This Glossary contains definitions of words and phrases as they are used in this book. You need to bear in mind that not everyone uses research terms in the same way.

Words and phrases in italics are also defined within this Glossary.

**Abstract**  Summary of academic research, usually 250–500 words long.

**Academic research**  Research conducted for an academic qualification, such as a diploma, Master’s degree or PhD, or in support of an academic career.

**Action research**  An iterative process of reflection and problem-solving in groups or communities.

**Activist methodology**  A methodology in which victims of oppression will research that oppression. Also known as emancipatory methodology.

**Analysis**  See data analysis.

**Application programming interface (API)**  A piece of source code that is being used to release some open data in such a way that external programs can communicate with it and access or exchange data.

**Archival data**  A subset of secondary data made up of historical records.

**Arts-based research**  Research that makes use of arts techniques such as drawing, photography or performance.

**Average**  See mean.

**Background research**  Part of a research project designed to give context to the research question, which may be in the form of a document review – for workplace research; or a literature review – for academic research.

**Bibliography**  A list at the end of a book or other written document containing references, some of which are cited in the text and some of which are not but may be useful to readers.

**Bivariate statistics**  Descriptive statistics that describe the relationship between two variables.

**Case study**  A research method in which a single ‘case’ (person, organisation, country, and so on) is studied in depth.

**Citation**  Giving the details of the source of an idea, fact or opinion that you draw on in your research.

**Closed question**  A question with predefined answers to choose from.

**Code**  A label for a piece of quantitative data or qualitative data.

**Coding**  Labelling quantitative data or qualitative data to facilitate data analysis.

**Coding frame**  A set of words or phrases to guide your coding of qualitative data.

**Constructionist methodology**  Methodology that views social phenomena as constructed by social actors, and recognises multiple realities rather than one independent reality.
Content analysis  A method of analysing qualitative data where you count the number of instances of each code.
Convenience sample  A sample where you choose the first participants you can find who are willing to help.
Copyright  The legal right of control over original written (or musical or artistic) work.
Correlation co-efficient  A statistical calculation that gives an estimate of the average distance of each point on a scattergraph from the regression line.
Covariant relationship  A relationship where two variables change in accordance with one another.
Critical realist methodology  A type of realist methodology that allows for an independent reality, but views that reality as only accessible through people’s perceptions.
Cross-analysis of data  See data synthesis.
Data  Information collected for research.
Data analysis  Methods of analysing data to find out what it can tell you.
Data collection  Methods of collecting data for research.
Data mashup  A mixture of data from two or more APIs.
Data preparation  Methods of preparing data for coding and analysis.
Data repository  A place where data is kept, usually on the internet.
Data synthesis  Comparing and contrasting the findings of different segments of data analysis within the same piece of research. Sometimes called cross-analysis of data.
Data visualisation  Presenting data in the form of images such as graphs, charts and infographics.
Decolonising methodology  A transformative methodology in which colonised peoples research their own situations.
Deconstruction  An approach to separating meaning from content.
Dependent variable  A measurable characteristic that stays constant in the course of the research.
Descriptive statistics  Statistics that enable us to summarise and describe numerical data.
Digitally mediated research  Research using digital technology.
Dissemination  Sharing knowledge gained through research.
Dissertation  The write-up of a piece of academic research conducted for a qualification such as a Master’s degree.
Document review  A review of relevant documents to provide context for workplace research.
Documents  Pieces of text that may be used for background research or as data.
DOI  Digital object identifier, used to uniquely identify electronic resources.
Draft  An unfinished piece of writing.
Edit  Work to improve a draft.
Emancipatory methodology  A methodology in which victims of oppression will research that oppression. Also known as activist methodology.
Emergent coding  Coding based on whatever the researcher perceives to be of interest in qualitative data.

Ephemera  Text and/or images that are not designed to be kept, but may be useful as data, such as advertising leaflets and social media updates.

Epistemology  How knowledge of the world is learned.

Ethics  The rules of conduct for a particular activity.

Ethnography  A time-consuming research method, used in qualitative research, from the discipline of anthropology.

Evaluation  A type of applied research used to assess the effectiveness of services or interventions, and make recommendations for improvement.

Excel  Computer software by Microsoft designed for spreadsheets and with the ability to perform statistical calculations.

Executive summary  Summary of workplace research, usually 1–4 pages long.

Feminist methodology  A transformative methodology designed to redress the power imbalance between the sexes.

Findings  The results of research.

Focus group  A data collection technique in qualitative research that usually involves one or two researchers and several participants.

Formal theory  A way of making sense of an aspect or aspects of the world around us, based primarily on thought.

