

Methodological Briefs on Evidence Synthesis Brief 1: Overview

1

Shivit Bakrania

UNICEF Office of Research – Innocenti

This series of eight briefs, produced by the UNICEF Office of Research – Innocenti, is intended to provide guidance on how to undertake, commission and manage evidence synthesis products such as systematic reviews, rapid evidence assessments and evidence gap maps. Evidence synthesis can play an important role in UNICEF's knowledge management and evidence translation efforts by collating knowledge from multiple studies on what interventions work, and why and how they work. It makes research more accessible and therefore can contribute to evidence-informed programming and policy decisions. The primary audience for these briefs is professionals, including UNICEF staff, who conduct, commission or interpret research and evaluation findings in development contexts to make decisions about policy, programming and advocacy. These briefs cover topics including:

- What is evidence synthesis? What kinds of questions can evidence synthesis products help to answer and how can they contribute to decision-making?
- How to design and undertake a systematic review, a rapid evidence assessment or an evidence gap map
- How to commission and manage an evidence synthesis product
- The future of evidence synthesis and key innovations for making the process faster and more efficient

These briefs have been written by Shivit Bakrania with input from some of the world's leading evidence synthesis experts. The other briefs in this series can be accessed at www.unicef-irc.org.

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UNICEF OFFICE OF RESEARCH – INNOCENTI METHODOLOGICAL BRIEFS

UNICEF Office of Research – Innocenti Methodological Briefs are intended to share contemporary research practice, methods, designs and recommendations from renowned researchers and evaluators. The primary audience is UNICEF staff who conduct, commission or interpret research and evaluation findings to make decisions about programming, policy and advocacy.

This brief has undergone an internal and external peer review. The text has not been edited to official publication standards and UNICEF accepts no responsibility for errors.

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To consult and download the Methodological Briefs on Evidence Synthesis and a glossary of key terms, visit the website <www.unicef-irc.org>.

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FURTHER GUIDANCE ON EVIDENCE SYNTHESIS

This series of methodological briefs is part of broader efforts by UNICEF Innocenti to support UNICEF staff to appraise, commission, generate, communicate and use research to drive change for children.

For further guidance on evidence synthesis, or to ask about anything covered in these methodological briefs, please contact the author, Shivit Bakrania, or Kerry Albright, Chief of Research Facilitation and Knowledge Management, at <research@unicef.org>.

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Kerry Albright is Chief of Research Facilitation and Knowledge Management at UNICEF Innocenti, where she oversees UNICEF research and knowledge activities relating to research governance and standard setting, research capacity building, evidence synthesis, research uptake and impact, and research-related organizational learning and knowledge management.

Tamara Lotfi holds a medical degree and a Master's in Public Health and has worked for more than five years in evidence synthesis, leading on at least 10 projects from different sectors. Tamara is Coordinator of the Secretariat for the Global Evidence Synthesis Initiative (GESI), hosted by the American University of Beirut, which aims to enhance capacity in low- and middle-income countries in producing and using evidence synthesis. Tamara is widely engaged in the non-profit sector in Lebanon and in community-based projects.

Rhona Mijumbi-Deve is a physician, public policy analyst and evidence broker for policy, based in Uganda. She is passionate about the use of evidence for government decision-making, with a focus on evidence for urgent and/or emergency situations, and is the Founding Director of the Center for Rapid Evidence Synthesis.

Susan Munabi-Babigumira is a researcher based at the Norwegian Institute of Public Health and an editor with the Cochrane Effective Practice and Organisation of Care (EPOC) Group. Her work is mainly in the field of implementation research, including systematic reviews of interventions to improve the organization and delivery of health care.

Sandy Oliver is Professor of Public Policy at the EPPI-Centre, University College London, and Distinguished Visiting Professor at the Africa Centre for Evidence, University of Johannesburg, South Africa. For 30 years, she has worked at the forefront of research synthesis methods and stakeholder engagement with research.

Ramya Subrahmanian is Chief of Child Rights and Protection at UNICEF Innocenti. She is an international social policy analyst with extensive experience in research, policy advocacy, training and teaching. Previously, she was Executive Director of Know Violence in Childhood. Prior to this, she was a Social Policy Specialist at UNICEF India, where she led research, policy analysis and advocacy in the areas of child-sensitive social protection, equity and social inclusion, and gender equality.

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1. INTRODUCTION TO THE BRIEFS

This brief provides an overview of a series of eight briefs that cover a range of evidence synthesis products that can contribute to different parts of the policy and programming cycle and strengthen evidence-informed decision-making at UNICEF.

This overview brief looks at evidence synthesis in context – to emphasize why evidence synthesis is worthwhile and the value it adds. It also outlines the rationale, aims and objectives of the briefs and provides a brief description of what each brief will cover (see Box 1).

Box 1. Key questions addressed in this overview

- What is evidence synthesis and why do it?
- How can evidence synthesis be useful for evidence-informed decision-making?
- What do the different briefs cover?

