

Department of Sociology

Systematic Reviews (SO7200)

7.5 credits, Spring 2024 Syllabus Last Updated: 2023-11-27

Instructors

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Aims

It is becoming more common that public policy interventions should be based on best available evidence. A systematic review aims to summarize the best available research evidence on a specific question. This is done by synthesizing the results of several studies. Participants will explore the range of existing approaches to, and methods for, research synthesis. The course will provide hands-on experience of commonly used methods (including the procedures proposed by the Cochrane). The course uses material from a range of policy areas and will explore different kinds of review questions. Participants will be introduced to different methods for synthesizing both a range of study designs and qualitative and quantitative data. However, there is an emphasis on synthesizing quantitative data (metaanalysis). To help participants consider the role systematic reviews play in policy and practice decisions, this course also includes a discussion of the opportunities and challenges that systematic reviews pose.

Organization

Course participants and instructors meet approximately twice a week. Each meeting involves lectures, group discussions, or computer-based exercises and Q/A, and thus requires active student participation and preparation (by reading literature and doing tasks). The lectures/seminars cover topics not necessarily addressed in the required readings, and lectures should therefore be viewed as a complement to the mandatory literature. The course is conducted in English.

Learning outcomes

After having completed the course, students are expected to:

- Have a good knowledge of the elements that are part of the systematic review process (problem formulation, identification and selection of studies, data extraction, synthesis, dissemination).
- Be able to assess and critically review results in meta-analyzes of quantitative research.
- Understand and argue about the basic problems related to external and internal validity and those consequences these have for results from social science research to be able to be applied in practice.

- Be critical of the systematic overview as a central method for knowledge management within the framework for evidence-based decision-making.
- Be able to update (replicate) a systematic overview

Assessment and examination

All course work is based on collaborative work. Meeting with the group is therefore mandatory. The course is examined through:

- 1. Replicated Systematic Review (in Group)
- 2. Peer Review (in Group)
- 3. Individual Summary Statement

Assignments 2 is assessed as Pass or Fail. Assignment 1 and 3 is assessed according to the criteria detailed below.

| | Assignment 1 | | | | Assignment 3 |
|-------------------------------|---|--|---|---|---|
| Criteria | Review selection, planning and | Literature searching, inclusion and exclusion | Data extraction and quality assessment | Synthesis and dissemination | |
| Good | Detailed timeline, well-planned division of review tasks, very effective project management | Very comprehensive search and screening, | Identify relevant data, extract relevant data, carry out complete quality assessment with the appropriate tool. | disseminate results in written form with | A comprehensive assessment of own experiences, strengths and weaknesses of systematic reviews with high analytical level. |
| Some Shortcomings/ Pass | Clear timeline, adequate division of review tasks, some project management | Somewhat comprehensive search screening | Identify most relevant data, extract some relevant data, carry out adequate quality assessment with the appropriate tool | form with minimally | |
| Fail | | Inadequate search and screening | Do not identify relevant data, or extract relevant data. Fail to carry out quality assessment with the appropriate tool | Inappropriate method of analysis, poor presentation of results, inadequate dissemination of results. | An inadequate assessment of own experiences, strengths and weaknesses of systematic reviews |

Late assignments will be penalized, and will rarely be graded good.

The final grade is based on the following criteria:

To receive grades A-E, students have to pass all assignments.

- To get A (excellent), Assignment 1 has to be Good on all criteria. Assignment 3 has to be good.
- To get **B** (very good), Assignment 1 has to be Good on all criteria except one. Assignment 3 has to be good.
- To get C (good), Assignment 1 has to be Good on at least two criteria. Assignment 3 has to be at least pass.
- To get **D** (satisfactory), Assignment 1 has to be Good on at least one criteria. Assignment 3 has to be at least pass.
- To get E (sufficient), Assignment 1 has Pass on all criteria. Assignment 3 has to be at least pass.
- To get **Fx (insufficient)**, Assignment 1 or 3 fails on at least one criteria and/or the student has not passed assignments 1-2 or the student has not participated in collaborative group work.
- To get **F** (fail), Assignment 1 or 3 fails on at least one criteria and the student has not passed assignments 1 and 2 and the student has not participated in collaborative group work.

Transitory Regulations

A student who has been awarded the grade Fx or F twice by the same instructor on the course has the right to have his/her next exam being evaluated by another instructor. If the student so wishes, he/she should contact the director of undergraduate studies.

Assigned readings (decided by Department Board)

Main course book

• Booth, A., Sutton, A. and Papaioannou, D. (2016). *Systematic approaches to a successful literature review*, 2nd edition. London: Sage

Other Books used for reference

- Boland, A., Cherry, M. & Dickson, R. (2017). *Doing a Systematic Review: A Student's Guide, 2nd edition*. London: Sage. ISBN: 9781473967014
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- Borenstein, M. et al. (2009). Introduction to meta-analysis. Chichester: John Wiley & Sons.

