITY OF TURKU

Inclusion and exclusion criteria

Inclusion and exclusion criteria

- criteria that will be used to select articles for your literature review based on your research question.

- Inclusion criteria are the elements of an article **that must be present** in order for it to be eligible for inclusion in a literature review. Some examples are:
    - Included studies must have compared certain treatments
    - Included studies must be experimental

- Exclusion criteria are the elements of an article that **disqualify the study from inclusion** in a literature review. Some examples are:
    - Study used an observational design
    - Study used a qualitative methodology

- inclusion criteria be clearly described in detail sufficient to avoid inconsistent application in study selection (bias) and that inclusion criteria be documented in a protocol.

VCU Libraries/LibGuides, https://guides.library.vcu.edu/health-sciences-lit-review/selection-criteria

UNIVERSITY OF TURKU

Example of poorly defined criteria

Inclusion criteria	Exclusion criteria
Adult patients (18+ year)	Children
Diagnosed with type 2 diabetes mellitus	Diagnosis of type 1 diabetes mellitus
Study setting as home	Institutional or hospital settings
Focus on experiences of using technology in self-care	Focus on experiences of care in general

UNIVERSITY OF TURKU

Example of strict/well defined criteria

Inclusion criteria	Exclusion criteria
(P) participants: healthy or with specific risk factors for diseases but no specific pathology or acute medical condition (Additional information on eligibility criteria)	(a) combined PA interventions with dietary or ancillary materials that could influence the effect of the intervention (Additional information on eligibility criteria) (b) included only master athletes in their study population, (c) were not in English or German, (d) were not available in full length
age: mean age between 40 and 60 years; mean age + 1 SD < 65 years and mean age − 1 SD > 35 years.	
(I) intervention: any PA except for pure endurance training.	
(C) comparator: a passive control group that maintained usual activity level or received no intervention, non-specific supportive intervention, sham exercise or placebo.	
(O) outcomes: at least one measure of lower limb muscle strength (maximal strength, muscle power, strength–endurance), postural balance (steady-static balance, steady-dynamic balance, proactive balance, reactive balance), falls [29] or injurious falls [30].	
(S) study design: individual or cluster randomized controlled trial.	

Avoiding bias in selection studies

https://www.ncbi.nlm.nih.gov/books/NBK126701/

Guidance for Setting Inclusion Criteria To Avoid Bias in Selecting Studies

The criteria should be set a priori and based on the analytic framework or conceptual model using a protocol (see Table 2)

UNIVERSITY OF TURKU

Study selection

Study selection

- Study selection should be performed in a systematic manner, so reviewers deal with fewer errors and a lower risk of bias

- Should involve ***two independent reviewers*** who select studies using inclusion and exclusion criteria. Any disagreements during this process should be resolved by discussion or by a third reviewer – team power!

- Title and abstracts first, then full-texts
  - Full-texts availability ?

Tools for data screening

- Rayyan
  - https://www.rayyan.ai/
  - Free access

- Covidence
  - https://www.covidence.org/
  - Licenced
  - Demo: https://www.youtube.com/watch?v=2cXPjhOhqE0

UNIVERSITY
OF TURKU

Rayyan

Inclusion decisions

Undecided	0
Maybe	2
Included	3
Excluded	5

Search methods [Add new]

Uploaded References [pubmed-foothealth... 10

Keywords for include [Add new]

randomly allocated	1 🗑
randomised	1 🗑
randomly	1 🗑
trial	1 🗑
randomised controlled trial	0 🗑
randomized controlled trial	0 🗑
placebo controlled	0 🗑
controlled design	0 🗑
randomly assigned	0 🗑
controlled study	0 🗑

More >>

Keywords for exclude [Add new]

cross-sectional	3 🗑
prevalence	2 🗑
retrospective study	1 🗑
observational	1 🗑
longitudinal	1 🗑
this review	1 🗑
survey	1 🗑
randomised controlled trials	0 🗑
randomized controlled trials	0 🗑
sensitivity and specificity	0 🗑

