

Conducting systematic literature reviews

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Why?

- A steady increase in the volume of research
- A systematic approach to excising research literature will strengthen the contribution of your own research
- Technology enables review of literature that was impossible earlier

Type of systematic reviews 1

- Aggregative reviews
 - often used to make empirical statements (within agreed conceptual perspectives) to inform decision making instrumentally
 - *E.g. “What do we know about the effects of intervention X?”*
- Configurative reviews
 - often used to develop concepts and enlightenment
 - *E.g. “How has the use of video technology been used in higher education over the past fifty years?”*
- Open versus narrow question formulations
 - “How has the use of video technology been used un higher education?”
versus
 - “How can simulation improve nursing students’ ability to respond to stroke patience?”

Type of systematic reviews 2

Narrative
literature
review or
critical review

Systematic
literature
review
(qual./quant.)

Scoping
Review

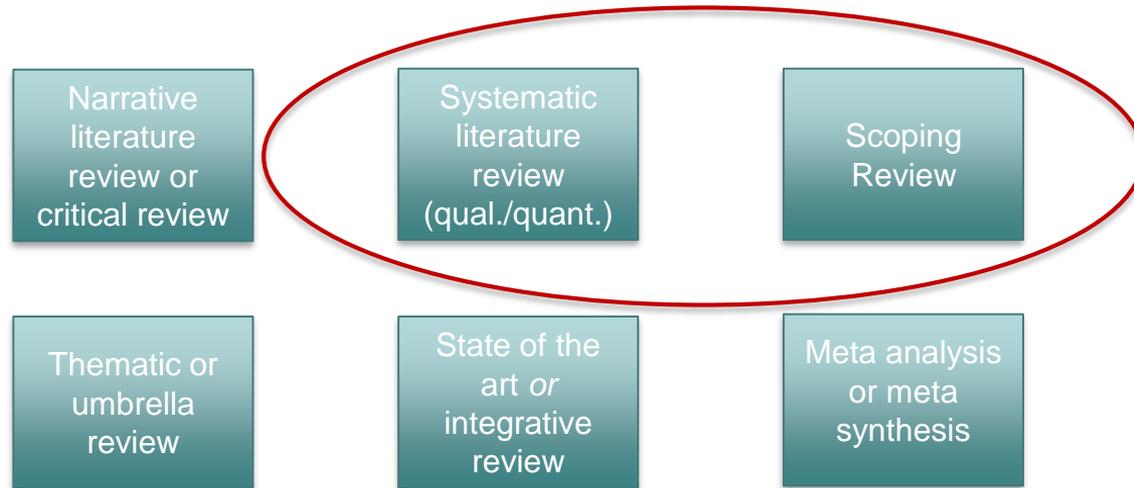
Thematic or
umbrella
review

State of the
art or
integrative
review

Meta analysis
or meta
synthesis

According to my colleague Wilfred Admiral, OsloMet

Type of systematic reviews 2

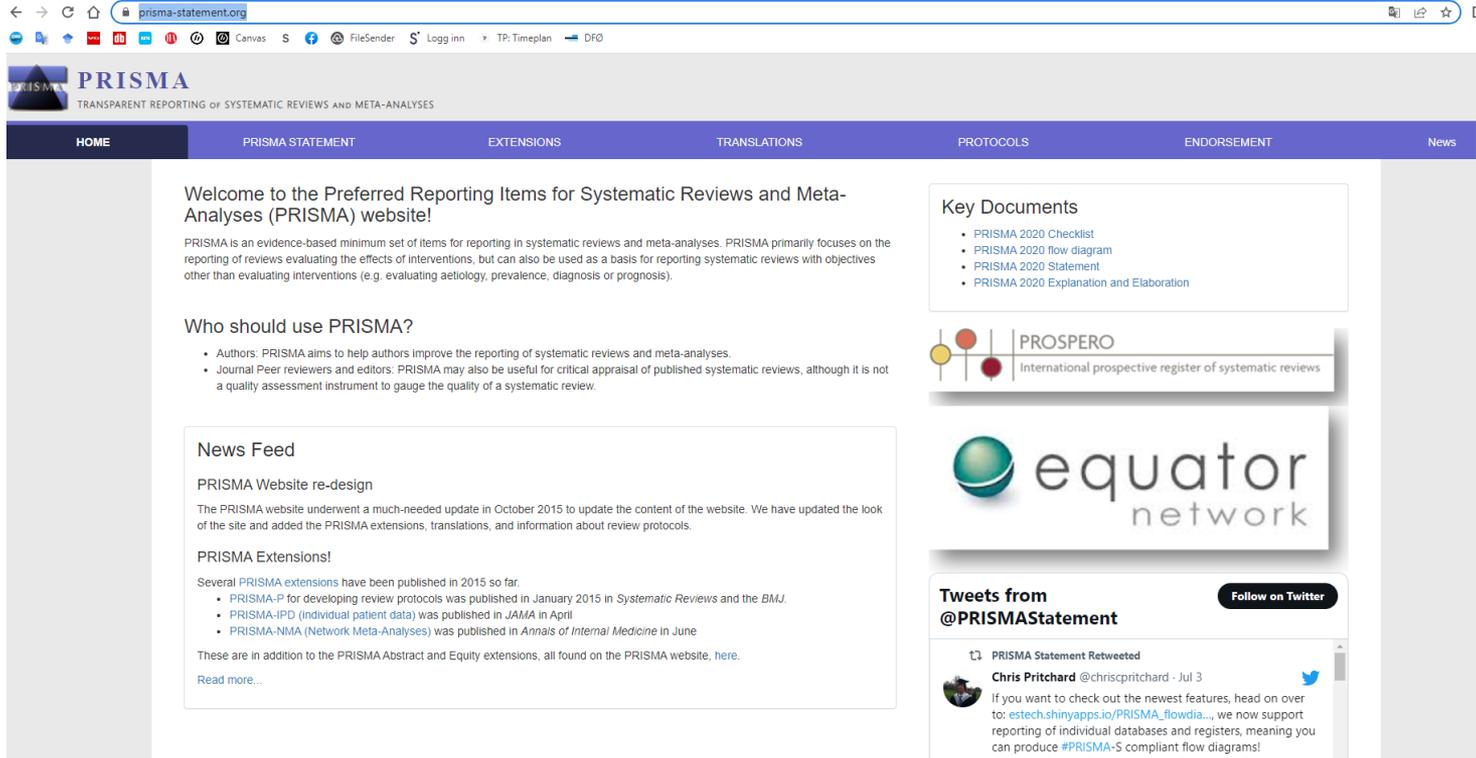


According to my colleague Wilfred Admiral, OsloMet

Indications for systematic review	Purposes for conducting scoping review
<ol style="list-style-type: none"> 1. Uncover the international evidence 2. Confirm current practice/ address any variation/ identify new practices 3. Identify and inform areas for future research 4. Identify and investigate conflicting results 5. Produce statements to guide decision-making 	<ul style="list-style-type: none"> • To identify the types of available