2. WHAT IS EVIDENCE SYNTHESIS?

Evidence synthesis can be described as the process of bringing together information and knowledge from a range of sources to inform debates and decisions on specific issues.¹

In these briefs, the term ‘evidence synthesis products’ refers to:

- systematic reviews (SRs), which synthesize the findings of single studies
- rapid evidence assessments (REAs), which seek to synthesize the findings of single studies quickly when facing urgent policy decisions
- evidence gap maps (EGMs), which provide an overview of the existing evidence on a topic, theme or sector to signpost where evidence exists and/or where it is lacking.

While a range of other products fall under the evidence synthesis umbrella, those listed above are the most prominent in the international development arena and the most relevant to UNICEF.

3. WHY IS EVIDENCE SYNTHESIS IMPORTANT FOR UNICEF?

UNICEF places evidence-informed thinking at the heart of its strategic planning. Evidence is seen as key to understanding the barriers that hold children back, and to developing the solutions that can overcome those barriers to ensure that no child is left behind.

There is also a strong emphasis within UNICEF on the need to generate, communicate and promote the use of evidence and data about child well-being to catalyse change, identifying what does and does not work to achieve results for the most disadvantaged children, and why. The need to promote cooperation, share best practice and lessons learned, and foster innovation between countries and across regions is also recognized.

Evidence synthesis is increasingly recognized by UNICEF staff as playing a potentially significant role in UNICEF knowledge management and evidence translation efforts through the following means:

- Mapping available evidence allows for informed decisions to be made about where UNICEF research efforts can be most usefully focused and helps to avoid ‘reinventing the wheel’.
- Evidence synthesis, and knowledge of what works (and what does not work), and why or how things work, is vital for making evidence-informed policy and programme decisions.
- Evidence synthesis products collate bodies of existing evidence. This allows time-pressed UNICEF staff to gain new insights from the findings of multiple studies, rather than selected single studies, to support their work.
- Synthesizing the findings of multiple studies also improves accessibility to research for busy UNICEF staff. Indeed, evidence synthesis is seen as a key means of translating, transferring and exchanging knowledge in a manner that can be accessible and understandable for programming and policy staff in UNICEF regional and country offices as well as for external partners.

1 Royal Society, *Evidence Synthesis for Policy: A statement of principles*, Royal Society/Academy of Medical Sciences, London, 2018. Available at: <<https://www.royalsociety.org/-/media/policy/projects/evidence-synthesis/evidence-synthesis-statement-principles.pdf>>, accessed 23 January 2020.

Whilst it is unlikely that many UNICEF staff will be directly involved in producing these products, for those involved in commissioning research there is value in understanding how to develop and interpret evidence synthesis. In particular, it is important that research commissioners at UNICEF:

- Understand the rationale for using evidence synthesis products and the additional insights that they bring over and above single studies
- Have a common understanding of evidence synthesis that aligns with globally recognized terminology and standards of quality and rigour
- Can identify and apply such quality standards to external consultancies, if UNICEF evidence synthesis products are to be recognized and included in global repositories and cited in the evidence synthesis products of others. This in line with UNICEF’s ambition of becoming a ‘thought leader’ for evidence on children.

Whilst acknowledging that formal evidence needs to be complemented with tacit knowledge, contextual knowledge and values in shaping decisions, evidence synthesis can also perform a vital role in supporting growth of evidence-informed decision-making and critical thinking across the organization.

Key reasons for why evidence synthesis should form an important part of decision-making processes at UNICEF – through the commissioning or use of these products – are explored in more detail below.

3.1 Contributing to evidence-informed decision-making

Evidence synthesis products have significant potential to contribute to UNICEF knowledge management and evidence translation efforts.

Firstly, they are valuable for making evidence-informed programming and policy decisions because they can offer an enhanced understanding of problems, present the options for and likely consequences of intervening, and highlight important implementation and scale-up issues.

Secondly, a mapping of the available evidence, such as that presented by an EGM, allows for informed decisions to be made about where UNICEF’s research efforts can be most usefully focused and where further research would be a duplication of existing efforts.

Thirdly, it is important that UNICEF-produced research is included in evidence synthesis products – in line with the UNICEF ambition of being a ‘thought leader’ on evidence for children – and that these products meet globally accepted standards of quality and rigour.

3.2 The whole is more than the sum of its parts

Evidence synthesis products are based on systematic approaches to collating or aggregating large amounts of information from multiple studies. The bringing together of evidence from multiple sources is a fundamental principle of evidence synthesis. This provides information about what is known from research or evaluations on a particular topic and improves access to and use of information for making decisions for societal benefit.² When policy decisions are based on evidence provided by a single study, this increases the risk of making wrong decisions because single studies often present conflicting conclusions and tell only one part of the story. The quality of research of individual studies varies and it is imprudent to make decisions based on cherry picking of individual studies and even counterproductive when such studies are of low quality. In contrast, drawing from multiple studies across the body of evidence increases the scale and representativeness of the evidence on the impacts of interventions or how interventions work or do not work. The synthesis of multiple studies provides an opportunity to make judgements about the overall trustworthiness of the evidence and to consider contextual factors and findings from different standpoints.³ Moreover, the bringing together of evidence ultimately makes it more accessible to time-constrained decision makers. This is because individual studies are often inaccessible, lengthy and technical and many are never read.