Articles, chapters, Cochrane reviews

A number of systematic reviews have been published, and serve as examples and learning material in this course. Go to the Cochrane Library and the Campbell Collaboration for the most complete source of systematic reviews:

https://www.cochranelibrary.com/ https://campbellcollaboration.org/ Here is an ad hoc selection of reviews and related articles for inspiration:

- Aboud, F. E., Tredoux, C., Tropp, L. R., Brown, C. S., Niens, U., & Noor, N. M. (2012). Interventions to reduce prejudice and enhance inclusion and respect for ethnic differences in early childhood: A systematic review. *Developmental review*, *32*(4), 307-336.
- Altman, D. G. et al. (2001). The revised CONSORT statement for reporting randomized trials: explanation and elaboration. *Annals of Internal Medicine*, 134: 663-694.
- Andrée Löfholm, C., Brännström, L., Olsson, M. & Hansson, K. (2013). Treatmentas- usual in effectiveness studies: What is it and does it matter? *International Journal of Social Welfare*, 22(1): 25-34.
- Aas, R. W. & Alexanderson, K. (2012). Challenging evidence-based decisionmaking: a hypothetical case study about return to work. *Occupational Therapy Internl*, 19: 28-44.
- Boaz, A. & Pawson, R. (2005). The perilous road from evidence to policy: five journeys compared. *Journal of Social Policy*, 34(2): 175-194.
- Britten, N. et al. (2002). Using meta-ethnography to synthesise qualitative research: a worked example. *Journal of Health Services Research and Policy*, 7(4): 209-215.
- Gendrau, P. & Smith, P. (2007). Influencing the "people who count". Some perspectives on the reporting of meta-analytic results for prediction and treatment outcomes with offenders. *Criminal Justice and Behavior*, 34(12): 1536-1559.
- GRADE Working Group (2004). Grading quality of evidence and strength of recommendations. *British Medical Journal*, 328(19): 1-8.
- Guyatt, G. et al. (2011). GRADE guidelines: 1. Introduction GRADE evidence profiles and summary of findings tables. *Journal of Clinical Epidemiology*, 64: 383-394.
- Harris, R. J. et al. (2008). metan: fixed- and random-effects meta-analysis, *The Stata Journal*, 8: 3-28.
- Henggeler, S. et al. (2006). Methodological critique and meta-analysis as Trojan horse. *Children and Youth Services Review*, 28(4): 447-457.
- Lieberson, S. (1992). Einstein, Renoir, and Greely: some thoughts about evidence in sociology. *American Sociological Review*, 57: 1-15.
- Littell, J. (2005). Lessons from a systematic review of effects of multisystemic therapy. *Children and Youth Services Review*, 27(4): 445-463.
- Littell, J. et al. (2005). Multisystemic therapy for social, emotional, and behavioral problems in children and adolescents aged 10-17. Campbell Systematic Review 2005:1. Oslo: The Campbell Collaboration.
- Littell, J. (2006). The case for multisystemic therapy: Evidence or orthodoxy? *Children and Youth Services Review*, 28(4): 458-472.
- MacLure, M. (2005). 'Clarity bordering to stupidity': Where's the quality in systematic review? *Journal of Education Policy*, 20(4): 393-416.
- Moher, D. et al. (2009). Preferred reporting items for systematic reviews and metaanalyses: the PRISMA statement. *Annals of Internal Medicine*, 151(4): 264-270.
- Mullen, E. J. (2006). Choosing outcome measures in systematic reviews: critical challenges. *Research on Social Work Practice*, 16(1): 84-90.
- Pawson, R. et al. (2005). Realist review a new method of systematic review designed for complex policy interventions. *Journal of Health Services Research and Policy*, 10(S1): 21-34.

- Smedslund, G. et al. (2006). Work programmes for welfare recipients. Campbell Systematic Review 2006:9. Oslo: The Campbell Collaboration.
- Smith, G. C. S. & Pell, J. P. (2003). Parachute use to prevent death and major trauma related to gravitational challenge: systematic review of randomised controlled trials. *British Medical Journal*, 327: 1459-1461.
- Sterne, J.A.C. et al. (2001). "Meta-analysis in Stata", in Egger, M., Davey Smith, G. & Altman, D. G. (Eds.), Systematic Reviews in Health Care: Meta-Analysis in Context. 2nd edition. London: BMJ.
- Stroup, D. E. et al. (2000). Meta-analysis of observational studies in epidemiology: a proposal for reporting. *JAMA*, 283(15): 2008-2012.
- Vedung, E. (2010). Four waves of evaluation diffusion. *Evaluation*, 16(3): 263–277.

Misc useful books

- Bogenschneider, K. & Corbett, T. J. (2010). Evidence-based policymaking. Insights from policy-minded researchers and research-minded policymakers. New York: Routledge Academic (e-book access via Stockholm University library)
- Davies, H. T. O., Nutley, S. M. & Smith, P. S. (Eds.) (2000). What works? Evidencebased policy and practice in public services. Bristol: The Policy Press.
- Higgins, J. P. T. & Green, S. (Eds.) (2008). Cochrane handbook for systematic reviews of interventions. Hoboken: Wiley-Blackwell.
- Petticrew, M. & Roberts, H. (2006). Systematic reviews in the social sciences: a practical guide. London: Blackwell.
- Saini, M. & Shlonsky, A. (2012). Systematic synthesis of qualitative research. Oxford: Oxford University Press.
- Shemilt, I. et al. (Eds.) (2010). Evidence-based decisions and economics. Health care, social welfare, education and criminal justice. 2nd edition. Chichester: Wiley-Blackwell.
- Sterne, J. A. C. (Ed.) (2009). Meta-analysis in Stata: an updated collection from the Stata Journal. College Station: Stata Press.

Other documents (available in Athena)

- Course plan [<u>https://sisu.it.su.se/pdf_creator/10223/67349</u>]
- Schedule overview
- Assignments overview