

# Organization and Planning of Scientific Research

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# Lecture 3. Qualitative research methods

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1. Choosing a research strategy: qualitative approach
2. In-depth interviews
3. Focus groups
4. Case study
5. Participant observation
6. Qualitative data analysis

The main **objective** of this lecture is to consider main qualitative research methods.

## Checklist for the choice of research strategy

When choosing a research strategy you should feel confident about answering 'yes' to the following questions:

### Factors to be considered

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|---|--|
| <b>Suitability</b><br>Will it produce appropriate kinds of data?                  | <ul style="list-style-type: none"><li>• Has the purpose of the research been clearly identified? <input type="checkbox"/></li><li>• Is there a clear link between the purpose of the research and the chosen strategy? <input type="checkbox"/></li><li>• Will the strategy produce findings that can answer the research question(s)? <input type="checkbox"/></li></ul>  |
| <b>Feasibility</b><br>Can it be done?   | <ul style="list-style-type: none"><li>• Is there sufficient time for the design of the research, collection of data and analysis of results? <input type="checkbox"/></li><li>• Are sufficient resources available to cover the costs of the research (e.g. travel, printing)? <input type="checkbox"/></li><li>• Is it possible and practical to gain access to necessary data (people, events, documents)? <input type="checkbox"/></li><li>• Will the chosen strategy be favoured by the key evaluators of the research? <input type="checkbox"/></li></ul> |
| <b>Ethics</b><br>Will it allow me to be ethical in my dealings with participants? | <ul style="list-style-type: none"><li>• Can I avoid any harm to participants resulting from their involvement in the research? <input type="checkbox"/></li><li>• Can I get informed consent from potential participants? <input type="checkbox"/></li><li>• Will the strategy permit me to work within an appropriate code of research ethics? <input type="checkbox"/></li><li>• Can I guarantee the confidentiality of the information given to me during the research? <input type="checkbox"/></li></ul>  |

There is no single strategy that can be recommended as the 'best' in all circumstances. The choice of strategy, instead, depends on identifying one that works best for the particular research project in mind.

To decide which strategy is likely to work best, the researcher needs to consider three key questions:

- Is it suitable?
- Is it feasible?
- Is it ethical?

**The researcher should choose a strategy that is likely to be successful in achieving the aims of the research and be able to justify the choice of this strategy clearly and explicitly.**

# Qualitative research methods

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**Qualitative research** involves collecting and analyzing non-numerical data (e.g., text, video, or audio) to understand concepts, opinions, or experiences. It can be used to gather in-depth insights into a problem or generate new ideas for research.

Qualitative research is the opposite of **quantitative research**, which involves collecting and analyzing numerical data for statistical analysis.

Qualitative research is commonly used in the humanities and social sciences, in subjects such as anthropology, sociology, education, health sciences, history, etc.

Qualitative research methods are designed in a manner that help reveal the behavior and perception of a target audience with reference to a particular topic.

**There are different types of qualitative research methods like an in-depth interview, focus groups, ethnographic research, content analysis, case study research that are usually used.**

# In-depth interviews.

## What is an interview?

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Interviews are an attractive proposition for project researchers. At first glance, they do not seem to involve much technical paraphernalia and they draw on a skill that researchers already have – the ability to conduct a conversation. **The reality, though, is not quite so simple.**

Although there are a lot of superficial similarities between a conversation and an interview, interviews are actually something more than just a conversation. Interviews involve a set of assumptions and understandings about the situation which are not normally associated with a casual conversation (Denscombe 1983; Silverman 1985).



# When someone agrees to take part in a research interview:

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- **There is consent to take part.** From the researcher's point of view this is particularly important in relation to research ethics. The interview is not done by secret recording of discussions or the use of casual conversations as research data. It is openly a meeting intended to produce material that will be used for research purposes – and the interviewee understands this and agrees to it.
- **Interviewees' words can be treated as 'on the record' and 'for the record'.** It is, of course, possible for interviewees to stipulate that their words are not to be attributed to them, or not to be made publicly available. The point is, though, that unless interviewees specify to the contrary, the interview talk is 'on record' and 'for the record'.
- **The agenda for the discussion is set by the researcher.** Although the degree of control exercised by the researcher will vary according to the style of interviewing, there is a tacit agreement built into the notion of being interviewed that the proceedings and the agenda for the discussion will be controlled by the researcher

# When is it appropriate to use interviews?

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**Opinions, feelings, emotions and experiences.** The nature of these means that they need to be explored in depth and in detail rather than simply reported in a word or two.

