A to Z OF RESEARCH METHODS AND TERMS APPLICABLE WITHIN SOCIAL SCIENCE RESEARCH

QUANTITATIVE RESEARCH METHODS
*Are concerned with trying to quantify things; they ask questions such as ‘how long’, ‘how many’ or ‘the degree to which’. They look to quantify data and generalise results from a sample of the population of interest. They may also look to measure the incidence of various views and opinions in a chosen sample for example or aggregate results.*

AGGREGATE
A total created from smaller units; the population of a county is an aggregate of the populations of the cities, rural areas, etc. that comprise the county.
http://www.researchconnections.org/childcare/research-glossary

BEHAVIOURAL RESEARCH
Social behavioural research applies the behavioural and social sciences to the study of people’s or animals’ responses to certain stimuli (both external and internal).
http://oprs.usc.edu/upirb/social-behavioral/

COHORT DESIGN
A group of people sharing a common demographic experience who are observed through time. For example, all the people born in the same year constitute a birth cohort. All the people married in the same year constitute a marriage cohort.
http://www.researchconnections.org/childcare/research-glossary

HYPOTHESIS TESTING RESEARCH
Statistical tests to determine whether a hypothesis is accepted or rejected. In hypothesis testing, two hypotheses are used: the null hypothesis and the alternative hypothesis. The alternative hypothesis is the hypothesis of interest; it generally states that there is a relationship between two variables. The null hypothesis states the opposite, that there is no relationship between two variables.
http://www.researchconnections.org/childcare/research-glossary

META ANALYSIS AND SYNTHESIS
A statistical technique that combines and analyzes data across multiple studies on a topic.
http://www.researchconnections.org/childcare/research-glossary

SAMPLING
The sample is the section of the wider population that will be engaged in the survey and sampling is the process of identifying who you will aim to contact from that population. The word ‘population’ is used to describe the target group, and while this may be the national population as a whole, it may also be a smaller group such as lone parents, or business members of a Chambers of Commerce in a particular location.
SECONDARY DATA COLLATION AND ANALYSIS
This method refers to the review of existing information, and in the quantitative context may involve the manipulation of statistical data. It differs from primary research techniques in that the researcher does not collect the data directly and cannot control the actual data collected, but can bring to bear new insights through interpretation or presentation.

STATISTICAL ANALYSIS
Statistical analysis is a mathematical method of interrogating data. This is done by looking for relationships between different sets of data. There are two types of statistics:
• Descriptive statistics: numerical summaries of samples (what was observed);
• Inferential statistics: from samples of populations (what could have been or will be observed)

SURVEY, CROSS-SECTIONAL
Cross-sectional surveys are used to gather information on a population at a single point in time. An example of a cross-sectional survey would be a questionnaire that collects data on peoples’ experiences of a particular initiative or event. A cross-sectional survey questionnaire might try to determine the relationship between two factors, like the impact of a programme of activity on the level of benefits claims for example

SURVEY, LONGITUDINAL
Longitudinal surveys gather data over a period of time. This would allow analysis of changes in the population over time and attempt to describe and/or explain them. The three main types of longitudinal surveys are trend studies, cohort studies, and panel studies (for more details see further reading). A longitudinal study will also seek to determine the relationship between factors, but the difference is that the examination will be of a change in factors over time, so for example the relationship between health and employment.

SURVEY, QUANTITATIVE
Surveys are a popular method of collecting primary data. The broad area of survey research encompasses any measurement procedures that involve asking questions of respondents. They are a flexible tool, which can produce both qualitative and quantitative information depending on how they are structured and analysed. In this section we focus on the quantitative use of surveys, and in later sections we explore the more qualitative use of survey methods. When should it be used?
When you need to generate primary data from a large number of sources to answer your research question. Surveys are a useful a means of gathering data from businesses, community organisations and residents, and survey research is one of the most important areas of measurement in applied social research. However, health warnings need to be attached to the use of quantitative surveys and careful consideration needs to be taken before embarking on any large-scale survey.
QUALITATIVE RESEARCH METHODS
A field of social research that is carried out in naturalistic settings and generates data largely through observations and interviews. Compared to quantitative research, which is principally concerned with making inferences from randomly selected samples to a larger population, qualitative research is primarily focused on describing small samples in non-statistical ways.
http://www.researchconnections.org/childcare/research-glossary