evidence in a given field • To clarify key concepts/ definitions in the literature • To examine how research is conducted on a certain topic or field • To identify key characteristics or factors related to a concept • As a precursor to a systematic review • To identify and analyse knowledge gaps

Munn, Z., Peters, M. D., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC medical research methodology*, 18(1), 1-7.

PRISMA website (<https://www.prisma-statement.org/>)



The screenshot shows the PRISMA website homepage. The browser address bar displays [prisma-statement.org](https://www.prisma-statement.org/). The website header includes the PRISMA logo and the tagline "TRANSPARENT REPORTING OF SYSTEMATIC REVIEWS AND META-ANALYSES". A navigation menu contains links for HOME, PRISMA STATEMENT, EXTENSIONS, TRANSLATIONS, PROTOCOLS, ENDORSEMENT, and News. The main content area features a welcome message, a description of PRISMA, and a list of key documents. A sidebar on the right highlights key documents, including the PRISMA 2020 Checklist, flow diagram, statement, and explanation. Below this, there are logos for PROSPERO and the EQUATOR NETWORK. A Twitter feed at the bottom right shows a tweet from Chris Pritchard retweeted by PRISMAStatement.

PRISMA
TRANSPARENT REPORTING OF SYSTEMATIC REVIEWS AND META-ANALYSES

HOME PRISMA STATEMENT EXTENSIONS TRANSLATIONS PROTOCOLS ENDORSEMENT News

Welcome to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) website!

PRISMA is an evidence-based minimum set of items for reporting in systematic reviews and meta-analyses. PRISMA primarily focuses on the reporting of reviews evaluating the effects of interventions, but can also be used as a basis for reporting systematic reviews with objectives other than evaluating interventions (e.g. evaluating aetiology, prevalence, diagnosis or prognosis).