More >>

Topics

Health Care Costs

Health Status   Adrenal Cortex Hormones

2023-09-04: Foot health

Detect duplicates | Compute ratings | Export | Copy | New search | All reviews

Showing 3 to 10 of 10 unique entries

Search: [id or title or abstract or author]

Date	Title	Authors	Rating
2023-07-01	Minna Impact of Plantar Fasciitis on Foot-Specific and Generic Health-Related Quality of Life in King Khalid University Hospital, Saudi Arabia.	Alshammari SA; Alshwieer M...	
2023-07-27	Minna Preventative Sensor-Based Remote Monitoring of the Diabetic Foot in Clinical Practice.	Minty E; Bray E; Bachus CB;...	
2023-08-01	Minna Changes in Environment and Management Practices Improve Foot Health in Zoo-Housed Flamingos.	Mooney A; McCall K; Basto...	
2023-01-01	Minna A Novel Intrinsic Foot Muscle Strength Dynamometer Demonstrates Moderate-To-Excellent Reliability and Validity.	Xu J; Goss DD; Saliba SA	
2023-07-06	Minna Does a corticosteroid injection plus exercise or exercise alone add to the effect of patient advice and a heel cup for patients with pla...	Riel H; Vicenzino B; Olesen J...	
2023-05-29	Minna Foot Health in People with Cancer Undergoing Chemotherapy: A Scoping Review.	Veiga-Seijo R; Gonzalez-Mar...	
2023-05-16	Minna Diabetic foot and lower limb amputations at central, provincial and tertiary hospitals-underscores the need for organised foot health...	Ntuli S; Letswalo DM	
2023-05-13	Minna Understanding the Role of Children's Footwear on Children's Feet and Gait Development: A Systematic Scoping Review.	Wang Y; Jiang H; Yu L; Gao ...	

👍 Include | ? Maybe | 🚩 Exclude | [Reason] | [Label] | 📝 Add Note | ✔ Highlights ON | 📄 Upload PDF full-texts

Understanding the Role of Children's Footwear on Children's Feet and Gait Development: A Systematic Scoping Review.

Children's footwear plays an important role in the healthy growth of foot and gait development during the growing stage. This review aims to synthesize findings of previous investigations and to explore the biomechanical influences of different types of children's footwear on foot health and gait development, thus guiding the healthy and safe growth of children's feet and gait. Online databases were searched for potential eligible articles, including Web of Science, Google Scholar, and PubMed. In total, nineteen articles were identified after searching based on the inclusion requirements. The following five aspects of biomechanical parameters were identified in the literature, including spatiotemporal, kinematics, kinetics, electromyography (EMG), and plantar pressure distribution. Children's footwear can affect their foot health and gait performance. In addition, children's shoes with different flexibility and sole hardness have different effects on children's feet and gait development. Compared to barefoot, the stride length, step length, stride time, and step time were increased, but cadence was decreased with wearing shoes. Furthermore, the support base and toe-off time increased. Double support time and stance time increased, but single support time decreased. The hip, knee, and ankle joints showed increased range of motion in children with the rear-foot strike with larger ground reaction force as well. Future studies may need to evaluate the influence of footwear types on gait performance of children in different age groups. Findings in this study may provide recommendations for suitable footwear types for different ages, achieving the aim of growth and development in a healthy and safe manner.

Authors: Wang Y; Jiang H; Yu L; Gao Z; Liu W; Mei Q; Gu Y;

Journal: Healthcare (Basel, Switzerland) - Volume 11, Issue 10, pp. - published 2023-05-13

Publication Types: Journal Article | Review

Locations: Ningbo | Szombathely | Auckland Bioengineering Institute | Auckland | New Zealand. | China

