

Research methods and skills



Gathering Information

Primary and secondary sources

A primary source provides direct or first-hand evidence about an event, object or person. Primary sources provide the original materials on which other research is based and enable students and other researchers to get as close as possible to what actually happened during a particular event or time period.

Examples of primary sources:

- autobiographies and memoirs
- diaries, personal letters and correspondence
- interviews, surveys and letters
- focus groups
- Internet communications such as email and blogs
- books, magazine and newspaper articles published *at the time of the event*
- public opinion polls
- original documents
- research data, such as census statistics
- official records of organisations and government departments
- government documents

Secondary sources describe, discuss, interpret, analyse, evaluate and summarise primary sources. A secondary source is generally one or more steps removed from the event or time period and are written or produced after the fact with the benefit of hindsight. Secondary sources often lack the freshness and immediacy of the original material.

Examples of secondary sources:

- biographical works
- reference books and encyclopaedias
- articles from magazines, journals, and newspapers *after the event*
- literature reviews
- academic books and articles
- commentaries
- textbooks
- documentaries, films and radio programmes

** Some of these sources can act as primary sources for certain forms of research.*

Evaluating Sources

When using and reviewing sources you should consider the following points:

- the **author**: find out about the author's level of experience in relation to the issue being discussed.
- **bias**, or the author's point of view, if this is displayed in the source.
- what is the **purpose** of the source? This is important when considering reliability. Is it to persuade, to inform, do develop or to reject? Who are/were the intended readers?
- the **date** of a source helps to see it in context, and understand its validity.
- is the source **supported** or contradicted by other sources?
- What is the quality and **integrity** of the source? Peer-reviewed academic journals are the gold standard – be careful with internet sources.

When you are reviewing sources, you should keep asking yourself if and in what ways they are related to the aims of your research.

Tips for evaluating online sources

How did you find the site?

- Was it cited in a credible source? This is generally an indicator of reliability.
- Was it a link within a reliable site? This is generally an indicator of reliability.

What is the site's domain?

- .org: An advocacy website, such as a not-for-profit organisation e.g. un.org
- .com or .co.uk: A business or commercial site
- .net: A site from a network organisation or internet service provider

- .gov.uk: A UK Government website
- .gov.scot: A Scottish Government website
- .ac.uk: A website associated with an academic institution, e.g. gla.ac.uk is Glasgow University
- .edu: A site affiliated with a higher education institution in the United States.
- .fr: A site originating in another country, e.g. France (as indicated by the two letter code)

You can use the site's domain to work out if the website is from a credible source. For example, the UK and Scottish Government websites regularly publish credible sources of statistical data which can be trusted. Academic institutions will also publish high-quality, reliable information.

Who authors this page?

Look for information on the author of the site. On the internet anyone can pose as an authority.

- Is the author's name clearly visible? Does the author have an affiliation with an organisation or institution? How might this affect what they are writing?
- Does the author list his or her credentials? Are they relevant to the information presented?
- Has the author written on this topic before? You could conduct a search to find any previous publications.

Is the information accurate and objective?

There are no standards or controls on the accuracy of information available via the internet. The internet can be used by anyone as a forum for airing his or her thoughts and opinions.

- Is it free from spelling errors?
- Is the text well-written and grammatically correct?
- Has the author listed a bibliography?
- Are the sources cited reliable and can they be verified elsewhere?
- Does the author present objective arguments or make it clear when he or she is expressing biased opinions?
- Is it a personal website or blog which expresses personal opinions?
- Is the website part of a commercial organisation, a political party or an organisation with a specific agenda? If yes, question the motives for publishing the information.

Conducting your own social research

What types of research are there?

There are three research paradigms or methodologies:

- *Quantitative* research is research that relies primarily on the collection of quantitative (numerical) data
- *Qualitative* research is research that relies primarily on the collection of qualitative (non-numerical, e.g. words, images) data
- *Mixed research* (commonly referred to as 'mixed methods' research) involves a combination of both forms of research (the proportions of each form used differ).

