















Social Science Resources Guide for Environmental Organisations

What does this guide do?

This guide brings together a range of resources to support understanding and the use of social science research within environmental organisations.

How was it developed?

The guide was bought together with the support of several environmental organisations (see logos) that have a small but growing remit in the social sciences, and through funding from the <u>ACCESS Flex Fund</u>. The design process is detailed in the report 'Developing acrossorganisational social science resources for non-social scientists within environmental organisations' on https://publications.naturalengland.org.uk/.

Who is the guide for?

The guide is openly accessibly, but intended for the use of environmental organisations with a remit around social science and a need to upskill their organisations in understanding and using social science.

How should it be used?

It can be used in whatever way best suits organisational need, but some suggestions might include:

Use by social scientists/science teams: The social sciences are used to a different extent in different environmental organisations, and so whether you are a team of 1 or 30, these resources could be used as part of your package of support for the wider organisation. For example, you might:

- 1. Transfer the content of this guide to your internal team pages. It is currently set-up as a front page with multiple sub-pages for this purpose, with multiple sections where we suggest you add your '[organisation specific]' resources;
- 2. Share the guide with those starting a social science project and wondering what the process might look like and what support they can draw upon;
- 3. Refer to the guide yourself to find useful resources that you can share when social science support requests come in.

Use by others looking to understand and use social science research: We hope that this guide will be a valuable resource to those beyond social science teams, to help them understand the uses and benefits of social science research in the environmental field, but also to help equip them to better use some basic social science methods.

However, we should always remember that the social sciences are a specialist skill and in many cases you will need social scientist input to support the work you are doing. Doing social science research without the appropriate understanding and/or support, poses a risk to both participants and the organisation.

















Environmental Social Science Resources Home Page

Learn more about Environmental Social Science

What is Social Science?

Learn more

Environmental Social Science

See examples of existing research

Commissioning Social Science Research

Ouick links

Plan and do Social Science Research

The social sciences are a specialist skill. These resources are provided to 1) enable basic use of more straightforward and low risk social science methods by non-social scientists, and 2) as continued professional development for those with social science expertise. Doing social science research without the appropriate understanding and/or support, poses a risk to both participants and the organisation.

Use the steps in the social science research process below to identify support at each stage. Click the links in each box to find out more.

- 1. Scoping the need & defining research questions
- ✓ Research questions
- ✓ Evidence reviews
- ✓ Planning evaluation



- 2. Setting a clear plan for your research
- ✓ Social research methods
- Sampling and recruitment
- ✓ Analysis plan
- ✓ Inclusive research



- 4. Carrying out your research
- ✓ Lone working safety
- ✓ <u>Time management</u>



- **3.** IMPORTANT: ethical considerations & data protection compliance
- ✓ Research ethics
- ✓ Data management



- 5. Analysis & reporting
- ✓ Analysing quantitative data
- ✓ Analysing qualitative data
- ✓ Reporting findings



- 6. Publishing & dissemination
- ✓ Publishing social research
- ✓ Communications planning

















What is Social Science?

Social science in its broadest terms is the study of people; as individuals, communities and societies, their values, attitudes, behaviours and interactions with each other and their environment. Understanding people and the social, political, cultural, institutional, economic and technological contexts in which we operate is critical to delivering thriving nature for people and planet.



What disciplines the social sciences include

Read the UKRI explanation



Why use social science research?

Read book chapter



















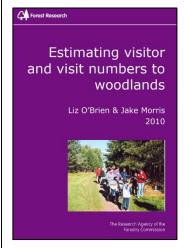
Environmental Social Science

While environmental issues have a scientific basis, their roots and solutions are often intertwined with human behaviour, societal structures, and cultural values. The social sciences can play an important role within this. For example, helping us to understand how communities interact with the environment, engaging different stakeholders and understanding their perspectives, and designing interventions to improve the ways we interact with nature. Without this social lens, environmental efforts risk overlooking crucial human dimensions, potentially leading to solutions that are unsustainable or even counterproductive.

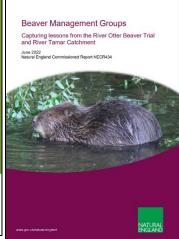
Explainer video: why do we need environmental social science?



