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## ualitative Research

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### Inippets on qualitative research



The value of qualitative research, as developed by social researchers, is that it offers a way of getting close to peoples' feelings, values and reactions. It allows insight into these issues without the researcher imposing their own conceptual framework on them. Qualitative research usually focuses on events, processes, experiences, actions, feelings, values etc from the perspective of those being studied. It is therefore a useful method for exploring perceptions and beliefs, for understanding complex processes and for developing theories. As with traditional research it involves sampling, developing a study instrument, collecting and analysing data, and checking the validity of your findings.





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## Why use qualitative research?

**Qualitative research can provide rich** data – it can reach the 'parts' other research methods cannot reach.

An in-depth interview with one person can be far better and reveal far more than 500 shallow questionnaires.

Qualitative research can help you find out why people do what they do and what they need to change.



If you are a doctor you are already likely to be familiar with quantitative research, which is about collecting and analysing data in numeric form, and perhaps wary about qualitative research. However, quantitative research offers limited information about peoples' experiences, values and does little to help you understand how organisations or teams function. This is where qualitative research has a key role to play.



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### ntroducing qualitative research

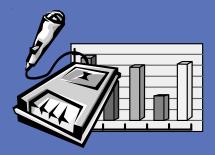
In today's world the healthcare profession faces many challenges. These include increased expectations from the government, Trusts and patients. There are also economic problems to be faced, as well as changing relationships with other professions and the users of the service. Quantitative research methods, which are the norm in medical research, are often inappropriate to address such complex issues.

Qualitative research, however, can be extremely useful in capturing the interactions between people and accessing their subjective worlds. It offers a means of exploring perceptions and beliefs, understanding complex processes, identifying important issues, exploring problem areas and suggesting ways of tackling them.



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Many researchers often combine qualitative and quantitative methods in their studies. For example a researcher might plan a survey through interviews but analyse some of the content using quantitative analysis.









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### ualitative research in action

The aspects listed below take you through the various steps of the research process.

What should the research question be?

**Research methods** 

Tools for collecting data

Study settings

Selecting the sample

Analysing, interpreting and validating the findings



Click the appropriate option if you wish to find out more



What should the research question be?

Research methods

Tools for collecting data

#### Study settings

Selecting the sample

Analysing, interpreting and validating the findings

The research question is likely to be more open than in traditional research. Define clearly what you want to find out. Remember qualitative methods are best suited to addressing questions about what, why and how events are occurring. Also think about the level of detail you require in your investigation in order to illuminate or answer your questions.



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What should the research question be?

#### **Research methods**



Tools for collecting data Study settings

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Qualitative research methods include:

- using case studies to explore specific situations then developing and expanding theory about the issue being studied.
- undertaking research at the same time as a real problem is being solved or a process is being implemented. The researcher is involved in the event or process and intervenes in it. Problems are identified and addressed as they arise. Changes are then implemented and evaluated.
- focusing on describing and analysing behaviour and beliefs. This comes under the heading of 'Ethnographic Research'.



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Qualitative Research... Core: 6 of 14

Snippets Core Examples Practical Tips Opportunities Activities What should the research question be?

Research methods

Tools for collecting data

Study settings

Selecting the sample

Analysing, interpreting and validating the findings Below are typical data collection tools. To learn more about a tool, click on the option of your choice.

Observation Interviews Focus groups Critical incident Diaries/self-reporting

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# What should the research question be?

Research methods

#### Tools for collecting data

#### Study settings

Selecting the sample

Analysing, interpreting and validating the findings

#### Observation

Through either participant or nonparticipant observation a researcher can gain an insider's or outsider's view of a situation and elicit information on relationships, behaviour and events.

#### Interviews

Focus groups Critical incident Diaries/self-reporting





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# What should the research question be?

Research methods

#### Tools for collecting data

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Selecting the sample

Analysing, interpreting and validating the findings

#### Observation

#### Interviews

These provide data in the interviewee's own words. This assists in 'seeing the world' from their perspective.

Focus groups Critical incident Diaries/self-reportin



# What should the research question be?

Research methods

#### Tools for collecting data

Study settings

Selecting the sample

Analysing, interpreting and validating the findings

#### Observation Interviews

#### Focus groups

This is simply any group discussion that generates data. The discussion may be made to follow a defined agenda, or be an open discussion on a topic. It can provide insight into attitudes, views and behaviour and is a useful method for exploring sensitive issues.