However, mixed methods research also refers to mixing different methods within qualitative research, or within quantitative methods. This is often done in order to **triangulate** the data.

Triangulation: in research, this involves the combination and application of two or more research methods, in an attempt to validate the data generated.

All of these are umbrella terms, and within each 'type' of research, there are many different types of methods that can be used.

For a more detailed overview of these different methodologies or paradigms of research, please look at this [SAGE publication](#).

When conducting any form of research, you must always bear in mind your *research questions*. Not all research methods will answer your questions, or answer them to the level of depth and detail that you are seeking. No research method is perfect. In addition, in any research method there are always practical and ethical considerations to take into account.

Alan Bryman's '[Student Researcher's Toolkit](#)' is a very helpful and practical guide to help you with conducting your own social research project.

The [ESRC outlines some key principles in producing good research](#):

- Validity: does it answer your research questions?
- Reliability: if it is repeated, will it get the same results?
>> This is often difficult to achieve for social researchers. Some argue that because every researcher is different, these characteristics shape the research, and all of the interactions that take place. Moreover, if people know that they are being researched, this often leads to different behaviours and responses than we may expect; this is referred to as '*the observer effect*'.
- Representativeness: is the study or project representative of a bigger group than just the sample?
- Generalisability (if the above three exist, generalisability is possible): generalisations can be made about 'x', based on the results.

These are some important starting points, but these are by no means exhaustive.

Ethical issues

One of the basic principles of social research is that research should not cause any harm people or put anyone at risk as a result of their participation. The [Economic and Social Research Council \(the ESRC\) offers detailed guidelines on conducting ethical research](#).

Included in its *Framework for Research Ethics* are six guiding principles:

1. *"Research should be designed, reviewed and undertaken to ensure integrity, quality and transparency.*
2. *Research staff and participants must normally be informed fully about the purpose, methods and intended possible uses of the research, what their participation in the research entails and what risks, if any, are involved..." (exceptions provided elsewhere in the document).*
3. *The confidentiality of information supplied by research participants and the anonymity of respondents must be respected.*
4. *Research participants must take part voluntarily, free from any coercion.*
5. *Harm to research participants and researchers must be avoided in all instances.*
6. *The independence of research must be clear, and any conflicts of interest or partiality must be explicit"*

This [ESRC document](#) offers an accessible summary about what these ethical issues are and the implications of them.

Research Methods

Some of the most popular methods of generating qualitative or quantitative data are listed below, along with a brief discussion on how they operate in practice, and a brief consideration of commonly cited strengths and weaknesses.

Qualitative methods

Interviews

An interview is a “*conversation with a purpose*” (Burgess, 1984).

Interviews can be conducted as a one off or can be *serial* (more than one; a series of generally shorter interviews). Interviews can be conducted face-to-face, or via the telephone.

- ✓ Interviews are not overly time-consuming.
- ✓ Interviews tend to generate rich, detailed data.
- ✓ Depending on the level of flexibility used, tangents and deviations from the interview schedule can offer insights into questions the researcher had not even considered, but which may be particularly important to the interviewee. In this way, interviews can help shape the researcher’s own research questions and challenge his/her assumptions.

- ✗ If rapport (see below) is not established, the interviewee is less likely to ‘open up’ to the interviewer, limiting the data generated.
- ✗ Interviews are difficult to replicate between researchers because each interviewer is different. Both the researcher’s and interviewee’s demographic characteristics and personalities (among other factors) shape each interview. This limits comparability or generalisability.

Within interviews, there are often considered to be three sub-sets of interviews:

- *Structured*: the interviewer has a list of questions contained in an interview schedule and there is little or no deviation from it.
- *Semi-structured*: this is the most common form of interview. The researcher has a schedule with key themes they wish to explore, but the order is left flexible, and tangents are allowed.