**Sensitive issues.** When the research covers issues that might be considered sensitive or rather personal there is a case to be made for using interviews. Using a careful and considerate approach, participants can be encouraged to discuss personal and sensitive issues in open and honest manner.

**Privileged information.** Here, the justification for interviews is based on the value of contact with key players in the field who can give privileged information. The depth of information provided by interviews can produce best 'value for money' if the informants are willing and able to give information that others could not – when what they offer is an insight they have as people in a special position 'to know'

# Types of research interview

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**Structured interviews** involve tight control over the format of the questions and answers. In essence, the structured interview is like a questionnaire which is administered face-to-face with a respondent. The researcher has a predetermined list of questions, to which the respondent is invited to offer limited option responses. The tight control over the wording of the questions, the order in which the questions occur and the range of answers that are on offer have the advantage of 'standardization'. Each respondent is faced with identical questions. And the range of pre-coded answers on offer to respondents ensures that data analysis is relatively easy. The structured interview, in this respect, lends itself to the collection of quantitative data.

**Semi-structured interviews.** With semi-structured interviews, the interviewer still has a clear list of issues to be addressed and questions to be answered. However, with the semi-structured interview the interviewer is prepared to be flexible in terms of the order in which the topics are considered, and, perhaps more significantly, to let the interviewee develop ideas and speak more widely on the issues raised by the researcher. The answers are open-ended, and there is more emphasis on the interviewee elaborating points of interest.



# Types of research interview

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**Unstructured interviews** go further in the extent to which emphasis is placed on the interviewee's thoughts. The researcher's role is to be as unintrusive as possible – to start the ball rolling by introducing a theme or topic and then letting the interviewee develop their ideas and pursue their train of thought.

**One-to-one interviews.** The most common form of interview is the one-to-one variety which involves a meeting between one researcher and one informant. One reason for its popularity is that it is relatively easy to arrange. Only two people's diaries need to coincide. Another advantage is that the opinions and views expressed throughout the interview stem from one source: the interviewee. This makes it fairly straightforward for the researcher to locate specific ideas with specific people. A third advantage is that the one-to-one interview is relatively easy to control. The researcher only has one person's ideas to grasp and interrogate, and one person to guide through the interview agenda. And a fourth advantage of conducting one-to-one interviews becomes evident when the researcher embarks on transcribing the interview tape: it is far easier to transcribe a recorded interview when the talk involves just one interviewee. There is only one voice to recognize and only one person talking at a time

# Types of research interview

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**Group interviews.** A disadvantage of the one-to-one interview is that it limits the number of views and opinions available to the researcher. Listening to one person at a time effectively restricts the number of voices that can be heard and the range of views that can be included within a research project. Group interviews, however, provide a practical solution to this.

By interviewing more than one person at a time the researcher is able to dramatically increase the number and range of participants involved in the research. A group interview can be undertaken very much like a one-to-one interview in the sense that the interviewer remains the focal point of the interaction that takes place. The questions and answers are channelled through the interviewer. The difference is that instead of each question prompting a response from just one interviewee the researcher can get perhaps four responses from four people during the interview.

# Focus group

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A **focus group** is also one of the commonly used qualitative research methods, used in data collection. A focus group usually includes a limited number of respondents (6-10) from within your target market.

The main aim of the focus group is to find answers to the “why” “what” and “how” questions.

Focus groups are an expensive method as compared to the other online qualitative research methods. Typically, they are used to explain complex processes.

This method is very useful when it comes to market research on new products and testing new concepts.

- Focus groups consist of small groups of people who are brought together by a 'moderator' (the researcher) to explore attitudes and perceptions, feelings and ideas about a specific topic.
- Typically they last for 1½ to 2 hours and are useful for gauging the extent to which there are shared views among a group of people in relation to a specific topic.
- Ideally, focus groups have six to nine people in them. This is a large enough number to allow a range of views and opinions to be present among the group but not too large as to be unmanageable in terms of the discussion. In small-scale research projects the numbers are often smaller. The reason for this is that focus groups can be costly and time consuming to arrange.
- It is not easy to organize a venue for the meeting and get six or more people to turn up on time. Nor is it necessarily inexpensive if the researcher needs to fund travel and pay for the room

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Focus groups make particular use of group dynamics and have three distinctive features:

- there is a **focus** to the session, with the group discussion being based on an item or experience about which all participants have similar knowledge;
- particular emphasis is placed on the **interaction within the group** as a means of eliciting information;
- the moderator's role is to **facilitate** the group interaction rather than lead the discussion.