Topics: Gait | Only Child | Child

System Id: 1075244517

? Help

Minna ▲

Covidence

- Import citations
- Screen titles & abstracts
- Upload refernces
- Screen full texts
- Data extraction
- Risk of bias
- Export
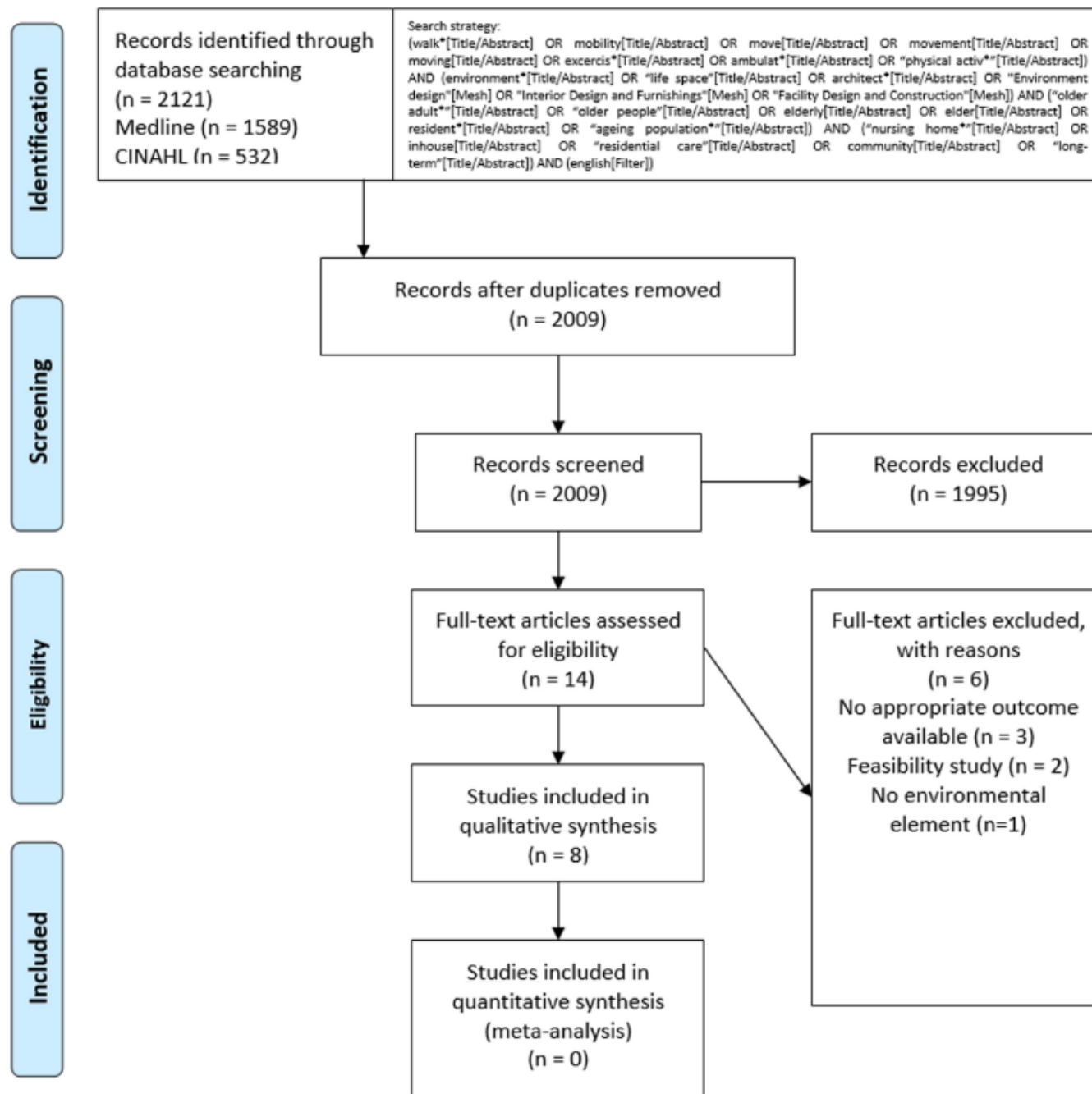
Literature search process
Narsakka et al. 2021

