Glossary

Terms with an entry elsewhere in the Glossary are in colour.

Abductive, abduction A form of reasoning with strong ties to *induction* that grounds social scientific accounts of social worlds in the perspectives and meanings of participants in those social worlds.

Action research An approach in which the action researcher and a client collaborate in the diagnosis of a problem and in the development of a solution based on the diagnosis.

***Ad libitum* sampling** A sampling approach in *structured observation* whereby whatever is happening at the moment that observation is due to occur is recorded.

Adjacency pair The tendency for certain kinds of activity in talk to be characterized by linked phases.

Analytic induction An approach to the analysis of qualitative data in which the researcher seeks universal explanations of phenomena by pursuing the collection of data until no cases that are inconsistent with a hypothetical explanation (deviant or negative cases) of a phenomenon are found.

Arithmetic mean ($\bar{x}$) Also known simply as the 'mean', this is the everyday average-namely, the total of a *distribution of values* divided by the number of values.

Asynchronous online interview or focus group Online interviews may be asynchronous or *synchronous*. In the case of the former, the transactions between participants are not in real time, so that there may be long spaces of time between interviewers' questions and participants' replies, and, in the case of focus groups, between participants' contributions to the discussion.

Attached email questionnaire survey A survey in which respondents are sent a questionnaire, which is received as an attachment by email. Compare with *embedded email questionnaire survey*.

Audit trail. A term borrowed from accounting which, when transferred to social research, refers to ensuring that records are kept of key decisions in the research process and that an evidence base is maintained to ensure that the main findings and concepts are fully supported.

Behaviour sampling A sampling approach in *structured observation* whereby an entire group is watched and the observer records who was involved in a particular kind of behaviour.

Big Data Refers to extremely large sources of data that are not immediately amenable to conventional ways of analysing them.

Biographical method See *life history method*.

Bivariate analysis The examination of the relationship between two variables, as in *contingency tables* or *correlation*.

CAPI. An abbreviation of ***c****omputer-****a****ssisted* ***p****ersonal* ***i****nterviewing*.

CAQDAS An abbreviation of ***c****omputer-****a****ssisted* (or *-****a****ided*) ***q****ualitative* ***d****ata* ***a****nalysi****s***.

Case study A *research design* that entails the detailed and intensive analysis of a single case. The term is sometimes extended to include the study of just two or three cases for comparative purposes. However, *multiple-case study* is the more common term for the examination of two or more cases.

Categorical variable See *nominal variable*.

Category In *grounded theory*, a category occupies a space between a researcher's initial theoretical reflections on and understanding of his or her data and a *concept*, which is viewed as a higher level of abstraction. Thus, a category has an intermediate position in terms of abstraction between *coding* and a theory.

CATI. An abbreviation of ***c****omputer-****a****ssisted* ***t****elephone* ***i****nterviewing*.

Causality A concern with establishing causal connections between variables, rather than mere *relationships* between them.

Cell The point in a table, such as a *contingency table*, where the rows and columns intersect.

Census The enumeration of an entire *population*. Unlike a *sample*, which comprises a count of some units in a population, a census relates to all units in a population. Thus, if a *postal questionnaire* is mailed to every person in a town or to all members of a profession, the research should be characterized as a census.

Chi-square test Chi-square (χ^2) is a test of *statistical significance*, which is typically employed to establish how confident we can be that the findings displayed in a *contingency table* can be generalized from a *probability sample* to a *population*.

Closed-ended question A question employed in an *interview schedule* or *self-administered questionnaire* that presents the respondent with a set of possible answers to choose

© Alan Bryman, 2016. All rights reserved.

from. Also called 'fixed-choice question' and *pre-coded question*. Compare with *open-ended question*.

Cluster sample A sampling procedure in which at an initial stage the researcher samples areas (i.e. clusters) and then samples units from these clusters, usually using a *probability sampling* method.

Code, coding In quantitative research, codes are numbers that are assigned to data about people or other units of analysis when the data are not inherently numerical. In questionnaire-based research, the answer to a question (e.g. 'strongly agree') is assigned a number (e.g. 5) so that the information can be statistically processed. Thus, each person who answers 'strongly agree' will receive the same number (in this case 5). When answers are textual, respondents' answers must be grouped into categories and those categories are then coded. In qualitative research, coding is the process whereby data are broken down into component parts, which are given names.

Coding frame A listing of the codes used in relation to the analysis of data. In relation to answers to a structured interview schedule or questionnaire, the coding frame will delineate the categories used in connection with each question. It is particularly crucial in relation to the coding of *open-ended questions*. With *closed-ended questions*, the coding frame is essentially incorporated into the pre-given answers, hence the frequent use of the term *pre-coded question* to describe such questions.

Coding manual In *content analysis*, this is the statement of instructions to coders that outlines all the possible categories for each dimension being coded.

Coding schedule In *content analysis*, this is the form onto which all the data relating to an item being coded will be entered.

Comparative design A *research design* that entails the comparison of two or more cases in order to illuminate existing theory or generate theoretical insights as a result of contrasting findings uncovered through the comparison.