² Ibid.

³ Oliver Sandy, et al., ‘Approaches to Evidence Synthesis in International Development: A research agenda’, *Journal of Development Effectiveness*, vol. 10, no. 3, 2018, pp. 305–326. Available at: <www.tandfonline.com/doi/full/10.1080/19439342.2018.1478875>, accessed 23 January 2020.

Box 2 provides an example of microfinance interventions and how available evidence influences policy decisions regarding these programmes.

Box 2. Synthesizing the evidence on microfinance

Microfinance has been a growth industry and has received much attention from policymakers and donors. A key feature of microfinance interventions has been the targeting of women, because it is claimed that, compared with men, women perform better as clients of microfinance institutions and their participation leads to more desirable development outcomes.

Policy and programming decisions on microfinance are often based on anecdotal evidence from single studies, which has led to misconceptions about the actual effects of microfinance programmes. A systematic review of the effects of microfinance interventions argues, however, that no clear rigorous evidence yet exists that these programmes have strong and positive impacts. The systematic review finds that there is no robust evidence of positive impacts on women's status or on girls' education enrolments. It also finds that well-known studies claiming to have found positive impacts on females are based on weak research designs and problematic analyses.ⁱ

i Duvendack, Maren, et al., *What is the Evidence of the Impact of Microfinance on the Well-being of Poor People?*, EPPi-Centre, University College London, London, 2011. See: <www.givedirectly.org/wp-content/uploads/2019/06/DFID_microfinance_evidence_review.pdf> p.192.

3.3 Minimizing the bias of non-systematic approaches

The value of basing decisions on multiple studies is difficult to dispute. However, it is also important to distinguish between the evidence synthesis products listed above and other approaches to secondary research such as literature reviews or annotated bibliographies. This is because SRs, EGMs and REAs all use systematic, comprehensive, rigorous and transparent methods to select and collate studies. Therefore, they are considered to be more trustworthy and can provide justifiable evidence claims.⁴ Traditional literature reviews (often mislabelled as 'systematic'), which have their place in the academic arena, are less suited to informing real-world decisions because they often do not clearly state their methods for collating and including or excluding studies. They may therefore misrepresent or leave out portions of the evidence base. They can be prone to 'cherry picking' particular studies to support an argument or position and are more susceptible to publication bias, whereby a non-systematic approach to collating studies may lead to the inclusion of studies that present only significant or positive findings. While literature reviews are a valuable product if time is short, authors and users need to be careful not to overstate their potential utility or claims.

4 Oliver Sandy, David Gough and James Copestake, 'Approaches to Evidence Synthesis in International Development', CEDIL Pre-inception Paper, Centre of Excellence for Development Impact and Learning, London, 2017. Available at: <<https://www.cedilprogramme.org/wp-content/uploads/2018/01/Approaches-to-evidence-synthesis-in-international-development.pdf>>, accessed 23 January 2020.

4. WHAT DO THE OTHER BRIEFS COVER?

Brief 2: Introduction to evidence synthesis

- What are the different evidence synthesis products, how can they be defined and what are their key features?
- What kinds of questions can evidence synthesis answer and what kinds of evidence can be included?
- How can evidence synthesis contribute to evidence-informed decision-making?

Brief 3: Developing and designing an evidence synthesis product

- What are the key considerations when deciding on a research question or scope?
- What does the scoping process involve and how can it help to refine and finalize the research questions and scope?
- How are the inclusion criteria and search strategies developed?
- What is a research protocol and what should it include?

Brief 4: Collating and analysing studies for synthesis

- How is a systematic search for evidence conducted?
- How are decisions made to include or exclude studies as part of the screening process?
- What is data extraction/coding and how should it be done?
- What is a quality appraisal and how is it conducted?
- What kinds of analysis are possible and how does this range differ among the various types of evidence synthesis products?
- What are the tools and applications that can help to manage the process and make it more efficient?

Brief 5: Commissioning and managing an evidence synthesis product

- What needs to be included in the terms of reference for an evidence synthesis product?
- What skills and expertise does a research team require?
- What is an advisory group, who should be included and how can the group be involved in the process?
- At what stages should UNICEF research commissioners provide feedback?
- What are the key cost and time considerations?

Brief 6: The future of evidence synthesis and knowledge brokering

- What are the key innovations in evidence synthesis?
- What are the emerging tools that can potentially make the evidence synthesis process faster and more efficient?
- What is knowledge brokering?
- How can the findings from evidence synthesis be presented and translated in a manner that is understandable, useful and accessible to decision makers?

Brief 7: Tools and resources for evidence synthesis

- A collection of key tools and resources for evidence synthesis

Brief 8: Glossary

- A glossary of key terms used throughout this series of briefs