# **Definitions of research methods**

|  |  |  |
| --- | --- | --- |
| Research Method | Definition | Application Form |
| Action research | * Action research is often community - or organisation - based and is carried out in the field. This approach involves testing ideas in practice as a means of improving social, economic or environmental conditions and increasing knowledge. Action research proceeds in a spiral of steps consisting of planning, action, and evaluation. It provides a basis for further planning of critically informed action. • This method includes design and implementation research and ‘rapid appraisal’ research. * **Action Research questions are at Section 5.7** | * [La Trobe University Human Research Ethics Application](https://www.latrobe.edu.au/researchers/research-office/ethics/human-ethics) |
| Biospecimen analysis | * [National Statement Chapter 3.2](https://www.nhmrc.gov.au/about-us/publications/national-statement-ethical-conduct-human-research-2023" \t "_blank) describes biospecimens as, “any biological material obtained from a person including tissue, blood, urine, sputum; it also includes any derivative of these such as cell lines. It does not include non-human biological material such as micro-organisms that live on or in a person.”  • Biospecimen analysis includes potential genetic or genomic investigations. * **The HREA contains relevant questions.** | * [NHMRC Human Research Ethics Application Form](https://hrea.gov.au/) |
| Data linkage | * The International Population Data Linkage Network describes data linkage as, “Secondary use of linked administrative data… often referred to as ‘data linkage,’ ‘record linkage,’ or ‘linked data.’ This is typically population based longitudinal data that has originally been collected for another purpose. Linkage may take place across data sets in a single domain (i.e. health) or across domains (i.e. health, education, environment, early childhood, etc.)”. * **Data linkage questions are contained at Section 5.9** | * [La Trobe University Human Research Ethics Application](https://www.latrobe.edu.au/researchers/research-office/ethics/human-ethics) |
| Existing Data Sets | * Existing data are data not generated by the researcher. They may be in the form of individual records (e.g. academic, medical, financial), data sets, interview notes, biospecimens, online profiles and posts (e.g. social media), and audio or video recordings. They could be available for reasons other than research and are sometimes, but not always, identifiable. * **Existing data set questions are at Section 5.8** | * [La Trobe University Human Research Ethics Application](https://www.latrobe.edu.au/researchers/research-office/ethics/human-ethics) |
| Ethnographic | * Ethnographic research is a qualitative, iterative research method used to engage with a group, community, population or society that is aimed at description of everyday life and practice and the interpretation of cultural meanings, patterns and systems emphasising an ‘insider’s point of view’. * Ethnographic research is usually based on fieldwork using a model of participant-observation and the research questions are often developed in collaboration with research participants. The result is an account of the people, place or institution with whom or with which the researchers have interacted. * **Ethnographic research questions are included at Section 5.10** | * [La Trobe University Human Research Ethics Application](https://www.latrobe.edu.au/researchers/research-office/ethics/human-ethics) |
| Epidemiological | * [The World Health Organization describes epidemiology as “the study of the distribution and determinants of health-related states or events (including disease), and the application of this study to the control of diseases and other health problems. Various methods can be used to carry out epidemiological investigations: surveillance and descriptive studies can be used to study distribution; analytical studies are used to study determinants”.](http://www.who.int/topics/epidemiology/en/) * **Epidemiological research questions are included at Section 5.11** | * [La Trobe University Human Research Ethics Application](https://www.latrobe.edu.au/researchers/research-office/ethics/human-ethics) |
| Interventional / Clinical Trials | • Interventional research is the use of one or more substances, devices, treatments, therapies, techniques or processes in a defined cohort of participants to determine the impact or effect on individuals. Interventions can be physical, behavioural, psychological or informational and can be used in clinical, educational or other contexts.  • Interventional research may or may not:  • Be comparative,  • Randomise the participants,  • Include an experimental arm, and/or  • Include a placebo arm.   * [The World Health Organization](http://www.who.int/topics/clinical_trials/en/)defines a clinical trial as "any research study that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects on health outcomes". Medical interventions include any intervention used to modify a health outcome and include drugs, surgical procedures, devices, behavioural treatments, etc. * **The HREA contains the relevant questions and links to the SPIRIT checklist** | * [NHMRC Human Research Ethics Application Form](https://hrea.gov.au/) |
| Observational | * Observational research involves the researcher observing participant/s in their own environment, or in the environment being studied. Data collection through observation can be structured or unstructured, with the observer as a collaborative participant (participant observation) or external to the environment. **Observational research questions are at Section 5.13** | * [La Trobe University Human Research Ethics Application](https://www.latrobe.edu.au/researchers/research-office/ethics/human-ethics) |
| Interview / Focus Group | * Interviews involve researchers talking to one or more participants, where the categories of response are focused but not necessarily pre-determined. Interviews are usually recorded by audio- or videotape, or notes. These records are research data in themselves, but also may be transcribed. Interviews are usually conducted in locations mutually acceptable to participants and interviewers.  • Focus groups of participants discuss a set of research questions or topics. This may entail the researcher acting as a moderator for the discussion.  • This method includes research using oral history. * **Interview/Focus Group research questions are at Section 5.12** | * [La Trobe University Human Research Ethics Application](https://www.latrobe.edu.au/researchers/research-office/ethics/human-ethics) |
| Surveys | * Survey research includes seeking to answer questions, solve problems, determine whether specific objectives have been met, establish baselines against which future comparisons can be made, analyse trends across time, and generally, to describe what exists, in what amount, and in what context.” (Isaac & Michael, 1997). * **Survey research questions are at Section 5.14** | * [La Trobe University Human Research Ethics Application](https://www.latrobe.edu.au/researchers/research-office/ethics/human-ethics) |
| Textual analysis | * This method may involve evaluation of texts including film, television, photographs, magazines, advertisements, clothes, graffiti and other media. * This method may include the study of content or specific language and its frequency (e.g. hermeneutics or linguistic analysis). * **Textual analysis research questions are at Section 5.15** | * [La Trobe University Human Research Ethics Application](https://www.latrobe.edu.au/researchers/research-office/ethics/human-ethics) |

Definitions drawn from: [National Health and Medical Research Council Human Research Ethics Application](https://hrea.gov.au/), the [Australian New Zealand Clinical Trials Registry](http://www.anzctr.org.au/), University of Kentucky, and Duke University.