Computer-assisted personal interviewing (CAPI). A face-to-face survey interview in which the interviewer reads out questions as they appear on a computer and keys in respondents' answers. The software automates the skipping of questions that do not need to be asked due to the operation of *filter questions*.

Computer-assisted (or -aided) qualitative data analysis (CAQDAS). The use of computer software to provide an environment in which textual materials can be processed and analysed.

Computer-assisted telephone interviewing (CATI). A survey interview carried out over the telephone in which the interviewer reads out questions as they appear on a computer and keys in respondents' answers. The software automates the skipping of questions that do not need to be asked due to the operation of *filter questions*.

Concept A name given to a grouping of phenomena that organizes observations and ideas by virtue of their possessing common features. In *grounded theory*, a concept is a key building block in the construction of a theory.

Concurrent validity One of the main approaches to establishing *measurement validity*. It entails relating a measure to a criterion on which cases (e.g. people) are known to differ and that is relevant to the *concept* in question.

Confounding variable A variable that is related to each of two variables the result of which is to produce the appearance of a relationship between the two variables. Such a relationship is a *spurious relationship*.

Connotation, connotative A term used in *semiotics* to refer to the principal and most manifest meaning of a *sign*. Compare with *denotation*.

Constant An attribute in terms of which cases do not differ. Compare with *variable*.

Constant comparison A central tool of *grounded theory* that entails constantly comparing new data with existing data, concepts, and categories. It also entails comparing categories with each other and categories with concepts.

Construct validity. An assessment of the *measurement validity* of a measure that tests hypotheses deduced from a theory that is relevant to the underlying concept. If the findings are consistent with the theory, confidence in the validity of the measure is enhanced.

Constructionism, constructionist An *ontological* position (often also referred to as 'constructivism') that asserts that social phenomena and their meanings are continually being accomplished by social actors. It is antithetical to *objectivism*.

Constructivism See *constructionism*.

Content analysis An approach to the analysis of documents and texts that seeks to quantify content in terms of predetermined categories and in a systematic and replicable manner. The term is sometimes used in connection with qualitative research as well-see *qualitative content analysis*.

Contingency table A table, comprising rows and columns, that shows the *relationship* between two *variables*. Usually, at least one of the variables is a *nominal variable*. Each *cell* in the table shows the frequency of occurrence of the intersection of categories of each of the two variables and usually a percentage.

Continuous recording A procedure in *structured observation* whereby observation occurs for extended periods so that the frequency and duration of certain types of behaviour can be carefully recorded.

Control group See *experiment*.

Convenience sample, sampling A sample that is selected because of its availability to the researcher. It is a form of *non-probability sample*.

Bryman: Social Research Methods, 5th edition
© Alan Bryman, 2016. All rights reserved.

Convergent validity An assessment of the *measurement validity* of a measure that compares it to another measure of the same concept that has been generated from a different method.

Conversation analysis The fine-grained analysis of talk as it occurs in interaction in naturally occurring situations. The talk is recorded and *transcribed* so that the detailed analyses can be carried out. The analysis is concerned with uncovering the underlying structures of talk in interaction and as such with the achievement of order through interaction. Conversation analysis is grounded in *ethnomethodology*.

Core category In *grounded theory* this is a *category* that acts as an over-arching motif that brings together other categories.

Correlation An approach to the analysis of relationships between *interval/ratio variables* and/or *ordinal variables* that seeks to assess the strength and direction of the relationship between the variables concerned. *Pearson's r* and *Spearman's rho* are both methods for assessing the level of correlation between variables.

Covert research A term frequently used in connection with *ethnographic* research in which the researcher does not reveal his or her true identity. Such research violates the ethical principle of *informed consent*.

Cramér's *V* A method for assessing the strength of the relationship between two variables, at least one of which must have more than two categories.

Critical discourse analysis A form of *discourse analysis* that emphasizes the role of language as a power resource that is related to ideology and socio-cultural change. It draws in particular on the work of Foucault.

Critical realism A *realist* epistemology that asserts that the study of the social world should be concerned with the identification of the structures that generate that world. Critical realism is 'critical' because its practitioners aim to identify structures in order to change them, so that inequalities and injustices may be counteracted. Unlike a *positivist* epistemology, critical realism accepts that the structures that are identified may not be amenable to the senses. Thus, whereas *positivism* is *empiricist*, critical realism is not.

Cross-sectional design A *research design* that entails the collection of data on a *sample* of cases and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables (usually many more than two), which are then examined to detect patterns of association.

Data saturation The principle that the researcher should continue sampling cases until no new insights are apparent in the data. See also, *theoretical saturation*.

Deductive, deduction An approach to the relationship between theory and research in which the latter is conducted with reference to hypotheses and ideas inferred from the former. Compare with *inductive*.

Denotation, denotative A term used in *semiotics* to refer to the meanings of a *sign* associated with the social context within which it operates that are supplementary to and less immediately apparent than its *connotation*.

Dependent variable A *variable* that is causally influenced by another variable (i.e. an *independent variable*).