CASE STUDIES
A case study is an in-depth study of a particular research problem rather than a sweeping statistical survey or comprehensive comparative inquiry. It is often used to narrow down a very broad field of research into one or a few easily researchable examples. The case study research design is also useful for testing whether a specific theory and model actually applies to phenomena in the real world. It is a useful design when not much is known about an issue or phenomenon.
http://libguides.usc.edu/writingguide/researchdesigns

An intensive investigation of the current and past behaviors and experiences of a single person, family, group, or organization.
http://www.researchconnections.org/childcare/research-glossary

CAUSAL ANALYSIS
An analysis that seeks to establish the cause and effect relationships between variables.
http://www.researchconnections.org/childcare/research-glossary

COMPARATIVE RESEARCH
Comparative research is a research methodology in the social sciences that aims to make comparisons across different countries or cultures.
http://www.popularsocialscience.com/2013/01/28/some-rules-of-comparative-research/

CONTENT ANALYSIS
A procedure for organizing narrative, qualitative data into themes and concepts.
http://www.researchconnections.org/childcare/research-glossary

CROSS-CULTURAL RESEARCH
Cross-cultural research is a scientific method of comparative research which focuses on systematic comparisons that compares culture to culture and explicitly aims to answer questions about the incidence, distributions and causes of cultural variation and complex problems across a wide domain, usually worldwide.
https://www.researchgate.net/publication/42385722_What_is_Cross-cultural_Research

DESCRIPTIVE RESEARCH
Descriptive research designs help provide answers to the questions of who, what, when, where, and how associated with a particular research problem; a descriptive study cannot conclusively ascertain answers to why. Descriptive research is used to obtain information concerning the current status of the phenomena and to describe “what exists” with respect to variables or conditions in a situation.
http://libguides.usc.edu/writingguide/researchdesigns
ETHNOGRAPHIC RESEARCH
A qualitative method for examining behaviour under specific circumstances. An EDM (Ethnographic Decision Model) is often referred to as a decision tree or flow chart and comprises a series of nested if-then statements that link criteria (and combinations of criteria) to the behaviour of interest. [http://www.researchconnections.org/childcare/research-glossary](http://www.researchconnections.org/childcare/research-glossary)

ETHNOgraphic DECISION MODELS (EDM's)
A qualitative method for examining behaviour under specific circumstances. An EDM is often referred to as a decision tree or flow chart and comprises a series of nested ‘if-then’ statements that link criteria (and combinations of criteria) to the behaviour of interest.

EVALUATION RESEARCH
The use of scientific research methods to plan intervention programs, to monitor the implementation of new programs and the operation of existing programs, and to determine how effectively programs or clinical practices achieve their goals. [http://www.researchconnections.org/childcare/research-glossary](http://www.researchconnections.org/childcare/research-glossary)

EXPERIMENTAL RESEARCH
A research design used to establish cause-and-effect relationships between the independent and dependent variables by means of manipulation of variables, control and randomization. A true experiment involves the random allocation of participants to experimental and control groups, manipulation of the independent variable, and the introduction of a control group for comparison purposes. Participants are assessed after the manipulation of the independent variable in order to assess its effect on the dependent variable (the outcome). [http://www.researchconnections.org/childcare/research-glossary](http://www.researchconnections.org/childcare/research-glossary)

FEASIBILITY STUDY
Feasibility studies are used to determine whether an intervention is appropriate for further testing; in other words, they enable researchers to assess whether or not the ideas and findings can be shaped to be relevant and sustainable. [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2859314/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2859314/)

FIELD RESEARCH
Research conducted where research subjects live or where the activities of interest take place. [http://www.researchconnections.org/childcare/research-glossary](http://www.researchconnections.org/childcare/research-glossary)