Who should use PRISMA?

- Authors: PRISMA aims to help authors improve the reporting of systematic reviews and meta-analyses.
- Journal Peer reviewers and editors: PRISMA may also be useful for critical appraisal of published systematic reviews, although it is not a quality assessment instrument to gauge the quality of a systematic review.

News Feed

PRISMA Website re-design

The PRISMA website underwent a much-needed update in October 2015 to update the content of the website. We have updated the look of the site and added the PRISMA extensions, translations, and information about review protocols.

PRISMA Extensions!

Several PRISMA extensions have been published in 2015 so far.

- PRISMA-P for developing review protocols was published in January 2015 in *Systematic Reviews* and the *BMJ*.
- PRISMA-IPD (Individual patient data) was published in *JAMA* in April
- PRISMA-NMA (Network Meta-Analyses) was published in *Annals of Internal Medicine* in June

These are in addition to the PRISMA Abstract and Equity extensions, all found on the PRISMA website, [here](#).

[Read more...](#)

Key Documents

- PRISMA 2020 Checklist
- PRISMA 2020 flow diagram
- PRISMA 2020 Statement
- PRISMA 2020 Explanation and Elaboration

PROSPERO
International prospective register of systematic reviews

equator network

Tweets from @PRISMAStatement [Follow on Twitter](#)

PRISMA Statement Retweeted

Chris Pritchard @chriscpritchard · Jul 3

If you want to check out the newest features, head on over to: estech.shinyapps.io/PRISMA_flowdia..., we now support reporting of individual databases and registers, meaning you can produce #PRISMA-S compliant flow diagrams!

[@PRISMAStatement](#) [@chriscpritchard](#) [@estech](#) [@prisma-statement](#)

To plan - one example:

Theme: Literature review on e-learning and organizational change in higher education

Type of review	Scoping review
Objective(s)	
Inclusion/exclusion criteria	
Information sources	
Review protocol	
Analytical strategy	

To plan - one example:

Theme:

Literature review on e-learning and organizational change in higher education

Type of review	Scoping review
Objective(s)	The objective in this scoping review is to examine how published, peer review studies have addressed the relationship between the growth of e-learning and organizational change in higher education institutions in the period 2010-2021
Inclusion/exclusion criteria	
Information sources	
Review protocol	

Criteria selection

- Criteria must correspond to the purpose and the scope of the review
- Typical issues to consider
 - Time period
 - Language
 - Empirical or theoretical research
 - Type of informants
 - Methodological or theoretical perspectives
 - Thematic focus etc.

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Information sources	Academic Search Premier, ERIC, Education Source, Scopus
Review protocol	

Search terms

- Important to identify established keywords within your field
 - e-learning, technology-enhanced learning, digitally mediated learning, computers and education, online learning, blended learning, digital education, learning technologies etc.

- Identifying synonyms
 - Higher education – tertiary education – post secondary education
 - Technology-enhanced learning – digital learning etc.

- Broad vs narrow search terms
 - Organization, institution, change transformation, transition etc.

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Inclusion/exclusion criteria	Years 2010- 2021 Peer reviewed Journal articles English Empirical/theoretical
Information sources	Academic Search Premier, ERIC, Education Source, Scopus
Review protocol	E-learning, digital learning, distance learning, hybrid learning, electronic learning, MOOC, massive open online courses, webbased, teaching, training, instruction, flipped learning, virtual learning Higher education, college, post-secondary, academia Organization, change, transformation, institution, transition

