

5. Designing your research methodology

Choosing your methodology

Follow this link to the Centre for Sociology, Anthropology and Politics *Companion for Undergraduate Dissertations* and listen to social science lecturers talking about methodologies.

<http://www.socscidiss.bham.ac.uk/vidpages/s9vid.html>

Research design

The Research Methods Knowledge Base gives an overview of different research designs:

<http://www.socialresearchmethods.net/kb/design.php>

Qualitative or quantitative

The Colorado State University offers a brief paper on the differences between qualitative and quantitative research

<http://writing.colostate.edu/guides/research/gentrans/pop2f.cfm>

Using the Internet for social research

Intute: virtual training suite hosts an online tutorial which overviews some of the resources available on the Internet to support your research.

Data collection

Overview of secondary and primary data collection methods

The Thames Valley University in the UK has produced an online dissertation guide. Within that guide you will find overviews of principal primary and secondary data collection methods. The site offers the advantages and disadvantages of different methods as well as activities for you to try.

<http://brent.tvu.ac.uk/dissguide/hm1u3/hm1u3fra.htm>

Support for different methods

There are many sites on the Internet that give advice and supporting materials for different data collection methods. Here are just a few:

A template for structured observation: <http://www.sociology.org.uk/methsi.pdf>

A site devoted to survey design: <http://www.whatisasurvey.info/>

A chapter on structured interviewing:
<http://informationr.net/tdw/publ/INISS/Chap1.html>

A chapter on qualitative interviewing:
<http://webspace.ship.edu/cgboer/qualmethfour.html>

Materials for focus group interviews:
<http://www.tc.umn.edu/~rkrueger/focus.html>

Research ethics and being a responsible researcher

Research ethics proposal proforma

The following proforma from Sheffield Hallam University is typical of the kinds of form that your institution might require you to complete. If this is not an institutional requirement for you, you might still want to fill it in as it will encourage you to think very carefully about the ethical implications of your research

RESEARCH ETHICS PROPOSAL
Name of researcher:
Email address:
Title of research:
Supervisor:
Briefly describe the rationale for your research with reference to the research literature (approx. 250 words).
State the major research questions including the aim(s) and hypothesis(es) where appropriate.
Describe the method including the design, participants, and procedure.
Describe the type of data analysis you envisage using.
Describe the arrangements for selecting/sampling and briefing potential

<p>participants. This should include copies of any advertisements for volunteers or letters to individuals/organisations inviting participation.</p>
<p>Describe any possible negative consequences of participation in the research along with the ways in which these consequences will be limited. This should include details where appropriate of any withholding of information or misleading of participants along with a justification of why this is necessary.</p>
<p>Describe how participants will be made aware of their right to withdraw from the research. This should also include information about participants' right to withhold information.</p>
<p>Describe the arrangements for obtaining participants' consent. This should include copies of the information that they will receive & written consent forms where appropriate. If children or vulnerable people are to be participants in the study details of the arrangements for obtaining consent from those acting in loco parentis or as advocates should be provided.</p>
<p>If you intend to undertake research with children or other vulnerable participants does the data collection involve you being alone with the participant(s)? Please provide details.</p>
<p>If your data collection requires that you work alone with children or other vulnerable participants have you undergone Criminal Records Bureau screening? Please supply details.</p>
<p>Describe the arrangements for debriefing the participants. This should include copies of information that participants will receive where appropriate.</p>
<p>Describe the arrangements for ensuring participant confidentiality. This should include details of how data will be stored and how results will be presented.</p>

Consent forms

A consent form is something you can use with your research participants to ensure that they are clear about what they are getting involved in. The form below, used at Sheffield Hallam University, can be used and adapted for your own project (but check first whether your own institution has similar templates for you to work with).

TITLE OF STUDY:

Please answer the following questions by circling your responses:
Have you read and understood the information sheet about this study? YES NO
Have you been able to ask questions about this study? YES NO
Have you received enough information about this study? YES NO
Do you understand that you are free to withdraw from this study? YES NO
At any time? YES NO
Without giving a reason for your withdrawal? YES NO
Your responses will be anonymised before they are analysed.
Do you give permission for members of the research team to have access to your anonymised responses? YES NO
Do you agree to take part in this study? YES NO
Your signature will certify that you have voluntarily decided to take part in this research study having read and understood the information in the sheet for participants. It will also certify that you have had adequate opportunity to discuss the study with an investigator and that all questions have been answered to your satisfaction.
Signature of participant: Date:
Name (block letters):
Signature of investigator: Date:

Ethical Codes

The following links lead to the ethical codes of different subject areas. You should read the one/s that relate most closely to your dissertation topic.