Diary A term that in the context of social research methods can mean different things. Three types of diary can be distinguished: diaries written or completed at the behest of a researcher; personal diaries that can be analysed as a *personal document*, but that were produced spontaneously; and diaries written by social researchers as a log of their activities and reflections.

Dichotomous variable A variable with just two categories.

Dimension Refers to an aspect of a *concept*.

Discourse analysis An approach to the analysis of talk and other forms of discourse that emphasizes the ways in which versions of reality are accomplished through language.

Distribution of values A term used to refer to the entire data relating to a *variable*. Thus, the ages of members of a *sample* represent the distribution of values for that variable for that sample.

Ecological fallacy The error of assuming that inferences about individuals can be made from aggregate data.

Ecological validity A concern with the question of whether social scientific findings are relevant and applicable to people's everyday, natural social settings.

Embedded email questionnaire survey A social survey in which respondents are sent an email that contains a *questionnaire*. Compare with *attached email questionnaire survey*.

Empiricism An approach to the study of reality that suggests that only knowledge gained through experience and the senses is acceptable.

Epistemology, epistemological A theory of knowledge. It is particularly employed in this book to refer to a stance on what should pass as acceptable knowledge. See *positivism*, *realism*, and *interpretivism*.

Eta(η) A test of the strength of the *relationship* between two *variables*. The *independent variable* must be a *nominal variable* and the *dependent variable* must be an *interval variable* or *ratio variable*. The resulting level of correlation will always be positive.

Ethnographic content analysis See *qualitative content analysis*.

Ethnography, ethnographer Like *participant observation*, a research method in which the researcher immerses him- or herself in a social setting for an extended period of time, observing behaviour, listening to what is said in conversations both between others and with the fieldworker, and asking questions. However, the term has a more inclusive sense than participant observation, which seems to emphasize the observational component. Also, the term 'an ethnography' is frequently used to refer to the written output of ethnographic research.

Bryman: Social Research Methods, 5th edition
© Alan Bryman, 2016. All rights reserved.

Ethnomethodology A sociological perspective concerned with the way in which social order is accomplished through talk and interaction. It provides the intellectual foundations of *conversation analysis*.

Evaluation research Research that is concerned with the evaluation of real-life interventions in the social world.

Event sampling. See *experience sampling*.

Experience sampling Also called 'event sampling', experience sampling refers to various methods that seek to capture affective states and/or behaviour at certain points in time. These 'points in time' are determined by the researcher and when they occur, research participants have to record such things as what they are doing or how they are feeling.

Experiment A *research design* that rules out alternative causal explanations of findings deriving from it (i.e. possesses *internal validity*) by having at least (a) an experimental group, which is exposed to a treatment, and a control group, which is not, and (b) *random assignment* to the two groups. Instead of a control group, an experiment may comprise a further group (or groups) that are exposed to other treatments.

Experimental group See *experiment*.

External validity A concern with the question of whether the results of a study can be generalized beyond the specific research context in which it was conducted.

Face validity A concern with whether an *indicator* appears to reflect the content of the *concept* in question.

Facilitator See *moderator*.

Factor analysis A statistical technique used for large numbers of *variables* to establish whether there is a tendency for groups of them to be inter-related. It is often used with *multiple-indicator measures* to see if the *indicators* tend to bunch to form one or more groups of indicators. These groups of indicators are called factors and must then be given names.

Field notes A detailed chronicle by an *ethnographer* of events, conversations, and behaviour, and the researcher's initial reflections on them.

Field stimulation A study in which the researcher directly intervenes in and/or manipulates a natural setting in order to observe what happens as a consequence of that intervention.

File drawer problem This occurs when research is conducted but it is found that the independent variable does not have the intended effect or the variables examined are unrelated, and as a result difficulty is experienced in publishing the findings. It is often suggested that the findings are then simply filed away in a drawer. The file drawer problem can produce bias when summarizing a field of research and especially when a *systematic review* (in particular a *meta-analysis*) is being conducted.

Filter question A question that is constructed so that on the basis of their replies, some respondents will answer another question to which the filter question is linked, whereas others will skip to a later question. For example, the filter question might ask respondents whether they have driven while intoxicated, but will only ask about the number of times that has happened to those respondents who reply 'Yes'; other respondents (those who have answered 'No') will skip to a later question.

Focal sampling A sampling approach in *structured observation* whereby a sampled individual is observed for a set period of time. The observer records all examples of whatever forms of behaviour are of interest.

Focus group A form of group interview in which there are several participants (in addition to the *moderator*); there is an emphasis in the questioning on a particular fairly tightly defined topic; and the emphasis is upon interaction within the group and the joint construction of meaning.

Frequency table A table that displays the number and/or percentage of units (e.g. people) in different categories of a variable.

Generalization, generalizability A concern with the *external validity* of research findings.

Grounded theory An iterative approach to the analysis of qualitative data that aims to generate theory out of research data by achieving a close fit between the two.