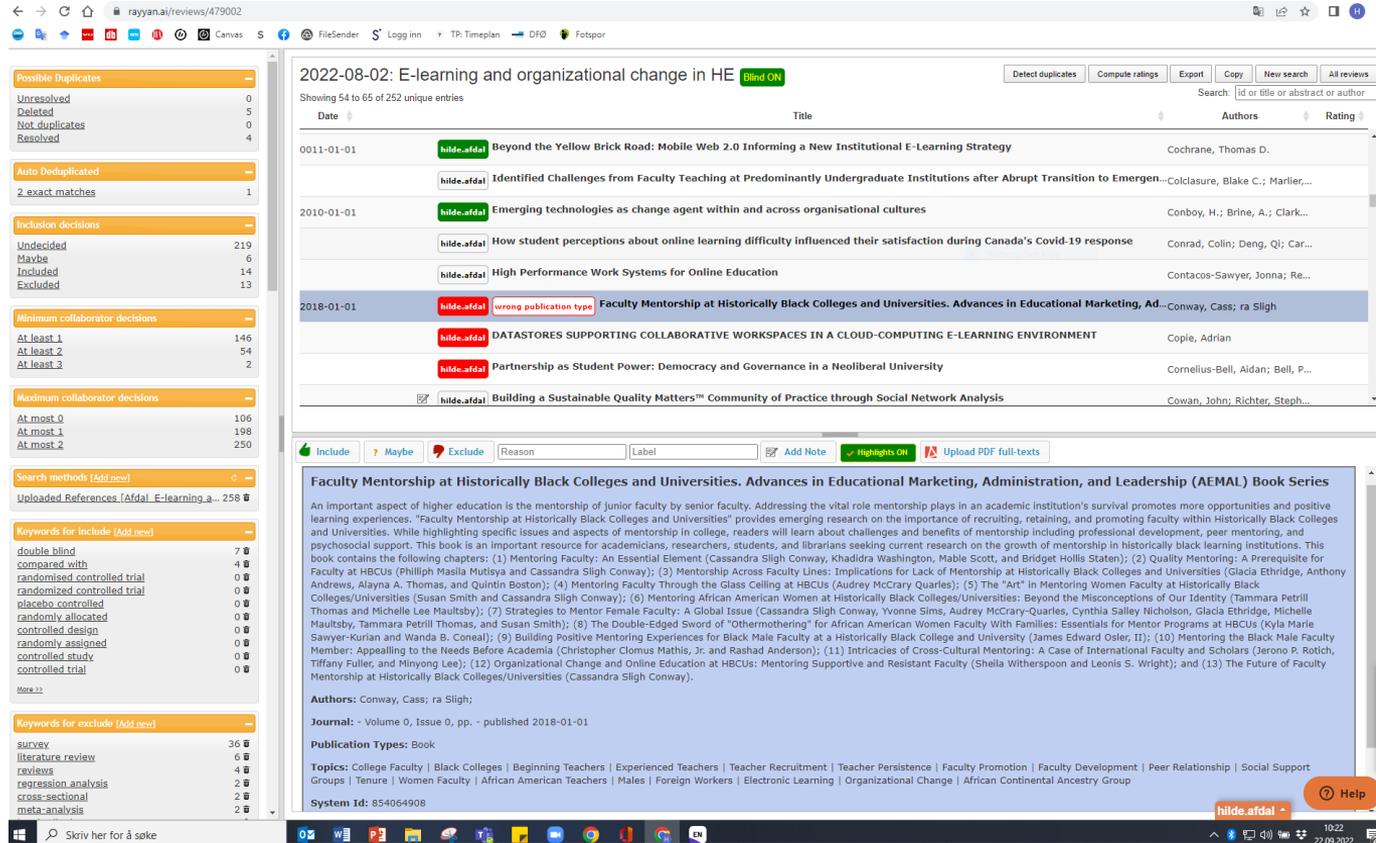
Final review protocol

Database: ERIC (EBSCOhost)			
Search no.	Search field	Search string and limiters	No. of results
S1	Title (TI)	TI (((e-learning OR elearning OR "flipped classroom*" OR MOOC* OR "massive open online course*") OR (digital OR online OR web-based OR webbased OR distan* OR remote OR blended OR flipped OR hybrid OR virtual OR electronic) N0 (learning OR instruction OR teaching OR education OR training OR course*)) AND ("higher education" OR college* OR universit* OR academi* OR "post-secondary" OR postsecondary) AND (organization* OR institution*) N2 (chang* OR transform* OR transition*))	5
S2	Abstract (AB)	AB (((e-learning OR elearning OR "flipped classroom*" OR MOOC* OR "massive open online course*") OR (digital OR online OR web-based OR webbased OR distan* OR remote OR blended OR flipped OR hybrid OR virtual OR electronic) N0 (learning OR instruction OR teaching OR education OR training OR course*)) AND ("higher education" OR college* OR universit* OR academi* OR "post-secondary" OR postsecondary) AND (organization* OR institution*) N2 (chang* OR transform* OR transition*))	177
S3	Descriptors (SU), (Search terms from the ERIC Thesaurus)	SU (("electronic learning" OR "blended learning" OR "Web based instruction" OR "online courses" OR "flipped classroom" OR "distance education" OR "electronic learning") AND ("Higher education" OR "Postsecondary education" OR Colleges OR universities) AND "organizational change")	127
		S1 OR S2 OR S3	283
		Limited to Peer reviewed	158
		Limited to publication years 2010-2022	112
		Limited to the English language	109
		(Note: there was no difference in the number of results with the application of the function "Apply equivalent subjects")	