FOCUS GROUPS
An interview conducted with a small group of people, all at one time, to explore ideas on a particular topic. The goal of a focus group is to uncover additional information through participants’ exchange of ideas. [http://www.researchconnections.org/childcare/research-glossary](http://www.researchconnections.org/childcare/research-glossary)
GROUNDED THEORY RESEARCH
The development of social science theory from the inductive analysis of data. This approach is generally used in qualitative research. The specific and detailed observations in the data are studied and understood to such an extent that a theory of more general patterns of behaviour can be generated.
http://www.researchconnections.org/childcare/research-glossary

IMPLEMENTATION SCIENCE
Implementation science is the study of methods to promote the integration of research findings and evidence into healthcare policy and practice. It seeks to understand the behaviour of healthcare professionals and other stakeholders as a key variable in the sustainable uptake, adoption, and implementation of evidence-based interventions.

INTERVIEW, SEMI-STRUCTURED, RESEARCH
A method of data collection in which the interviewer uses a pre-determined list of topics or questions to gather information from a respondent. The interviewer, however, may stray from the list to follow-up on things the respondent says during the interview.
http://www.researchconnections.org/childcare/research-glossary

INTERVIEW, UNSTRUCTURED, RESEARCH
An interview in which the researcher asks open-ended questions. The researcher aims to give respondents the latitude to talk freely on a topic and to influence the direction of the interview. There is no predetermined plan about the specific information to be gathered from these types of interviews.
http://www.researchconnections.org/childcare/research-glossary

INDUCTIVE METHOD RESEARCH
A method of study that begins with specific observations and measures, from which patterns and regularities are detected. These patterns lead to the formulation of tentative hypotheses, and ultimately to the construction of general conclusions or theories.
http://www.researchconnections.org/childcare/research-glossary

OBSERVATIONAL
This type of research design draws a conclusion by comparing subjects against a control group, in cases where the researcher has no control over the experiment. There are two general types of observational designs. In direct observations, people know that you are watching them. Unobtrusive measures involve any method for studying behaviour where individuals do not know they are being observed. An observational study allows a useful insight into a phenomenon and avoids the ethical and practical difficulties of setting up a large and cumbersome research project.
http://libguides.usc.edu/writingguide/researchdesigns

PARTICIPATORY METHODS
A field research method whereby the researcher develops knowledge of the composition of a particular setting or society by taking part in the everyday routines and rituals alongside its members. A principle goal of participant observation is develop an understanding of a setting from a member’s perspective, which may be accomplished through both informal observations and conversations, as well as in-depth interviews.
http://www.researchconnections.org/childcare/research-glossary
RISK ANALYSIS
In terms of ethics questions, assessing risk is not simply a procedural requirement - rather, you need to reflect on three key questions in relation to your planned project:

- What is ‘harm’?
- What is ‘risk’?
- What are the potential benefits?

There are risks, harms, costs and benefits that arise in social research, and these need to be assessed, for two reasons:

1. Assessments enable researchers, reviewers, and funders to decide whether the research is worth doing at all, and whether it could be made less risky.
2. Later these assessments help the people you are inviting to take part in your study make an informed decision. Informed consent is the legal means of transferring responsibility for risk-taking from the researcher to the participant. It is useful to think about harm-benefit during the early stages of planning a study, when it is still fairly easy to redesign the study to reduce risks.

http://www.ethicsguidebook.ac.uk/Assessing-risk-and-harm-21

SOCIAL ANALYSIS
Social analysis is the evaluation of issues related to social characteristics, the general quality of life, social services and social justice of a society. The analysis touches on individuals, governments, economies, groups and environments. It studies the past with respect to the present, particularly large-scale developments such as urbanization, ethnic cultures, migration of people and identity formation.

https://www.reference.com/world-view/social-analysis-a0dcb5e7c0f5618

LINKS
http://libguides.usc.edu/writingguide/researchdesigns
http://www.researchconnections.org/childcare/research-glossary
http://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1002&context=oa_textbooks
http://www.popularsocialscience.com/2013/01/28/some-rules-of-comparative-research/
http://oprs.usc.edu/upirb/social-behavioral/
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2859314/