Hermeneutics A term drawn from theology, which, when imported into the social sciences, is concerned with the theory and method of the interpretation of human action. It emphasizes the need to understand from the perspective of the social actor.

Hypothesis An informed speculation, which is set up to be tested, about the possible relationship between two or more variables.

Independent variable A *variable* that has a causal impact on another variable (i.e. a *dependent variable*).

Index See *scale*.

Indicator A measure that is employed to refer to a *concept* when no direct measure is available.

Inductive, induction An approach to the relationship between theory and research in which the former is generated out of the latter. Compare with *deductive*.

Inferential statistics The domain of inferential statistics refers to tests of *statistical significance* that are used in inferring qualities of a *population* from data about a *sample* drawn randomly from that population. This process is referred to as *statistical inference*.

Informed consent A key principle in social research ethics. It implies that prospective research participants should be given as much information as might be needed to make an informed decision about whether or not they wish to participate in a study.

Inter-rater reliability The degree to which two or more individuals agree about the *coding* of an item.

Bryman: Social Research Methods, 5th edition
© Alan Bryman, 2016. All rights reserved.

Inter-rater reliability is likely to be an issue in *content analysis*, *structured observation*, and when *coding* answers to *open-ended questions* in research based on *questionnaires* or *structured interviews*.

Internal reliability The degree to which the indicators that make up a *scale* are consistent.

Internal validity A concern with the question of whether a finding that incorporates a causal relationship between two or more variables is sound.

Internet survey A very general term used to include any social survey conducted online. As such, it includes the *Web survey*, the *attached email questionnaire survey*, and the *embedded email questionnaire survey*.

Interpretative repertoire A collection of linguistic resources that are drawn upon in order to characterize and assess actions and events.

Interpretivism An *epistemological* position that requires the social scientist to grasp the subjective meaning of social action.

Interval variable A *variable* where the distances between the categories are identical across its range of categories.

Intervening variable A *variable* that is affected by another variable and that in turn has a causal impact on another variable. Taking an intervening variable into account often facilitates the understanding of the relationship between two variables. Also called a 'mediating variable'.

Interview guide A rather vague term that is used to refer to the brief list of memory prompts of areas to be covered that is often employed in *unstructured interviewing* or to the somewhat more structured list of issues to be addressed or questions to be asked in *semi-structured interviewing*.

Interview schedule A collection of questions designed to be asked by an interviewer. An interview schedule is always used in a *structured interview*.

Intra-rater reliability The degree to which an individual differs over time in the *coding* of an item. Intra-rater reliability is likely to be an issue in *content analysis*, *structured observation*, and when *coding* answers to *open-ended questions* in research based on *questionnaires* or *structured interviews*.

Item This term is used in *survey research* based on *questionnaires* and *structured interviews*. It refers to a statement to which the respondent is expected to respond in terms of a predetermined format (for example, by indicating his or her level of agreement or disagreement). A *Likert scale* is the kind of context in which items are encountered, as it is made up of several items. In effect, an item is a question on a questionnaire or interview schedule, but the term 'item' is preferred as it comprises a statement rather than a question in the sense that there is no question mark.

Item non-response The failure to respond to an *item* on the part of a survey respondent. See also *missing data*.

Key informant Someone who offers the researcher, usually in the context of conducting an *ethnography*, perceptive information about the social setting, important events, and individuals.

Life history interview Similar to the *oral history interview*, but the aim of this type of *unstructured interview* is to glean information on the entire biography of each respondent.

Life history method Also often referred to as the 'biographical method', this method emphasizes the inner experience of individuals and its connections with changing events and phases throughout the life course. The method usually entails *life history interviews* and the use of *personal documents* as data.

Likert scale A widely used format developed by Rensis Likert for asking attitude questions. Respondents are typically asked their degree of agreement with a series of statements that together form a *multiple-indicator* or *-item* measure. The scale is deemed then to measure the intensity with which respondents feel about an issue.

Longitudinal research A *research design* in which data are collected on a *sample* (of people, documents, etc.) on at least two occasions.

Mail questionnaire Traditionally, this term has been synonymous with the *postal questionnaire,* but with the arrival of email-based questionnaires (see *embedded email questionnaire survey* and *attached email questionnaire survey*), many writers prefer to refer to postal rather than mail questionnaires.

Maximum variation sampling A *purposive sampling* approach which is conducted to ensure as wide a variation as possible in terms of the dimension(s) of interest.

Mean See *arithmetic mean*.

Measure of central tendency A statistic, such as the *arithmetic mean*, *median*, or *mode*, that summarizes a *distribution of values*.

Measure of dispersion A statistic, such as the *range* or *standard deviation*, that summarizes the amount of variation in a *distribution of values*.

Measurement validity The degree to which a measure of a *concept* truly reflects that concept. See also *concurrent validity*, *construct validity*, *convergent validity*, *face validity*, and *predictive validity*.

Median The mid-point in a *distribution of values*.

Mediating variable Another term for intervening variable.

Member validation See *respondent validation*.

Meta-analysis A form of *systematic review* that involves summarizing the results of a large number of quantitative studies and conducting various analytical tests to show whether or not a particular variable has an effect across the studies.