#### Critical incident

Diaries/self-reporting





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What should the research question be?

Research methods

#### Tools for collecting data

Study settings

Selecting the sample

Analysing, interpreting and validating the findings

Observation Interviews Focus groups

#### **Critical incident**

These are events, usually 'dilemmas' but can be 'master performances', which are discussed in detail and their characteristics explored. It is useful for studying rare occurrences.

Diaries/self-reporting

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# What should the research question be?

Research methods

#### Tools for collecting data

#### Study settings

Selecting the sample

Analysing, interpreting and validating the findings

Observation Interviews Focus groups Critical incident

#### Diaries/self-reporting

Self-reporting can provide a rich picture especially when participants are asked to reflect and make sense of their experiences.



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Before deciding on the study setting, think:

Is the selection of one location likely to give you sufficient information?

Would one setting be a typical setting?

Is a contrast between settings required?

Are you likely to elicit crucial information by using different settings?

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What should the research question be?

Research methods

Tools for collecting data

#### Study settings

Selecting the sample

Analysing, interpreting and validating the findings





What should the research question be?

Research methods

Tools for collecting data

Study settings

#### Selecting the sample

Analysing, interpreting and validating the findings

For qualitative research the main aim is to select cases rich in information in the area being researched. The size and representativeness of the sample are of less importance than the quality of the information elicited from it.

Commonly used non statistical sampling methods include:

- purposive (judgmental): hand picking subjects to gain the maximum relevant information for the research study.
- convenience (incidental): choosing captive audiences or readily accessible subjects
- quota: setting quotas within each strata for subjects with the appropriate characteristics
- advertising: relying on volunteers.





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What should the<br/>research question be?Research methodsTools for collecting dataStudy settingsSelecting the sample

Analysing, interpreting and validating the findings

### Methods of analysing data involves two processes:

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Reducing the data so that you can report on it

Abstracting from it what you feel is important.

So how does this work with, for example, an interview transcript? Data is sorted and reduced through coding or annotating in terms of key concepts that emerge. Alternatively you might compare answers to specific questions to find if any key concepts and patterns emerge.

Interpreting the data involves you putting meaning to the data you have collected and analysed. Methods to ensure your interpretation is not biased include:

- triangulation: using multiple methods of data collection, data sources and researchers
- respondent validation: verifying the findings with the research participants themselves.





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### xamples in practice

Studies of compliance, life style and health service utilisation are well suited to qualitative methods.The example below outlines the steps taken in an asthma qualitative research study.

Defining the research question

Deciding on research methods

Deciding on tools for data collection

Deciding on the study setting

Selecting the sample

Analysing, interpreting and validating the findings

Click for more information on the steps taken in the research study



Deciding on research methods

Deciding on tools for data collection

Deciding on the study setting

Selecting the sample

Analysing, interpreting and validating the findings



A review of the literature found only two papers on patient goals in asthma. Given this lack of information on patient goals a question was developed "what are the treatment goals of adults with asthma and why?"



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## Deciding on research methods

Deciding on tools for data collection

Deciding on the study setting

Selecting the sample

Analysing, interpreting and validating the findings



In view of the lack of other research on asthma goals and the form of the research question which wanted to know if treatment goals existed and why, qualitative methods were chosen. It was not necessary to know how many people had asthma goals.





Deciding on research methods

### Deciding on tools for data collection

Deciding on the study setting

Selecting the sample

Analysing, interpreting and validating the findings

In order to understand patient goals in their social context it was decided to interview subjects at home.

The interviews were tape-recorded and transcribed word for word – 'verbatim' – in order to accurately record what was said.





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Deciding on research methods

Deciding on tools for data collection

### Deciding on the study setting

Selecting the sample

Analysing, interpreting and validating the findings



As most people with asthma are seen in primary care and most general practitioners have registers of people with asthma, a primary care population was selected.

As the study was exploratory, a single general practice was chosen.





Deciding on research methods

Deciding on tools for data collectior

Deciding on the study setting

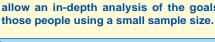
#### Selecting the sample

Analysing, interpreting and validating the findings

Purposive sampling allowed subjects to be selected of different ages and gender. Disease severity was limited to steps 2-4 of the British Thoracic Society Guidelines to allow an in-depth analysis of the goals of







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Deciding on research methods

Deciding on tools for data collection

Deciding on the study setting

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Selecting the sample

Analysing, interpreting and validating the findings Several researchers with different perspectives read the transcriptions of the interviews. From reading the transcripts and the relevant literature a coding system was developed. Codes included 'asthma goals' and 'life goals'. Three researchers coded a few transcripts. Differences in coding were explored and negotiated until agreement was reached. This process continued until all differences had been resolved. The final coding system was applied to all the transcripts. The data was then explored for patterns and a theory developed.