Freewriting  A technique to help writers overcome blocks or solve problems.

Frequency distribution  A way of showing how many times a particular variable has occurred, both of itself and in relation to other variables.

Gatekeeper  Someone who is able to help you reach potential participants.

Generalisability  The extent to which the findings of research apply in situations beyond that in which the research was conducted.

Generated theory  Theory that is built as part of the research process.

Geographic information system  A way of working with data that contains location or place information, and plotting it on a map or doing calculations related to its position on the Earth.

Graph  A diagram to show changes in one variable or the relationship between two variables.

Grey literature  Documents that are not formally published, but that may be available in hard copy and/or electronic formats from individuals, organisations or governments.

Grid  A table designed for keeping records, for example of documents or literature, or making notes, for example of observations, for the purposes of research.

Grounded theory  A form of generated theory that is grounded in data.

Hermeneutic methodology  An interpretivist methodology focusing on the principles of interpretation.

Hypothesis  A hunch, guess or suspicion about something unknown.

Impact  The effect research has in the world, which may be positive or negative.

Implementation  Making use of research findings.
Independent relationship  A relationship where two variables change independently of one another.

Independent researcher  A researcher who is not part of an academic or other institution.

Independent variable  A measurable characteristic that changes in the course of the research.

Inferential statistics  Statistics that enable us to infer something about a population from a sample.

Informal theory  A way of making sense of an aspect or aspects of the world around us, based primarily on experience.

Instrument  See measuring devices.

Intellectual property  Original ideas or words, which are held to belong to the person who created them.

Interpretivist methodology  Methodology suggesting that reality is interpreted by people as they work to make sense of the world they experience and of their place in that world.

Interval data  Quantitative data in ranks with a defined numerical distance between them, such as age in years.

Interview  A data collection technique in qualitative research that usually involves one researcher and one or two participants.

Inventory  See measuring devices.

Knowledge exchange  A view of research as an arena where people are continually exchanging knowledge.

Literature  Academic texts that may be used for background research.

Literature review  A review of relevant literature to provide context for academic research.

Location  A researcher’s position, which may be geographical, political, theoretical, and so on.

Mashup tool  A technological tool for combining data from different APIs (application programming interfaces).

Mean  A statistical calculation for quantitative data in which the total of all values is divided by the number of values. Also known as the average.

Measuring devices  Scales, tools, instruments or inventories designed to measure human characteristics and conditions.

Median  The middle value in a set of quantitative data after it has been ranked in order.

Meta-analysis  Similar to a systematic review, but also includes a statistical summary of findings from quantitative research.

Metadata records  Data about data, such as grids designed for recording data during observation or for coding visual data.

Methodology  A coherent and logical framework for research based on views, beliefs and values.

Mixed methods research  Research drawing on both quantitative data and qualitative data.

Mode  The value occurring most commonly in a set of quantitative data.
Nominal data  *Data* in categories with labels, such as categories of ethnicity.

Non-probability sample  A *sample* in which every member of the *population* does not have an equal chance of becoming a member of the *sample*.

NVivo  Computer software designed to support the *coding* and *analysis* of *qualitative data* including text, audio and images.

Objectivity  Considering or managing a situation on the basis of facts and logic without the involvement of emotions, values or other intangibles.

Observation  A *data collection* technique in *qualitative research* that usually involves one *researcher* and many *participants*.

Ontology  How the world is known.

Open access  Free access for everyone, for example to academic journal articles.

Open data  *Data* collected by governments and made freely available to everyone.

Open question  A question with no predefined answers.

OpenOffice  Freely available software that is compatible with Microsoft Office, including Microsoft *Excel*, and that performs the same functions.

Ordinal data  *Quantitative data* in ranks without a defined numerical distance between them, such as the first, second and third places in a competition.

Participants  People who participate in *research*, for example by completing a *questionnaire* or taking part in an *interview*.

Participant observation  A time-consuming method of collecting *data*, often used within *ethnography*.

Participatory appraisal  Sometimes called participatory rural appraisal, a set of participatory and mostly *arts-based* techniques for use in community-based *research*.

Participatory methodology  A *transformative methodology* in which *participants* are involved throughout the *research* process.

Participatory action research  Similar to *action research*, but with a slightly stronger emphasis on partnership.

Phenomenology  An *interpretivist methodology* focusing on how people experience the world they live in.

Pie chart  A circular chart with ‘slices’ that show the proportions of different *variables* in a dataset.

Pilot  A test run of a *data collection* method to assess its quality.

Plagiarism  Presenting someone else’s ideas or words as your own original work.

Polish  The final stage in the writing process, to remove any remaining errors and finalise structure, grammar, word choices, and so on.