Meta-ethnography A form of *systematic review* that is used to achieve interpretative synthesis of *qualitative research*

Bryman: Social Research Methods, 5th edition
© Alan Bryman, 2016. All rights reserved.

studies and other secondary sources, thus providing a counterpart to *meta-analysis* in *quantitative research*.

Missing data Data relating to a case that are not available-for example, when a respondent in *survey research* does not answer a question. These are referred to as 'missing values' in *SPSS*. The term *item non-response* is often used to refer to unanswered questions.

Mixed methods research A term that is increasingly employed to describe research that combines both *quantitative research* and *qualitative research*. The term can be employed to describe research that combines just quantitative research methods or that combines just qualitative research methods. However, in recent times, it has taken on this more specific meaning of combining quantitative and qualitative research methods.

Mixed mode survey A *survey* that offers respondents more than one method of answering questionnaires, such as when *postal questionnaire* respondents are given the option of answering by *Web survey*.

Mode The value that occurs most frequently in a *distribution of values*.

Moderated relationship A *relationship* between two *variables* is said to be moderated when it holds for one category of a third variable but not for another category or other categories.

Moderator The person who guides the questioning of a *focus group*. Also called a 'facilitator'.

Multiple-case study A research design in which the researcher examines two or more cases in detail, usually but not necessarily to compare the findings deriving from the cases.

Multiple-indicator measure A measure that employs more than one *indicator* to measure a *concept*.

Multiple-item measure A measure that is made up of more than one *item*.

Multivariate analysis The examination of *relationships* between three or more *variables*.

Narrative analysis An approach to the elicitation and analysis of data that is sensitive to the sense of temporal sequence that people, as tellers of stories about their lives or events around them, detect in their lives and surrounding episodes and inject into their accounts. However, the approach is not exclusive to a focus on life histories.

Narrative review An approach to reviewing the literature that is often contrasted nowadays with a *systematic review*. It tends to be less focused than a systematic review and seeks to arrive at a critical interpretation of the literature that it covers.

Naturalism A confusing term that has at least three distinct meanings: a commitment to adopting the principles of natural scientific method; being true to the nature of the phenomenon being investigated; and a style of research that seeks to minimize the intrusion of artificial methods of data collection.

Negative relationship A *relationship* between two *variables* whereby as one increases the other decreases.

Netnography A form of *ethnography* which is applied to online or largely online communities. It has mainly been used in relation to topics in the fields of marketing and retailing.

Nominal variable Also known as a 'categorical variable', this is a variable that comprises categories that cannot be rank ordered.

Non-manipulable variable A *variable* that cannot readily be manipulated either for practical or for ethical reasons and that therefore cannot be employed as an *independent variable* in an *experiment*.

Non-probability sample A sample that has not been selected using a *random sampling* method. Essentially, this implies that some units in the population are more likely to be selected than others.

Non-response A source of *non-sampling error* that occurs whenever some members of a sample refuse to cooperate, cannot be contacted, or for some reason cannot supply the required data. This is more properly called 'unit non-response' to distinguish it from *item non-response*.

Non-sampling error Differences between the *population* and the *sample* that arise either from deficiencies in the sampling approach, such as an inadequate *sampling frame* or *non-response*, or from problems such as poor question wording, poor interviewing, or flawed processing of data.

Null hypothesis A *hypothesis* of no relationship between two variables.

NVivo A *CAQDAS* package that facilitates the management and analysis of qualitative data.

Objectivism An *ontological* position that asserts that social phenomena and their meanings have an existence that is independent of social actors. Compare with *constructionism*.

Observation schedule A device used in *structured observation* that specifies the categories of behaviour that are to be observed and how behaviour should be allocated to those categories.

Official statistics Statistics compiled by or on behalf of state agencies in the course of conducting their business.

Ontology, ontological A theory of the nature of social entities. See *objectivism* and *constructionism*.

Open-ended question A question employed in an *interview schedule* or *self-administered questionnaire* that does not present the respondent with a set of possible answers to choose from. Compare with *closed-ended question*.

Operational definition The definition of a *concept* in terms of the operations to be carried out when measuring it.

Bryman: Social Research Methods, 5th edition
© Alan Bryman, 2016. All rights reserved.

Operationism, operationalism A doctrine, mainly associated with an area of physics, that emphasizes the search for *operational definitions* of *concepts*.

Optimizing A cognitive process involved in answering survey questions that entails maximizing the amount of effort involved. The respondent expends a great deal of effort to arrive at the best possible answer. Compare with *satisficing*.

Oral history interview A largely *unstructured interview* in which the respondent is asked to recall events from his or her past and to reflect on them.

Ordinal variable A variable whose categories can be rank ordered (as in the case of *interval* and *ratio variables*), but the distances between the categories are not equal across the range.

Outlier An extreme value in a *distribution of values*. If a *variable* has an extreme value—either very high or very low—the *arithmetic mean* or the *range* will be distorted by it.