- *Unstructured*: the interviewer will have a clear idea of his/her research questions, but there is no list of interview questions. The interviewer may ask one question to start the interview, and the rest of the interview discussion will flow from this.

Practical and ethical considerations:

- *Rapport*
Establishing trust and respect are essential features of any research interview. In some cases, it can be established or begun prior to the interview (for example, if you know the interviewee), but on other occasions, it may need to be established at the time of interviewing.

Ways to establish rapport (examples):

- Being an active and empathetic listener can help establish rapport. Active listening includes acknowledging what the interviewee has said in verbal ('uh huh', 'yeah') terms or non-verbal terms (nodding head), and showing positive body language towards the interviewee (for example, body positioned towards interview, making eye contact)
 - Starting the interview with easy to answer or 'warm-up' questions.
- *Sensitive topic/sensitive questions*
Often qualitative researchers are researching sensitive or potentially sensitive topics, or have sensitive or potentially sensitive questions as part of their interview schedule. Given the nature of crime and justice, research into this area is often quite sensitive. Sensitive topics or questions are not per se to be avoided; often they are on important areas which are in need of research. However, they need to be very carefully managed, and ethical considerations should be given paramount attention.
 - If at any time the interview becomes distressed, researchers should pause or stop the interview.
 - The interviewee has a right to stop or pause the interview at any time, and has the right not to answer a question he/she does not want to answer.

Participant observation

Participant observation is considered an *ethnographic method*. *Ethnography* involves the study of a particular place or group of people in a "*naturally occurring setting*".

The ethnographer is both present and involved in the setting; the degree to which the

ethnographer is involved varies. Ethnography has its roots in (social) anthropology,

and ethnographies tend to take place over a significant period of time (typically months if not years).

In participant observation, the researcher will observe and interact with the group or place he/she is studying. The researcher takes detailed '*field notes*' about what he/she has observed.

- ✓ The researcher is able to capture the difference between what people say and what people *do*. Researchers often combine participant observation with interviews, as both can be used as checks for the other and can triangulate their data.
- ✓ The researcher can see a particular group/place/phenomenon through the eyes of the people he/she is researching with.
- ✓ The researcher can gain a very rich, in-depth understanding of what he/she is studying.
- ✓ The researcher is able to capture the changes that occur over time. For example, in a one-off interview, a researcher may only capture the interviewee's experiences or views at that time. In participant observation or ethnography, a researcher can capture change.
- ✗ It is a very time-consuming process.
- ✗ The degree to which the researcher is involved in the 'field' has ethical implications: one's role as a researcher can become blurred: are the participants able to give informed consent to *all* elements of the research?
- ✗ There are practical difficulties with writing field notes: what do you include and what do you discount? When do you write and re-write your field notes?
- ✗ Researchers have assumptions about the 'field' (this is inevitable because humans all have biases). These assumptions may obscure what the researcher is actually observing or *thinks* he/she is observing. It may cause the researcher to 'look for' certain events or experiences and discount those that do not fit with his/her assumptions – this is referred to as '*confirmation bias*' or '*observer bias*'.

Focus groups

Focus groups are also referred to as '*group interviews*'.

Anita Gibbs states: "*the main purpose of focus group research is to draw upon respondents' attitudes, feelings, beliefs, experiences and reactions in a way in which would not be feasible using other methods.*"

Focus groups tend to comprise 4-10 people discussing a particular topic or issue for around 60 minutes. The researcher introduces the topic and all group members, and encourages all participants to contribute while respecting '*focus group etiquette*' (such as showing respect, and not talking over one another). In a focus group, the researcher facilitates and moderates the discussion.

- ✓ In general, large quantities of data are generated in a short space of time
- ✓ Participants can query and challenge each other. However, the extent to which participants do this might depend on the dynamics of the group.
- ✓ Provides an insight into how groups think and interact.
- ✗ Demands quite a high degree of organisation from the facilitator in co-ordinating people's schedules to an agreed time and place
- ✗ The facilitator needs to be careful in managing group dynamics to ensure some participants do not take over the discussion.