Examples of environmental social science:













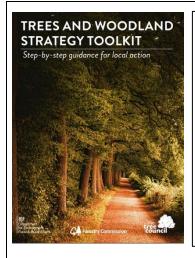




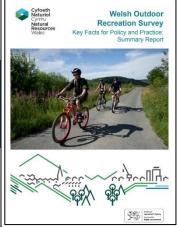




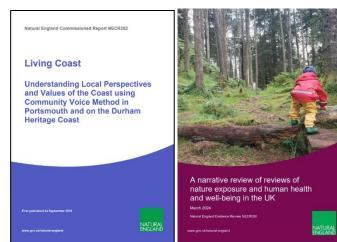




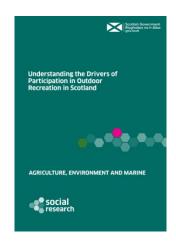








[organisation specific reports]





















Commissioning Social Science

You may need to commission others to undertake social science research for you, either due to time constraints or due to a lack of experience internally. Much like undertaking research yourself, you need to carefully consider the research process and approach that those who you commission will use. This ensures that the research undertaken is of sufficient quality and the findings useful for your organisation.

Social Research Association commissioning guidance

Read guidance

Commissioning in [organisation]

[organisation specific

Standards for contractors to adhere to

Read the Joint Code of Practice for Research















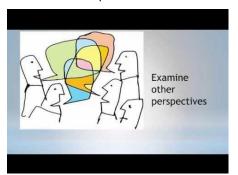


Research Questions

Before you decide on which social research method to use it is important to clearly outline your research question(s). A well-designed research question acts as a guide to your research approach. It should be:

- Focused and specific narrowing down a broad topic to a manageable and answerable problem
- **Feasible** within your timeframe and resources
- Contribute to existing knowledge building on the gaps you have identified through existing evidence review

Explainer video: writing a research question



Writing a research question

How to write a research question

See guidance and examples

Research questions for intervention evaluation

Learn about PICO/PEO

Examples of research questions

Read examples

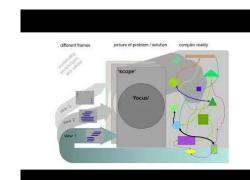
How you frame research questions matters!

How we frame social issues and research questions influences the direction of inquiry and the scope of potential solutions and policy implications. This is an important consideration at the beginning of the research process. To effectively frame your research question/s you might consider:

- Being clear about the underlying assumptions, values, and narratives that have shaped the topic under investigation.
- 2. Exploring less dominant perspectives and thinking about how these might be represented within your research.
- 3. Interdisciplinary collaboration and dialogue among stakeholders with diverse backgrounds and interests.

By critically examining and refining issue framing, social science research can contribute to more nuanced, equitable, and actionable insights that address the complex dynamics of contemporary society.

Explainer video: Why framing matters for sustainability



















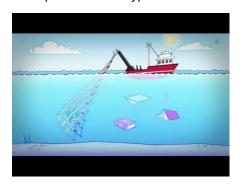
Evidence Reviews

Before designing your own research project, it is advisable to carry out a review of existing research to identify what we already know and where there are still gaps in our understanding. There are different types of evidence review or evidence synthesis, depending on what you are looking to draw together, and the amount of time and resource you have. For example:

- Literature Reviews are not systematic but can provide an overview and evaluation of existing research on a topic. This is the simplest and cheapest option but can be liable to bias and lack transparency.
- Quick Scoping Reviews provide an informed conclusion on the volume and characteristics of an evidence base and a synthesis of what that evidence indicates in relation to a question.
- Rapid Evidence Assessments provide an informed conclusion on the volume and characteristics of an evidence base, a synthesis of what that evidence indicates and a critical appraisal of that evidence.
- Systematic Reviews are reviews of a clearly formulated question that uses systematic and explicit methods to identify, select and critically appraise relevant research, and analyse data from the studies that are included within the review. Statistical methods (meta-analysis) may be used to analyse and summarise the results of the included studies. A systematic review is the most robust option, but time consuming and comparatively expensive.

Quick Scoping Reviews & Rapid Evidence Assessments are well suited to meet policy and practice evidence requirements.

Explainer video: Types of review



Guide to quick scoping & rapid evidence reviews

Read Defra/NERC guidance

BACK TO HOME PAGE

Accessing evidence

Find open access literature on Google Scholar

Search Google Scholar

Access journal articles

[organisation-specific guidance]

Learning how to do evidence reviews

Quick overview: evidence review key stages

Get started

Free online evidence synthesis courses

Access here

















Planning Evaluation

If you want to understand the impact and or process by which this was achieved of an intervention (perhaps a programme or policy), you should consider completing an 'evaluation'.

This process would normally start with bringing together existing understanding of how and why the intervention works and what the outcomes are in a 'theory of change'.

The Magenta Book provides an overview of evaluation as a sensible starting-point.