Paradigm A term deriving from the history of science, where it was used to describe a cluster of beliefs and dictates that for scientists in a particular discipline influence what should be studied, how research should be done, and how results should be interpreted.

Participant observation Research in which the researcher immerses him- or herself in a social setting for an extended period of time, observing behaviour, listening to what is said in conversations both between others and with the fieldworker, and asking questions. Participant observation usually includes interviewing *key informants* and studying documents and as such is difficult to distinguish from *ethnography*. In this book, 'participant observation' is employed to refer to the specifically observational aspect of ethnography.

Pearson's *r* A measure of the strength and direction of the *relationship* between two *interval/ratio variables*.

Personal documents Documents such as *diaries*, letters, and autobiographies that are not written for an official purpose. They provide first-person accounts of the writer's life and events within it.

Phenomenology A philosophy that is concerned with the question of how individuals make sense of the world around them and how in particular the philosopher should bracket out preconceptions concerning his or her grasp of that world.

Phi Phi (Φ) is a method for assessing the strength of the *relationship* between two *dichotomous variables*.

Photo-elicitation Typically, photo-elicitation is a visual research methods that entails getting interviewees to discuss one or more photographs in the course of an interview. The photograph(s) may be extant or may have been taken by the interviewee for the purpose of the research.

Population The universe of units from which a *sample* is to be selected.

Positive relationship A *relationship* between two *variable*s, whereby as one increases the other increases as well.

Positivism An *epistemological* position that advocates the application of the methods of the natural sciences to the study of social reality and beyond.

Postal questionnaire A form of *self-administered questionnaire* that is sent to respondents and usually returned by them by postal mail.

Postmodernism A position that displays a distaste for master-narratives and for a *realist* orientation. In the context of research methodology, postmodernists display a preference for qualitative methods and a concern with the modes of representation of research findings.

Pre-coded question Another name for a *closed-ended question*. The term is often preferred, because such a question removes the need for the application of a *coding frame* to the question after it has been answered. This is because the range of answers has been predetermined and a numerical *code* will have been pre-assigned to each possible answer. The term is particularly appropriate when the codes appear on the *questionnaire* or *interview schedule*.

Predictive validity. An assessment of the *measurement validity* of a measure of a concept that uses a future benchmark as a criterion.

Probability sampling, sample A sample that has been selected using *random sampling* and in which each unit in the population has a known probability of being selected.

Purposive sampling, sample A form of *non-probability sample* in which the researcher aims to sample cases or participants in a strategic way, so that those sampled are relevant to the *research questions* that are being posed.

Qualitative content analysis An approach to documents that emphasizes the role of the investigator in the construction of the meaning of and in texts. There is an emphasis on allowing categories to emerge out of data and on recognizing the significance, for understanding the meaning of the context in which an item being analysed (and the categories derived from it) appeared. Also called 'ethnographic content analysis'.

Qualitative research Qualitative research usually emphasizes words rather than quantification in the collection and analysis of data. As a *research strategy* it is *inductivist*, *constructionist*, and *interpretivist*, but qualitative researchers do not always subscribe to all three of these features. Compare with *quantitative research*.

Quantitative research Quantitative research usually emphasizes quantification in the collection and analysis of data. As a *research strategy* it is *deductivist* and *objectivist* and incorporates a natural science model of the research process (in particular, one influenced by *positivism*), but quantitative researchers do not always subscribe to all three of these features. Compare with *qualitative research*.

Bryman: Social Research Methods, 5th edition
© Alan Bryman, 2016. All rights reserved.

Quasi-experiment A *research design* that is close to being an *experiment* but that does not meet the requirements fully and therefore does not exhibit complete *internal validity*.

Questionnaire A collection of questions administered to respondents. When used on its own, the term usually denotes a *self-administered questionnaire*.

Quota sample, quota sampling A *sample* in which participants are non-randomly sampled from a *population* in terms of the relative proportions of people in different categories. It is a type of *non-probability sample*.

Random assignment A term used in connection with *experiments* to refer to the random allocation of research participants to the experimental group and the control group.

Random digit dialling (RDD) A method of sampling, usually for a *computer-administered telephone interview (CATI)* survey, whereby telephone numbers are randomly generated.

Random sampling Sampling whereby the inclusion of a unit of a *population* occurs entirely by chance.

Randomized controlled trial A term used to describe a study that meets the criteria of a true *experiment*. The term is used in fields such as the health sciences in which the goal is to test the effectiveness of an intervention, such as a clinical intervention.

Range The difference between the maximum and the minimum value in a *distribution of values* associated with an *interval* or *ratio variable*.

Rapid review A literature review that conforms to the main principles of a *systematic review* but is deliberately limited in scope so that the review can be completed in a relatively short time.

Ratio variable An *interval variable* with a true zero point.

RDD An abbreviation of *random digit dialling*.

Reactivity, reactive effect A term used to describe the response of research participants to the fact that they know they are being studied. Reactivity is deemed to result in untypical behaviour.