Quantitative Methods

Surveys/questionnaires

A survey is a *research method for collecting/generating quantitative data*.

One tool commonly used when conducting a survey is a questionnaire. A *questionnaire is a list of written questions*.

Self-completion questionnaires are either sections or entire questionnaires in which the respondent answers the questions alone, with no researcher present. Postal and online questionnaires are examples of self-completion questionnaires. Large-scale social surveys tend to have elements which involve self-completion, where the

researcher will not be present. The researcher's absence avoids embarrassment, meaning the respondent's answers are more likely to be truthful. For example, the *Scottish Crime and Justice Survey* offers a self-completion section for respondents on experiences of sexual victimisation and stalking, in addition to the questionnaire that is completed with the researcher.

General advantages and disadvantages of questionnaires:

- ✓ Vast quantities of quantitative data are produced quite quickly and easily.

- ✓ The same questionnaire can be used by different researchers since there is limited interaction between the researcher and the participant.
- ✓ For self-completion sections, sensitive data can be collected
- ✗ Depth and detail cannot be captured. For example, you might know that 'x' happens, but the method will not tell you *why* 'x' happens

Face-to-face surveys

Face-to-face surveys are similar to structured interviews (where there is little or no room for variation in questions or for tangents)

- ✓ Control over who answers the questionnaire (i.e. the individual(s) the researcher intends)
- ✓ Opportunity for the respondent to ask questions, clarify or provide more information

Postal surveys

- ✓ Offers respondents more time to reflect, which might result in more thoughtful or detailed responses
- ✗ Typically low response rates
- ✗ Relies on the literacy and English language skills of the individual in the household: unrepresentative sample and raises ethical concerns too
- ✗ No control over who answers the questionnaire in the household
- ✗ No opportunity for respondent to ask questions, clarify or provide more information. The respondent could misinterpret the question and provide incorrect information, limiting the data.

Online surveys

- ✓ Offers respondents more time to reflect, which may result in more thoughtful or detailed responses.

- ✗ Not all households have access to the internet, limiting the representativeness of the sample.

Telephone surveys

- ✓ Data can be generated from a range of geographic locations
- ✓ Can talk to a substantial number of people, at a relatively low cost
- ✓ Opportunity for the respondent to ask questions, clarify or provide more information
- ✗ Refusal rates may be high (e.g. if researcher phones at an inconvenient time)

- ✘ Increasing numbers of the population no longer have a landline (if telephone survey depends on landline). Even of those, a number have ex-directory numbers. This limits a representative sample.

[This is a guide to writing and conducting questionnaires.](#)

Further Reading

Bryman, A. (2012) *Social Research Methods Student Researcher's Toolkit*, Oxford University Press. Available from:

<http://fdslive.oup.com/www.oup.com/orc/resources/sociology/brymansrm4e/01student/toolkit/index.htm>

ESRC (2012) *Framework for Research Ethics (FRE)*. Available from:

http://www.esrc.ac.uk/_images/framework-for-research-ethics-09-12_tcm8-4586.pdf

ESRC Social Science for Schools *Methodologies, Ethics- Participants' interests, confidentiality and consent*. Available from:

http://www.esrc.ac.uk/_images/methodologies-ethics_tcm8-32681.pdf

ESRC Social Science for Schools *Methodologies, What makes good research?*

Available from: http://www.esrc.ac.uk/_images/what-makes-good-research_tcm8-32679.pdf

Gibbs, A. (1997) *Focus Groups Social Research Update* (Issue 19) Sociology at Surrey. Available from: <http://sru.soc.surrey.ac.uk/SRU19.html>

SAGE Publications *Chapter 2, Quantitative, Qualitative and Mixed Methods Research*. Available from: http://uk.sagepub.com/sites/default/files/upm-binaries/38123_Chapter2.pdf