Writing a 'theory of change'

Within social research, a theory of change helps you to think through a particular policy, programme or action you are taking. It helps you to make explicit from the start what you plan to do, what you hope to achieve and the mechanisms/assumptions this is based on. By outlining this it will help you better identify what you need to evaluate to show change. The core components of a theory of change are:

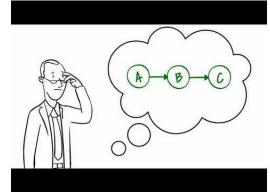
- 1. What you are trying to achieve/What change you hope to see
- 2. What steps/activities you are taking to achieve this change
- 3. What you expect to change as a result of these actions

Theories of change are often visual and can be adapted as new information becomes available. This makes them a useful tool for guiding and reflecting on your project and its evaluation.

The Magenta Book: Guide to Evaluation



Explainer video: Developing a theory of change



How to develop a theory of change

<u>Use government</u> guidance **Examples of** theories of change

See examples

















Social Research Methods

Often people think of surveys when they think about social research, however, the social sciences use a wealth of different research methods to help understand people and the society in which we live.

What to consider when choosing a method

1. The kind of outcomes your research question/s aim to report on:

Are you looking to measure or summarise human outcomes (whether behaviours, attitudes or characteristics etc)? In which case a larger quantity of quantitative data from a survey or analysis of existing (secondary) data may be more useful. Alternatively, you may wish to obtain data that cannot be captured easily through set-response or short-answer survey questions (such as questions of how, why or personal experience). In this case you may want to collect qualitative data through one of many qualitative approaches. Use the National Centre for Research Methods interactive tool and watch their quick video to help think about the different options depending on the type of research question.

Explainer video: Choosing a social research method



Choosing a research method

Use interactive tool

2. Your participant group:

For participant groups that are relatively easy to engage (e.g., there are a lot of them and they are accessible through gate-keepers or online), familiar with research (e.g., answering questionnaires and talking with researchers), and time rich, quick approaches like surveys may be possible. However, we often aim to get the views of marginalised groups or talk to a sample that can 'represent' the views of the wider population. In these instances, you may want to think about both the tools you use and how you make them available/accessible to a wide range of people. You may also want to think about the characteristics of your target participant group and what forums they engage with. For example, online surveys may exclude older age groups, whereas time-intensive face-to-face methods may exclude the working age group.

3. The resources available to you:

Balancing resources and rigour can be difficult. You may have big research questions but very little resource to answer these. Completing poor quality research that produces unreliable insights (e.g., small sample size or with a sample poorly representing the views of the group you aim to help) does not follow ethical research practice and should be avoided. Therefore, you might either consider whether the research is possible given the resource you have, or how you might focus the ambitions of your research to produce useful data given existing resources.

















Guides to different research methods

Using photos to give voice in research

Learn about PhotoVoice

Using creative methods

Learn about arts-based research



















Sampling and recruitment

Once you have decided upon your method you need to consider who will take part in your research. Based on your research question you should know who the population is who you would like to take part in the research. You then need to consider how many of the population you can reach (your sample). A summary of key terms can be found below.

- **Population**: All the members of the group you are interested in
- Sample: A subset of the population of interest
- Respondents/participants: Those who take part in the research

It is unlikely that you would have the time or resources to reach the whole population. You therefore need to consider what your approach to sampling will be. This includes considerations of representativeness, resources and the purpose of the research.

Once you have identified your sample you need to consider how to reach them e.g., online, in person, through a gatekeeper.

Explainer video: Considerations in sampling



More detail on sampling methods

Read more

















Analysing Data

It is important to consider how data will be analysed BEFORE it is collected. This will ensure you are collecting the right data to answer the research questions you have and that only the data that is needed is collected (in accordance with good data and research ethics).

Reflexivity and positionality

An important part of the social research process is the considering who you are may impact on your research. This may include the assumptions, expectations and approaches you bring to research which shape it and the conclusions it draws.

'Reflexivity' is the process of critically reflecting on this, whereas 'positionality' can be seen as the more public conclusions drawn around how this may have shaped the research at hand. You may want to read this more detailed explanation of what this means and suggestions for how to be reflexive shared here.

Being reflexive in your research

Understand what this means and how to approach it

Quantitative vs. qualitative

The range of different social science methods (or tools) available are typically broken down into qualitative and quantitative methods. You may hear these terms used:

- **Quantitative methods** tend to deal with numeric data. As such they focus on measurable data, usually through surveys or experiments, with the associated statistical analysis looking for patterns, trends and relationships.
- Qualitative methods focus on words, images and experiences. Data is typically collected through talking or observing individuals or groups to capture their thoughts, feelings and behaviours. Data analysis tends to focus on drawing together insights to find common themes and gain insights into specific experiences or situations.