Realism An epistemological position that acknowledges a reality independent of the senses that is accessible to the researcher's tools and theoretical speculations. It implies that the categories created by scientists refer to real objects in the natural or social worlds. See also *critical realism*.

Reflexivity A term used in research methodology to refer to a reflectiveness among social researchers about the implications, for the knowledge that they generate about the social world, of their methods, values, biases, decisions, and mere presence in the very situations they investigate.

Relationship An association between two variables whereby the variation in one variable coincides with variation in another variable. See also *negative relationship* and *positive relationship*.

Reliability The degree to which a measure of a concept is stable. See also *internal reliability*.

Replication, replicability The degree to which the results of a study can be reproduced.

Representative sample A *sample* that reflects the population accurately, so that it is a microcosm of the *population*.

Research design This term is employed in this book to refer to a framework or structure within which the collection and analysis of data takes place. A choice of research design reflects decisions about the priority being given to a range of dimensions of the research process (such as causality and generalization) and is influenced by the kind of *research question* that is posed.

Research question An explicit statement in the form of a question of what it is that a researcher intends to find out about. A research question not only influences the scope of an investigation but also how the research will be conducted.

Research strategy A term used in this book to refer to a general orientation to the conduct of social research (see *quantitative research* and *qualitative research*).

Respondent validation Sometimes called 'member validation', this is a process whereby a researcher provides the people on whom he or she has conducted research with an account of his or her findings and requests feedback on that account.

Response set The tendency among some respondents to *multiple-indicator measures* to reply in the same way to each constituent item.

Retroductive, retroduction A form of reasoning that entails making an inference about the causal mechanism that lies behind and is responsible for regularities that are observed in the social world. It is very much associated with *critical realism*.

Rhetoric, rhetorical A concern with the ways in which appeals to convince or persuade are devised.

Sample The segment of the population that is selected for research. It is a subset of the *population*. The method of selection may be based on *probability sampling* or *non-probability sampling* principles.

Sampling error Differences between a *random sample* and the *population* from which it is selected.

Sampling frame The listing of all units in the *population* from which a *sample* is selected.

Satisficing A cognitive process involved in answering survey questions that entails minimizing the amount of effort involved. The respondent does not expend enough effort to arrive at the best possible answer. Compare with *optimizing*.

Scale A term that is usually used interchangeably with 'index' to refer to a *multiple-indicator measure* in which the

Bryman: Social Research Methods, 5th edition
© Alan Bryman, 2016. All rights reserved.

score a person gives for each component *indicator* is used to provide a composite score for that person.

Scan sampling A sampling approach in *structured observation* whereby an entire group of individuals is scanned at regular intervals and the behaviour of all of them is recorded at each occasion.

Secondary analysis The analysis of data by researchers who will probably not have been involved in the collection of those data, for purposes that may not have been envisaged by those responsible for the data collection. Secondary analysis may entail the analysis of either quantitative data or qualitative data.

Self-administered questionnaire A *questionnaire* that the respondent answers without the aid of an interviewer. Sometimes called a 'self-completion questionnaire'.

Self-completion questionnaire See *self-administered questionnaire*.

Semiotics The study/science of *signs*. An approach to the analysis of documents and other phenomena that emphasizes the importance of seeking out the deeper meaning of those phenomena. A semiotic approach is concerned to uncover the processes of meaning production and how signs are designed to have an effect upon actual and prospective consumers of those signs.

Semi-structured interview A term that covers a wide range of types of interview. It typically refers to a context in which the interviewer has a series of questions that are in the general form of an *interview guide* but is able to vary the sequence of questions. The questions are frequently somewhat more general in their frame of reference than those typically found in a *structured interview* schedule. Also, the interviewer usually has some latitude to ask further questions in response to what are seen as significant replies.

Sensitizing concept A term devised by Blumer to refer to a preference for treating a *concept* as a guide in an investigation, so that it points in a general way to what is relevant or important. This position contrasts with the idea of an *operational definition*, in which the meaning of a concept is fixed in advance of carrying out an investigation.

Sign A term employed in *semiotics*. A sign is made up of a signifier (the manifestation of a sign) and the signified (that idea or deeper meaning to which the signifier refers).

Simple observation The passive and unobtrusive observation of behaviour.

Simple random sample A *sample* in which each unit has been selected entirely by chance. Each unit of the *population* has a known and equal probability of inclusion in the sample.

Snowball sample A *non-probability sample* in which the researcher makes initial contact with a small group of people who are relevant to the research topic and then uses these to establish contacts with others.

Social desirability bias A distortion of data that is caused by participants responding to data collection exercises in terms of socially desirable traits so that their accounts conform to their perceptions of socially acceptable beliefs or behaviour.

Social survey See *survey research*.

Spearman's rho (ρ) A measure of the strength and direction of the *relationship* between two *ordinal variables*.

SPSS Short for **S**tatistical **P**ackage for the **S**ocial **S**ciences. SPSS is a widely used computer program that allows quantitative data to be managed and analysed.

Spurious relationship A *relationship* between two *variables* is said to be spurious if it is being produced by the impact of a third variable (often referred to as a *confounding variable*) on each of the two variables that form the spurious relationship. When the third variable is controlled, the relationship disappears.