Database: Education Source (EBSCOhost)			
Search no.	Search field	Search string and limiters	No. of results
S1	Title (TI)	TI (((e-learning OR elearning OR "flipped classroom*" OR MOOC* OR "massive open online course*") OR (digital OR online OR web-based OR webbased OR distan* OR remote OR blended OR flipped OR hybrid OR virtual OR electronic) N0 (learning OR instruction OR teaching OR education OR training OR course*)) AND ("higher education" OR college* OR universit* OR academi* OR "post-secondary" OR postsecondary) AND (organization* OR institution*) N2 (chang* OR transform* OR transition*))	7
S2	Abstract (AB)	AB (((e-learning OR elearning OR "flipped classroom*" OR MOOC* OR "massive open online course*") OR (digital OR online OR web-based OR webbased OR distan* OR remote OR blended OR flipped OR hybrid OR virtual OR electronic) N0 (learning OR instruction OR teaching OR education OR training OR course*)) AND ("higher education" OR college* OR universit* OR academi* OR "post-secondary" OR postsecondary) AND (organization* OR institution*) N2 (chang* OR transform* OR transition*))	137
S3	Author supplied keywords (KW)	KW (((e-learning OR elearning OR "flipped classroom*" OR MOOC* OR "massive open online course*") OR (digital OR online OR web-based OR webbased OR distan* OR remote OR blended OR flipped OR hybrid OR virtual OR electronic) N0 (learning OR instruction OR teaching OR education OR training OR course*)) AND ("higher education" OR college* OR universit* OR academi* OR "post-secondary" OR postsecondary) AND (organization* OR institution*) N2 (chang* OR transform* OR transition*))	4
S4	Subject (SU), (Search terms from the Education Source Thesaurus)	SU (("digital learning" OR "blended learning" OR "distance education" OR "flipped classrooms" OR "Internet in higher education" OR "online education" OR "massive open online courses") AND ("higher education" OR "universities & colleges" OR "postsecondary education") AND "organizational change")	18
		S1 OR S2 OR S3 OR S4	160
		Limited to Peer reviewed	137
		Limited to publication years 2010-2022	92
		Limited to the English language	85
		(Note: there was no difference in the number of results with the application of the function "Apply equivalent subjects")	

Search results

- Total no. of references from all databases combined: 381.
- After deduplication: 244



The screenshot shows the Rayyan.ai interface with a search for "2022-08-02: E-learning and organizational change in HE". The interface includes a sidebar with filters for duplicates, inclusion decisions, and search methods. The main area displays a list of search results with columns for Date, Title, Authors, and Rating. One result is highlighted in blue, and its details are shown in a pop-up window at the bottom.

Date	Title	Authors	Rating
0011-01-01	Beyond the Yellow Brick Road: Mobile Web 2.0 Informing a New Institutional E-Learning Strategy	Cochrane, Thomas D.	
2010-01-01	Identified Challenges from Faculty Teaching at Predominantly Undergraduate Institutions after Abrupt Transition to Emergen...	Colclausure, Blake C.; Marlier,...	
2010-01-01	Emerging technologies as change agent within and across organisational cultures	Conboy, H.; Brine, A.; Clark...	
	How student perceptions about online learning difficulty influenced their satisfaction during Canada's Covid-19 response	Conrad, Colin; Deng, Qi; Car...	
	High Performance Work Systems for Online Education	Contacos-Sawyer, Jonna; Re...	
2018-01-01	Faculty Mentorship at Historically Black Colleges and Universities. Advances in Educational Marketing, Ad...	Conway, Cass; ra Sligh	
	DATASTORES SUPPORTING COLLABORATIVE WORKSPACES IN A CLOUD-COMPUTING E-LEARNING ENVIRONMENT	Copie, Adrian	
	Partnership as Student Power: Democracy and Governance in a Neoliberal University	Cornelius-Bell, Aidan; Bell, P...	
	Building a Sustainable Quality Matters™ Community of Practice through Social Network Analysis	Cowan, John; Richter, Steph...	