Analysing quantitative data

The analysis of quantitative data can include the analysis of existing data, or data you have collected yourself. The most common way of collecting quantitative social science data is through the use of surveys. These typically include a mixture of question formats and so types of data, ranging from Likert scales, ranking questions or multiple-choice questions. You should plan in advance what questions you need to ask and how you will draw findings from this data to address your overall research questions or hypotheses. This will help you to identify the best format for asking your questions.

Analysis plan

It is important to have a data analysis plan BEFORE you launch your data collection. This will ensure that your collected data is in the right format for the analysis you need to perform.

Choosing statistics for a study

Read paper on data analysis planning

















Managing data

Any survey data collected needs to be entered into a database to help with analysis. If you've created an online survey this will be done automatically for you.

The software you use to analyse data will depend on what is available at your institution and the type of analysis you need to undertake. If just doing basic descriptive statistics, data analysis is possible in Microsoft Excel (available to most organisations). There is also an increasing array of free data analysis tools available e.g., \underline{R} .

Using existing data sets

Finding and analysing survey data from the UK

Watch UK Data Service Tutorial

Webinar: Analysing UKDS data about environmental attitudes and behaviour



Statistical analysis guidance

R Studio

Start with the beginners guide

Statistics learning

Watch a range of tutorials with Andy Field

Analysis support in [organisation]

[organisation specific]

















Analysing Qualitative Data

Data obtained from open-ended questions in surveys and through interviews/focus groups are the most common forms of qualitative data collected within social research. You should plan in advance how you will collate and draw together findings from this data.

Transcribing data

When collecting verbal responses from participants it is best practice to record and transcribe answers rather than relying on notes. This reduces bias when taking notes.

Transcription options:

- Transcribe the material yourself.
- Commission a transcription service
- Use an online AI transcription service.
 (e.g. otter.ai or MS Teams
 transcription). These automated
 transcripts are likely to contain some
 level of error, checking the transcripts
 for accuracy is important.

Transcription tips

Transcribing data can be time consuming. Consider this when planning your project. If you are commissioning a third party to do the research, ensure this is included in their plan and budget.

Consider how you will record the audio in sufficient quality to facilitate the transcription process.

The Informed consent sheet must mention your plans to record and transcribe conversations and allow participants to indicate their consent to being recorded in this way.

Thematic analysis guidance

For beginners, 'thematic analysis' is the most commonly used form of analysis for qualitative data. Watch the tutorial video to see if this is appropriate for your research.

There are a number of helpful programmes that make the analysis of large quantities of qualitative data more manageable. One of these is NVivo, but similar systems of data management and coding can be established using more commonly available softeware like Microsoft Excel.

Webinar: Thematic analysis from leaders in the field based on the paper 'Braun & Clarke' (start at 2:05)



Tutorial: Getting started with NVivo



















Equality, diversity, inclusion and accessibility in social research

Equality, Diversity, and Inclusion (EDI) play a crucial role in every stage of the research process, from formulating research questions to disseminating findings. Read more in the Equality Act 2010.

At the research planning stage, diverse perspectives contribute to the identification of research priorities that address a wide range of societal needs and challenges. Participatory approaches can also support more effective research design.

Throughout data collection and analysis, inclusive practices ensure that data reflects the complexities of diverse populations, leading to more comprehensive and accurate results. In the interpretation phase, diverse perspectives help contextualise findings within different cultural, social, and historical contexts, enhancing the relevance and applicability of research outcomes.

In addition, an inclusive research environment fosters innovation and creativity by encouraging the exploration of a wide variety of ideas and approaches.

Finally, in disseminating research, prioritising accessibility and inclusivity ensures that findings reach and benefit diverse audiences, promoting greater equity in knowledge dissemination and utilisation.

Accessibility

Making research findings digitally accessible is important for reaching a wide audience and is also <u>required under law</u>. The Accessibility Regulations 2018 ensures equal access for all individuals, including those with disabilities. This entails employing practices such as using accessible document formats (e.g., PDF), providing alternative text for images, ensuring proper heading structure for screen readers, and maintaining sufficient colour contrast for readability. Furthermore, adopting plain language and avoiding complex jargon makes documents easier to understand for a wider and more diverse set of audiences.

EDI and accessibility guidance

Inclusive research practices

Visit government guidance

Designing for accessibility

The dos and don'ts

[Organisation] guidance

[organisation specific]

















Research Ethics in Social Research

Those doing or commissioning social research should protect research participants, and mitigate against risks to the organisation and wider societal impacts, by adhering to ethical research practices.