FIGURE 1 Flow diagram [24] of inclusion of articles

Data retrieval, analysis and critical appraisal

Organizing the evidence and analysis

- Table with main information/raw data

- Analysis

- Depends your review aim

- Categorization, content analysis, statistical analysis…

(http://libguides.usc.edu/writingguide/literaturereview)

Examples of organizing the data

Author, year Country Database	Main concept, defined?	Aim of the study	Design & Methodology Methods: data collection, analysis	Setting, sampling, sample (n), response rate	Ethical approval	Validity & reliability	Results

Author, year, country	Aim	Methods				Discussion of sampling/rr/sample Miten on arvioitu tutkimusmenetelmien asioita	Notes
		Sample aimed (target & N)	Sample obtained (n & rr%)	Sampling method, justification of sample size	Data collection method & procedures		

UNIVERSITY OF TURKU

Data analysis

- Goal to synthesize the evidence
- Dependent on the type of the review and the review aim
  - meta-analysis -> statistical analysis
  - metasynthesis or metasummary -> qualitative analysis

- Remember to report how the analysis was conducted

Critical appraisal / assessment of study quality

- Will identify strengths and weaknesses in what you have found

- Make informed decisions about the quality of the research evidence.

- Often carried out using checklists that help signpost areas to look for while reading a paper. There are different types of checklist depending on the type of research you are reviewing.

- CASP: https://casp-uk.net/casp-tools-checklists/
- AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both: https://www.bmj.com/content/358/bmj.j4008
- **Cardiff University website: checklists** (http://www.cardiff.ac.uk/specialist-unit-for-review-evidence/resources/critical-appraisal-checklists)

UNIVERSITY OF TURKU

Reporting

- Responding to research questions
- Tables or figures
- Systematic scientific report

Reporting standards - use when writing up a research study

- **Not recommended for critical appraisal**

- **Equator Network -** guidelines to promote transparent and accurate reporting of health research

- PRISMA for systematic reviews

- PRISMA-Sc for scoping reviews

- RAMESES for meta-narrative reviews

- CONSORT for randomised controlled trials

- STROBE for observational studies

UNIVERSITY OF TURKU

Strenghts and weaknesses of the review

- Critical part of the Discussion
- Point out the strenghts and weaknessess
- Provide rationale for your choise(s)
- Research evidence
- Be critical, but do not underestimate your review!

PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	

Link:
https://www.equator-network.org/reporting-guidelines/prisma/

UNIVERSITY OF TURKU

PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	
Study characteristics	17	Cite each included study and present its characteristics.	
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	
	23b	Discuss any limitations of the evidence included in the review.	
	23c	Discuss any limitations of the review processes used.	
	23d	Discuss implications of the results for practice, policy, and future research.	
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	
Competing interests	26	Declare any competing interests of review authors.	
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	

UNIVERSITY OF TURKU

Conclusions

- Reporting of literature review requires systematic approach (follow reporting guidelines)

- Provide new evidence

- Be transparent

- Address strenghts and weaknesses

- Team work needed!
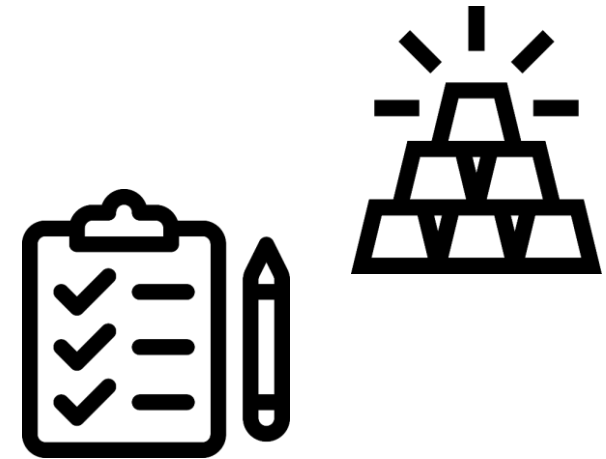
UNIVERSITY OF TURKU

Thank you!

Minna.stolt@utu.fi