Faculty Mentorship at Historically Black Colleges and Universities. Advances in Educational Marketing, Administration, and Leadership (AEMAL) Book Series

An important aspect of higher education is the mentorship of junior faculty by senior faculty. Addressing the vital role mentorship plays in an academic institution's survival promotes more opportunities and positive learning experiences. "Faculty Mentorship at Historically Black Colleges and Universities" provides emerging research on the importance of recruiting, retaining, and promoting faculty within Historically Black Colleges and Universities. While highlighting specific issues and aspects of mentorship in college, readers will learn about challenges and benefits of mentorship including professional development, peer mentoring, and psychosocial support. This book is an important resource for academicians, researchers, students, and librarians seeking current research on the growth of mentorship in historically black learning institutions. This book contains the following chapters: (1) Mentoring Faculty: An Essential Element (Cassandra Sligh Conway, Khadija Washington, Hable Scott, and Bridget Hollis Staten); (2) Quality Mentoring: A Prerequisite for Faculty at HBCUs (Phillip Masila Mutleya and Cassandra Sligh Conway); (3) Mentorship Across Faculty Lines: Implications for Lack of Mentorship at Historically Black Colleges and Universities (Glacia Ethridge, Anthony Andrews, Alayna A. Thomas, and Quintin Boston); (4) Mentoring Faculty Through the Glass Ceiling at HBCUs (Audrey McCrary Quarles); (5) The "Art" in Mentoring Women Faculty at Historically Black Colleges/Universities (Susan Smith and Cassandra Sligh Conway); (6) Mentoring African American Women at Historically Black Colleges/Universities: Beyond the Misperceptions of Our Identity (Tammarra Petrill Thomas and Michelle Lee Maulitby); (7) Strategies to Mentor Female Faculty: A Global Issue (Cassandra Sligh Conway, Yvonne Sims, Audrey McCrary-Quarles, Cynthia Salley Nicholson, Glacia Ethridge, Michelle Maulitby, Tammarra Petrill Thomas, and Susan Smith); (8) The Double-Edged Sword of "Othermothering" for African American Women Faculty With Families: Essentials for Mentor Programs at HBCUs (Kyla Marie Sawyer-Kurian and Wanda S. Conroy); (9) Building Positive Mentoring Experiences for Black Male Faculty at a Historically Black College and University (James Edward Osler, II); (10) Mentoring the Black Male Faculty Member: Appealing to the Needs Before Academia (Christopher Clomus Mathis, Jr. and Rashad Anderson); (11) Intricacies of Cross-Cultural Mentoring: A Case of International Faculty and Scholars (Jeronno P. Rotich, Tiffany Fuller, and Minyong Lee); (12) Organizational Change and Online Education at HBCUs: Mentoring Supportive and Resistant Faculty (Sheila Witherspoon and Leonis S. Wright); and (13) The Future of Faculty Mentorship at Historically Black Colleges/Universities (Cassandra Sligh Conway).

Authors: Conway, Cass; ra Sligh;

Journal: - Volume 0, Issue 0, pp. - published 2018-01-01

Publication Types: Book

Topics: College Faculty | Black Colleges | Beginning Teachers | Experienced Teachers | Teacher Recruitment | Teacher Persistence | Faculty Promotion | Faculty Development | Peer Relationship | Social Support Groups | Tenure | Women Faculty | African American Teachers | Males | Foreign Workers | Electronic Learning | Organizational Change | African Continental Ancestry Group

System Id: 854064908

Example 1:

Working on working together. A systematic review on how healthcare professionals contribute to interprofessional collaboration

Evert Schot, Lars Tummers & Mirko Noordegraaf (2020). Working on working together. A systematic review on how healthcare professionals contribute to interprofessional collaboration, Journal of Interprofessional Care, 34:3, 332-342, DOI: 10.1080/13561820.2019.1636007