Those commissioning or conducting research with human subjects should uphold six key ethical principles (outlined by the <u>Government Social Research (GSR) Profession</u>):

Principle 1: Research should have a clear user need and public benefit

Principle 2: Research should be based on sound research methods and protect against bias in the interpretation of findings

Principle 3: Research should adhere to data protection regulations and the secure handling of personal data

Principle 4: Participation in research should be based on specific and informed consent

Principle 5: Research should enable participation of the groups it seeks to represent

Principle 6: Research should be conducted in a manner that minimises personal and social harm

Explainer video: Research ethics in practice



Key ethical principles

Read more about the GSR principles

Practical guidance on applying these principles

Read the Social Research Association guidance

[Organisation] ethics

Forganisation specific

Guidance for specific areas of research ethics

Research with children and young people

Visit UKRI guidance

Internet mediated research

Visit UKRI guidance

Using social media for research

Visit GSR guidance

Informed consent

Visit UKRI guidance

















Data management

As part of good research ethics, it's also important to consider whether you are handling people's data responsibly. This includes ensuring compliance with legal requirements, as well as considering wider data ethics. The governments <u>Data Ethics Framework</u> principles can help you do this.

As a minimum, you should adhere to the UK General Data Protection Regulation (UKGDPR) and the Data Protection Act 2018 which involves:

- <u>Data Protection Impact Assessments</u> (**DPIA**) are used to help you identify and
 minimise the risks associated with the handling of people's personal data. You should
 follow your organisations data protection procedures to decide if you should
 complete one (many screening tools available to help with this).
- **Providing participants with a <u>privacy notice</u>** or including information about how their data will be used in the study introduction before they provide consent to take part. This includes things like, what data you will hold, who will handle it, how it will be stored and when it will be destroyed.
- Records of processing activities (ROPA) to ensure the data is managed well across the lifecycle (e.g., stored, archived and deleted) should be kept in accordance with your organisations data protection procedures.

[Organisation] data protection guidance

<u>[organisation specific]</u>

















Carrying out Research

There are several practical considerations as part of the social science research process. These include researcher safety and ensuring that sufficient time is planned into each step to ensure that research is conducted to a sufficient standard.

Lone working

Often data collection can involve lone working for researchers – for example travelling to different locations to conduct interviews or collect survey data.

Researchers who need to undertake lone working should consider:

- checking in and out with colleagues once you leave a data collection site, and that they know where you will be.
- having a charged and working mobile on them at all times. If you're working in a remote area with poor phone signal consider providing estimated length of stays at location.
- having conducted a risk assessment prior to any data collection taking place.

Time management

The time taken to undertake social science research is often underestimated. Have realistic timelines for each stage, and building in contingency within these is important.

Stages of the research process that often take longer than expected are: designing your research instruments (including sharing drafts for comments, obtaining ethical and organisational approvals and making necessary revisions), recruiting participants to take part and data analysis.

















Sharing your findings

Publishing social research

It is beneficial to write-up social research so that there is transparency around the methods used, analysis completed and research findings. This can be done through an academic journal, an organisational report, or through other avenues suited to your target audience.

The Government Social Research Profession have useful principles for the publication of social research that can be applied beyond government research to improve research integrity, these are: **Principle 1**. The products of research and analysis will be made publicly available.

Principle 2. Prompt release of all social research and analysis, including advance publication of research protocols and analysis plans

Principle 3. Social research and analysis must be released in a way that promotes public trust.

Principle 4. Clear communication plans should be developed and maintained for all social research. **Principle 5.** Responsibility for the release of social research and analysis must be clear.

Create a communications plan

Communications plans should be built into a project plan from the outset.

A communications plan should outline who your target audience(s) will be. This may include both internal and external communications. By having defined target audiences for your research, you can be clear on how your communications will reach them, and can tailor your messaging to emphasise why the research would be of interest to them.

Ensure that you communicate your findings as clearly as possible: you may wish to produce a shorter research summary specifically for this purpose. As with all communications and research outputs, you should ensure that this is produced in an accessible format.

Sharing your findings with your research participants, either directly or through their supporting organisations so that findings are visible to them is also important where possible. This will only be possible if participants have given their consent for you to use their contact details in order to do so. By sharing the findings it acknowledges their contribution to advancing our knowledge and maintains good relationships.

Explore different formats of sharing your research to suit your audience:

These might include, but are not limited to:

- A press release through your organisations press office (or similar)
- Internet blogs, articles or think pieces
- TV or radio shows
- Social media posts, including video explainers or infographics
- Attending groups hosted by your target groups e.g., schools, business or interest groups
- Conference talks or posters

[Organisation] comms guidance

[organisation specific]