Sometimes respondents are sent a copy of their transcript or a copy of the analysis to make sure it is valid. Focus groups can also be used to validate the results of an interview study.



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### ractical tips



Discuss your research idea with a colleague who may point out some of the pitfalls or tell you if it is a waste of time. If you are new to qualitative research, you should seek out an experienced researcher to act as a collaborator or supervisor.

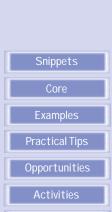
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✓ Think about some topic 'short cuts' eg comparing practice with other published work or trends.

Outline your thoughts in writing. Jot down what the proposal is about (introduction), what you want to do (method), what you think you might find (results) and what it might mean (discussion).

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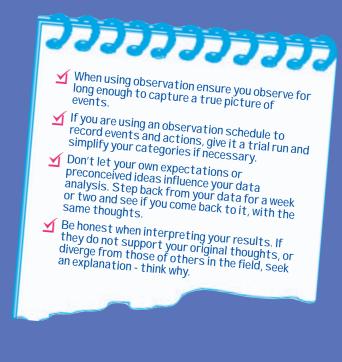
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✓ Ensure you are adequately trained for qualitative research. Get some practice on data collection methods (observation, interviewing) and data analysis through trying the methods out on colleagues or assisting in another investigation.
<ul> <li>Keep an on-going list of full references of articles/books relevant to your research. It will save a lot of time when writing the final report.</li> <li>Don't rely on solely one method for data collection.</li> </ul>
✓ Transcribing interviews is a lengthy process and tape recorders can make interviewees nervous. If you decide to use note-taking for an interview, practise - asking questions, listening and taking notes.















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## Ither learning opportunities

There are many books and other resources on Qualitative Research. Here is a short resume of our suggestions.





Click the appropriate button if you wish to find out more



### Blaxter L, Hughes C, Tight M (1996) *How to research* Buckingham, Open University Press

Although covering quantitative as well as qualitative research this is an excellent, jargon free book about doing research in the social sciences as well as in related subjects, eg education, health and social care. It offers lots of practical advice for all stages of the qualitative research process.

#### Strauss A, Corbin J (1996) *Basics of Qualitative Research: techniques and procedures for developing grounded theory* London, Sage

This is one of the most widely read and used basic texts of qualitative research. The book itself is very much a "how to" guide which systematically takes the reader through the importance of qualitative research and its relationship to quantitative methods through the development of a research question, sampling and data collection. The majority of the book concentrates on the previously enigmatic process of analysis by providing a clear and almost mechanical guide for new researchers.





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### Snippets Core Examples Practical Tips Opportunities Activities



Centre for Medical Education (1997) Research awareness (unit R:1), Approaches to Research (unit R:2), Sampling (unit R:3), Designing and administering questionnaires (unit R:4) in the *Diploma in Medical Education*, Dundee, Centre for Medical Education, University of Dundee

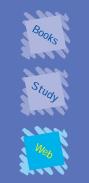
These stand-alone units are an excellent 'next step' to this and the quantitative research units. You can also go on to gain accreditation towards a postgraduate certificate/diploma/Masters in Medical Education.





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The international database TimeLIT (Topics in Medical Education Literature) <u>www.timelit.org</u> gives free access to articles relating to education in medicine, dentistry, nursing, patient health and the professions allied to medicine.

Other useful websites for those interested in Medical Education are that of the Association for the Study of Medical Education <u>www.asme.org.uk</u> and that of the Association for Medical Education in Europe <u>www.amee.org</u>





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### You might now wish to look at the related unit on Quantitative Research.



Click the option to take you to a summary of the unit



Snippets



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# **O**roup activities

Have a go with some colleagues at designing an Observation Diary to record events relevant to the team-working skills of trainees in your unit. Discuss the kind of thing you might want to observe and record in order to gain insight into good and poor team working skills. Afterwards discuss how you would proceed to code the data.

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Snippets Opportunities

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Qualitative research, when carried out properly, is a systematic and rigorous form of research.