Type of review	Systematic review
Objective(s)	In what ways and why do healthcare professionals contribute to interprofessional collaboration? In doing so, we also focus on differences between professions and specific collaborative contexts, and on evidence of the effects of their contributions.
Inclusion/exclusion criteria	<ul style="list-style-type: none">• Studies deal with actions of professionals that are seen to contribute to interprofessional collaboration.• Studies are conducted within healthcare.• Empirical studies.• Peer-reviewed journals• Written in English
Information sources	Scopus and Web of Science (January – May 2017) and Medline (May 2019).
Review protocol	<ul style="list-style-type: none">• One of the following: [interprofessional], [interprofessional], [multidisciplinary], [interdisciplinary], [interorganizational], [interagency], [inter-agency], AND• One of the following: [collaboration], [collaborative practice], [cooperation], [network*], [team*], [integrat*], AND• One of the following: [healthcare], [care], AND• [professional].
Analytical strategy	1. coded relevant fragments from the included studies, 2. inductive coding of the fragments

Selection process – flow diagram

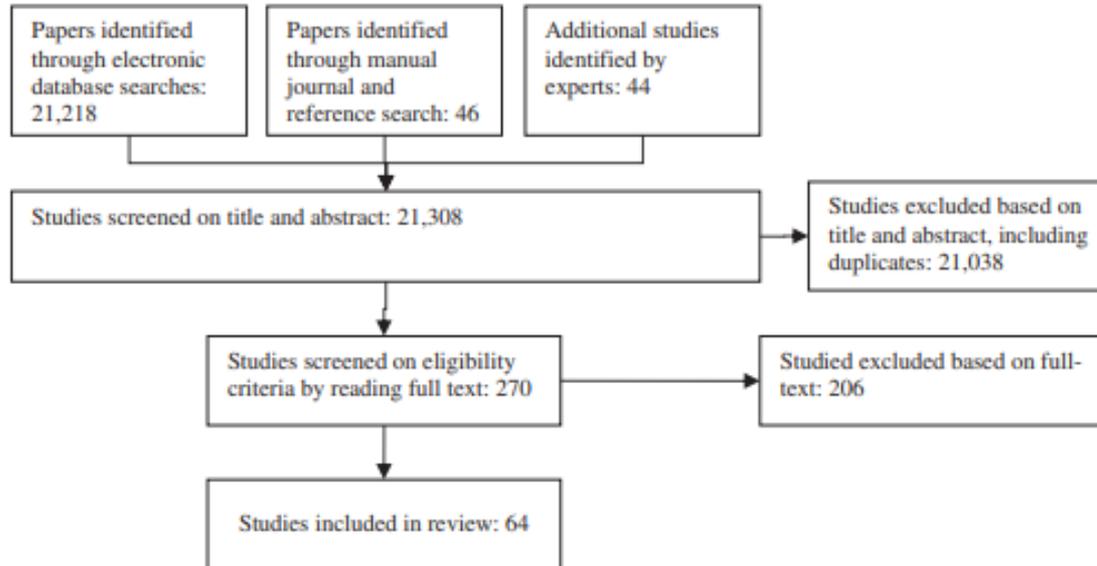


Figure 1. Flow diagram of the search strategy.

Characteristics of the studies that were reviewed

Table 1. Study designs in review.

Study design	Number (%)
Qualitative design	60 (93,8%)
Mixed-method design	3 (4,7%)
Quantitative design	1 (1,6%)
Total	64

Table 2. Healthcare (sub)sectors represented in review.

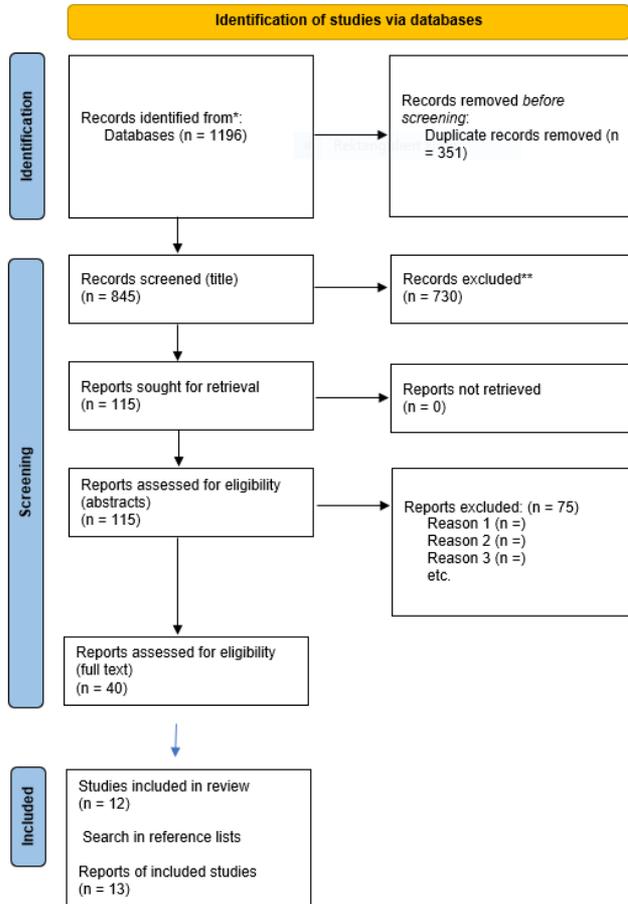
Sub-sectors	Number (%)	Example
Hospital care	29 (45,3%)	Intensive care team (Reeves et al., 2015)
Cross-sectoral	12 (18,8%)	Distributed heart failure teams (Lingard et al., 2017)
Primary and neighborhood care	9 (14,1%)	Primary health teams (Quinlan & Robertson, 2012)
Mental health care	4 (6,3%)	Substance abuse care (Sylvain & Lamothe, 2012)
Cases in multiple subsectors	5 (7,8%)	Acute care and elderly home care (Hurlock-Chorostecki et al., 2015)
Other	5 (8,2%)	Dental care (Franzén, 2012)
Total	64	