Population  All of the people you could, in theory, include as *participants* in a *research* project.

Positivist methodology  *Methodology* originating in the natural sciences that places a high value on *objectivity*.

Postmodernist methodology  A *methodology* that holds objective reality to be inaccessible and knowledge to be relative.
Post-positivist methodology  A form of positivist methodology that accepts that a researcher will influence what they observe.

Practitioner  Someone who works in public services, whether paid or unpaid.

Primary data  Data collected specifically for your research project.

Probability sample  A sample in which every member of the population has an equal chance of becoming a member of the sample.

Public services  Services run by society for society, such as health, social care, criminal justice and education services, from pre-school to university.

Purposive sample  A sample of people who, in the researcher’s judgement, have most to contribute to the research.

Qualitative data  Data in the form of words, images, sound, or anything except numbers.

Qualitative research  Research based on qualitative data.

Quantitative data  Data in the form of numbers.

Quantitative research  Research based on quantitative data.

Questionnaire  A data collection instrument primarily used for quantitative research.

Quota sample  The population is divided into segments on the basis of characteristics (for example, gender, age, geographical location) and then a different type of sample, such as a convenience sample or purposive sample, is taken from each segment.

Random sample  A sample where random numbers are used to select participants.

Range  The difference between the smallest and largest values in a set of quantitative data.

Realist methodology  Methodology that uses theory, recognises complexity and acknowledges context.

Recommendations  Suggestions for how workplace research can be put into practice.

Reference  The full details of a document or piece of literature, signposted by a citation.

Reference list  A list at the end of a research report, dissertation or thesis, containing references, all of which are cited in the text.

Reliability  The extent to which a research method will produce the same results when used in different situations.

Research  Systematic investigation, using a predefined research method, to gather information with the aim of answering a predefined research question.

Research commissioner  Someone who holds a budget for a piece of research.

Research method  System for conducting research.

Research plan  Similar to a research proposal, most commonly used in workplace research to inform people such as research commissioners, managers and colleagues.

Research proposal  A written explanation of what you intend to research and why, and how you intend to carry out the research, to inform people such as potential funders or PhD supervisors, most commonly used in academic research.
Research question  The stated question that a piece of research aims to answer.
Research report  The write-up of a piece of workplace research.
Research topic  The subject area of a piece of research.
Researcher  A person who does research.
Sample  The people you include as participants in a research project, drawn from a population.
Scale  See measuring devices.
Scattergraph  A graph that gives an overview of the relationship between two variables.
Secondary data  Data that was not collected specifically for your research project, but that you can use in your research.
Service user  A user of public services.
Snowball sample  A sample where one or more participants help the researcher to find other participants.
SPSS  Statistical Package for Social Scientists, computer software designed to perform statistical calculations.
Standpoint  A person’s own position from which they view or judge things.
Statistics  A branch of mathematics that enables the analysis and interpretation of numerical data.
Stratified random sample  A sample where the population is divided into segments on the basis of characteristics such as gender, age or geographical location, and then a random sample is taken from each segment of the population.
Stratified sample  A sample where you use one number generated at random to select the first participant, then choose other participants at regular intervals, for example every third or every tenth person.
Subjectivity  Taking emotions, values and other intangibles into account when considering or managing a situation.
Survey  A piece of research, often large-scale, to investigate people’s experiences, attitudes, behaviours, judgements, beliefs, and so on.
Systematic review  A review of all the research previously conducted around a specific research question.
Thematic analysis  A method for identifying themes within coded data.
Theory  A way of making sense of an aspect or aspects of the world around us. See also formal theory, informal theory and generated theory.
Thesis  The write-up of a piece of academic research conducted for a qualification such as a PhD.
Third sector  Organisations and groups that provide public services and are neither state-funded nor run purely for profit, such as charities, social enterprises and community groups.
Tool  See measuring devices.
Transcribe  To convert data from audio to text.
Transformative methodology  Methodology suggesting that research will not only investigate, but also create, change.
Univariate statistics  Descriptive statistics that describe a single variable.
URL  Uniform resource locator, that is, the address of a web page.
User-led methodology  A transformative methodology where the research is led by service users, with or without help from a professional researcher.

Validity  The extent to which a research method does what it claims to do.

Variable  A measurable characteristic.

Variance  In quantitative data, an estimate of the average distance of each value from the mean.

Visual data  Qualitative data in the form of images, such as photographs, paintings, drawings, collage and video.

Viva  An oral examination for academic research such as a PhD.

Workplace research  Research conducted to support professional work, such as evaluation research, skills audit, training needs analysis.