Standard deviation A measure of dispersion around the *mean*.

Standard error of the mean An estimate of the amount that a sample *mean* is likely to differ from the population mean (μ).

Standardized interview See *structured interview*.

Statistical inference The process of inferring characteristics of a *population* from information about a *sample* drawn randomly from that population. See *statistical significance (test of)*.

Statistical significance (test of) Allows the analyst to estimate how confident he or she can be that the results deriving from a study based on a randomly selected *sample* are generalizable to the *population* from which the sample was drawn. Such a test does not allow the researcher to infer that the findings are of substantive importance. The *chi-square test* is an example of this kind of test. The process of using a test of statistical significance to generalize from a sample to a population is known as *statistical inference*.

Stratified random sample A *sample* in which units are *randomly sampled* from a *population* that has been divided into categories (strata).

Structured interview A research interview usually in the context of *survey research* in which all respondents are asked exactly the same questions in the same order with the aid of a formal *interview schedule*.

Structured observation Often also called 'systematic observation', structured observation is a technique in which the researcher employs explicitly formulated rules for the observation and recording of behaviour. The rules inform observers about what they should look for and how they should record behaviour.

Survey research A *cross-sectional design* in relation to which data are collected predominantly by *self-administered questionnaire* or by *structured interview* on a *sample* of cases

Bryman: Social Research Methods, 5th edition
© Alan Bryman, 2016. All rights reserved.

drawn from a wider *population* and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with a number of *variables*, which are then examined to detect patterns of *relationships* between variables.

Symbolic interactionism A theoretical perspective in sociology and social psychology that views social interaction as taking place in terms of the meanings actors attach to action and things.

Synchronous online interview or focus group Online interviews may be *asynchronous* or synchronous. In the case of the latter, the transactions between participants are in real time, so that there there will be only brief time lapses between interviewers' questions and participants' replies, and, in the case of focus groups, between participants' contributions to the discussion.

Systematic observation See *structured observation*.

Systematic review Systematic reviews are reviews of the literature in a domain that aim to provide an account of the literature that is comprehensive, capable of *replication*, and transparent in its approach. Systematic reviews pay close attention to assessing the quality of research in deciding whether a study should be included or not. *Meta-analysis* and *meta-ethnography* are both forms of systematic review.

Systematic sample A *probability sampling* method in which units are selected from a *sampling frame* according to fixed intervals, such as every fifth unit.

Test of statistical significance See *statistical significance (test of)*.

Text A term that is used either in the conventional sense of a written work or in more recent years to refer to a wide range of phenomena. For example, in arriving at a *thick description*, Geertz refers to treating culture as a text.

Thematic analysis A term used in connection with the analysis of qualitative data to refer to the extraction of key themes in one's data. It is a rather diffuse approach with few generally agreed principles for defining core themes in data.

Thematic synthesis Essentially, the application of *thematic analysis* to the synthesis of a set of qualitative studies in an area to arrive at an overall sense of what they show.

Theoretical sampling, sample A term used mainly in relation to *grounded theory* to refer to *purposive sampling* carried out so that emerging theoretical considerations guide the selection of cases and/or research participants. Theoretical sampling is supposed to continue until a point of *theoretical saturation* is reached.

Theoretical saturation In *grounded theory*, the point when emerging *concepts* have been fully explored and no new theoretical insights are being generated. See also *theoretical sampling*.

Thick description A term devised by Geertz to refer to detailed accounts of a social setting that can form the basis for the creation of general statements about a culture and its significance in people's social lives.

Time sampling In *structured observation*, a sampling method that entails using a criterion for deciding when observation will occur.

Transcription, transcript The text version of a recorded interview or *focus group* session.

Triangulation The use of more than one method or source of data in the study of a social phenomenon so that findings may be cross-checked.

Trustworthiness A set of criteria advocated by some writers for assessing the quality of *qualitative research*.

Turn-taking The notion from *conversation analysis* that order in everyday conversation is achieved through orderly taking of turns.

Unit non-response See *non-response*.

Univariate analysis The analysis of a single *variable* at a time.

Unobtrusive methods Methods that do not entail an awareness among research participants that they are being studied and that are therefore not subject to *reactivity*.

Unstructured interview An interview in which the interviewer typically has only a list of topics or issues, often called an *interview guide*, that are typically covered. The style of questioning is usually very informal. The phrasing and sequencing of questions will vary from interview to interview.

Validity A concern with the integrity of the conclusions that are generated from a piece of research. There are different aspects of validity. See, in particular, *measurement validity*, *internal validity*, *external validity*, and *ecological validity*. When used on its own, *validity* is usually taken to refer to *measurement validity*.

Variable An attribute in terms of which cases vary. See also *dependent variable* and *independent variable*. Compare with *constant*.

Web survey A survey conducted so that respondents complete a *questionnaire* via a website.

Bryman: Social Research Methods, 5th edition
© Alan Bryman, 2016. All rights reserved.