Department of Health Research Governance Framework for Health and Social Care:

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4008777

British Psychological Society Ethics Code:

http://www.bps.org.uk/the-society/code-of-conduct/code-of-conduct_home.cfm

British Sociological Association Ethics Code:

<http://www.britisoc.co.uk/equality/Statement+Ethical+Practice.htm>

American Anthropological Association Ethics Code:
<http://www.aaanet.org/committees/ethics/ethcode.htm>

British Association of Social Work Ethics Code:
<http://www.basw.co.uk/Default.aspx?tabid=67>

Quantitative Data Analysis

Online textbooks

The Web Center for Social Research Methods houses *The Knowledge Base*, an online textbook which is aimed at undergraduate students in the social sciences. It is clearly written and covers the research process from the formulation of research questions; sampling; measurement; research design; data analysis; and, the write-up. Although the book covers qualitative research as well, the focus is firmly within the area of quantitative research methods.

<http://www.socialresearchmethods.net/kb/index.php>

The Rice Virtual Lab in Statistics also houses an online textbook, *Hyperstat*. This textbook introduces univariate and bivariate analysis, probability, distribution and hypothesis testing. The site also includes a really useful section of case studies, which use real life examples to illustrate various statistical tests.

http://onlinestatbook.com/case_studies_rvls/index.html

Online tutorials / courses

The following site offers tutorials on the use and interpretation of basic statistical tests. The tutorials are based on commonly-used quantitative data analysis packages including: SAS, SPSS, WINKS and EXCEL. The examples come from the medical sciences; however the principles are the same in the social sciences.

<http://www.stattutorials.com/index.html>

Manchester Metropolitan University (Department of Information and Communications) and Learn Higher offer a clear introduction to quantitative data analysis through their *Analyse This!!!* site. The tutorial is peppered with short quizzes to test your understanding. The site also links out to further reading.

<http://www.learnhigher.ac.uk/analysethis/main/quantitative.html>

Statistical tests

Not sure which statistical test to use with your data? The University of the West of England has a really helpful tree diagram to help you decide which is the best one for you. The diagram is housed within another good introduction to data analysis.

<http://hsc.uwe.ac.uk/dataanalysis/quantInf.asp>

Checklist for presenting quantitative data analysis

Do the results that you have presented relate to your original research question/s?	
Have you included all the results you need to support your argument?	
Have you included results that are not needed?	
Have you commented on all of the results?	
Have you used to best presentation of your results (tables, graphs, diagrams, words)	
Have you labelled all of your tables and figures?	
Have you referred to all your tables and figures in the main text? If not, do you really need them?	

Qualitative Data Analysis

Bibliography of qualitative research methods

As we have indicated in the qualitative data analysis chapter, there are many different ways to work with qualitative data. The following link takes you to a site hosting a bibliography of qualitative research methods. The site is divided up into thirty-five sections to reflect different approaches to and ideas about qualitative research, including, for example, auto-ethnography, action research and subjectivity. It has been compiled by Dr Bobi Kerlins who is the Learning Technology Coordinator at Queen's University in Canada:

<http://kerlins.net/bobbi/research/qualresearch/bibliography/index.html>

Online Tutorials

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<http://www.learnhigher.ac.uk/analysethis/main/qualitative.html>

Common computer-aided qualitative data analysis packages

There are many computer packages that can support your qualitative data analysis. The following two sites offer a comprehensive overview of many of them:

Online QDA: http://onlineqda.hud.ac.uk/Intro_CAQDAS/index.php

Computer Assisted Qualitative Data Analysis Networking Project:
<http://caqdas.soc.surrey.ac.uk/index.htm>

While the following table gives you links to some of the biggest sellers:

N-Vivo http://www.qsrinternational.com/products_nvivo.aspx Able to deal audio, video, photos, word and PDF files. You can import and export your data. Nvivo will help you to code, sort and display. The text searching functions are very sophisticated in Nvivo.
ATLAS.ti http://www.atlasti.com/ Another package that allows you analyse textual, graphical, audio and video data. It also has the functionality to produce tag clouds to represent the codes you have created.
HyperRESEARCH http://www.researchware.com/hr/index.html This has the same functionality as the other packages. You can buy it in a package with HyperTRANSCRIBE which facilitates transcription
MAXQDA http://www.maxqda.com/index.php/maxqda This has add-ons which allow you to analyse vocabulary and carry out content analysis. There is a visual MAPS add-on which produces visual representations of your data.
The Ethnograph http://www.qualisresearch.com/ This was one of the first packages for qualitative data analysis. It allows you to create code trees and search your data easily.
Transana

<http://www.transana.org/>

This was designed for researchers who want to analyse audio and visual data. The prices for one user are quite low.