Example 2:

A systematic review of the knowledge, attitudes and perceptions of health and social care professionals towards people with learning disabilities and mental health problems

Ee, J., Stenfert Kroese, B., & Rose, J. (2021). A systematic review of the knowledge, attitudes and perceptions of health and social care professionals towards people with learning disabilities and mental health problems. *British Journal of Learning Disabilities*.

Type of review	Systematic review																																
Objective(s)	In what ways and why do healthcare professionals have attitudes of health and social care professionals towards people with learning disabilities and mental health problems The review aimed to investigate the attitudes of health and social care professionals towards people with learning disabilities and mental health problems																																
Inclusion/exclusion criteria	<ul style="list-style-type: none"> Quantitative studies Published in English Between 2006 and June 2020 medical staff, nurses, therapists, psychologists or social workers. Excluded: studies that focus on efficacy of staff training programmes, health and social care professionals' views on efficacy of specific intervention targeted to people with learning disabilities and mental health problems, and health and social care professionals' attitudes towards sexuality or parenting issues in people with learning disabilities + review articles, conference proceedings, book chapters, case and qualitative studies 																																
Information sources	MEDLINE, PubMed and OVID																																
Review protocol	<table border="1"> <thead> <tr> <th>Attitudes</th> <th>Learning disability</th> <th>Mental Health</th> <th>Professionals</th> </tr> </thead> <tbody> <tr> <td>Attitu*</td> <td>Intellectual disabili*</td> <td>Mental health illness*</td> <td>Staff</td> </tr> <tr> <td>OR</td> <td>OR</td> <td>OR</td> <td>OR</td> </tr> <tr> <td>Beliefs</td> <td>Learning disabili*</td> <td>Psychiatr*</td> <td>Therapis*</td> </tr> <tr> <td>OR</td> <td>OR</td> <td>OR</td> <td>OR</td> </tr> <tr> <td>Perception</td> <td>Developmental disabil*</td> <td>Dual diagnos*</td> <td>Nurs*</td> </tr> <tr> <td></td> <td>OR</td> <td></td> <td>OR</td> </tr> <tr> <td></td> <td>Mental Retardation</td> <td></td> <td>Psych*</td> </tr> </tbody> </table>	Attitudes	Learning disability	Mental Health	Professionals	Attitu*	Intellectual disabili*	Mental health illness*	Staff	OR	OR	OR	OR	Beliefs	Learning disabili*	Psychiatr*	Therapis*	OR	OR	OR	OR	Perception	Developmental disabil*	Dual diagnos*	Nurs*		OR		OR		Mental Retardation		Psych*
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	OR		OR																														
	Mental Retardation		Psych*																														
Analytical strategy	Descriptive + quality assessment tool developed by Sale and Brazil (2004) that focused on evaluating the internal and external validity of the quantitative studies to determine their quality.																																



Selection process –
flow chart (not in the
article)

Some challenges

- Titles are not descriptive enough
- Abstracts are often badly written => full text reading is necessary to assess if the article matches selection criteria
- Relatively time consuming
- Search bases can vary in quality – library support makes a big difference
- There will usually be relevant studies that are not included in your searches => «snowballing»