# The interviewer effect

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## **Personal identity.**

The impact of the researcher's personal identity, of course, will depend on who is being interviewed. It is not, strictly speaking, the identity in its own right that affects the data, but what the researcher's identity means as far as the person being interviewed is concerned. Interviewees, and interviewers come to that, have their own preferences and prejudices, and these are likely to have some impact on the chances of developing rapport and trust during an interview.

## **Self-presentation**

Conventional advice to researchers has been geared to minimizing the impact of researchers on the outcome of the research by having them adopt a passive and neutral stance. The idea is that the researcher:

- presents himself or herself in a light which is designed not to antagonize or upset the interviewee (conventional clothes, courtesy, etc.);
- remains neutral and non-committal on the statements made during the interview by the interviewee.

## Personal involvement

One line of reasoning argues that a cold and calculating style of interviewing reinforces a gulf between the researcher and the informant and does little to help or empower the informant.

Now, if the aims of the research are specifically to help or empower the people being researched, rather than dispassionately learn from them, then the approach of the interviewer will need to alter accordingly (Oakley 1981). Under these circumstances, the researcher will be inclined to show emotion, to respond with feeling and to engage in a true dialogue with the interviewee. The researcher will become fully involved as a person with feelings, with experiences and with knowledge that can be shared with the interviewee.

A word of warning, though. This style of interviewing remains 'unconventional', and the researcher needs to be confident and committed to make it work.

The researcher also needs to feel sure that his or her audience understand and share the underlying logic of the approach rather than expecting the researcher to adopt the cool and dispassionate stance.



## Planning and preparation for interviews

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- The topics for discussion
- Selection of informants / experts
- Pilot interview
- Authorization / approval
- Arranging the venue



# Interview skills

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**The good interviewer needs to be attentive.** This may sound obvious, but it is all too easy to lose the thread of the discussion because the researcher needs to be monitoring a few other things while listening closely to what the informant has to say: writing the field notes, looking for relevant nonverbal communication, checking that the recorder is working.

**The good interviewer is sensitive to the feelings of the informant.** This is not just a matter of social courtesy, though that is certainly a worthy aspect of it. It is also a skill which is necessary for getting the best out of an interview. Where the interviewer is able to empathize with the informant and to gauge the feelings of the informant, they will be in a better position to coax out the most relevant information.

**The good interviewer is able to tolerate silences during the talk,** and knows when to shut up and say nothing. Anxiety is the main danger. Fearing that the interview might be on the verge of breaking down, the researcher can feel the need to say something quickly to kick-start the discussion. But, most of all, feeling uncomfortable when the conversation lapses into silence, the interviewer can be all too quick to say something when a more experienced interviewer would know that the silence can be used as a wonderful resource during interviews (see below).

**The good interviewer is adept at using prompts.** Although silences can be productive, the interviewer needs to exercise judgement on this. There are times during an interview when the researcher might feel that it is necessary to spur the informant to speak.

**The good interviewer is adept at using checks.** One of the major advantages of interviews is that they offer the researcher the opportunity to check that he or she has understood the informant correctly. As an ongoing part of the normal talk during interviews, the researcher can present a summary of what they think the informant has said, which the informant can then confirm as an accurate understanding, or can correct if it is felt to be a misunderstanding of what has been said.

**With focus groups, the good facilitator manages to let everyone have a say.** It is vital to avoid the situation where a dominant personality hogs the discussion and bullies others in the group to agree with his or her opinion.

**The good interviewer is non-judgemental.** As the researcher enters the interview situation they should, as far as is possible, suspend personal values and adopt a non-judgemental stance in relation to the topics covered during the interview. This means not only biting your lip on occasion, but also taking care not to reveal disgust, surprise or pleasure through facial gestures. The good researcher must also respect the rights of the interviewee.

# Conducting the interview

## Introduction and formalities

At the beginning there should be the opportunity to say 'Hello', to do some introductions, to talk about the aims of the research and to say something about the origins of the researcher's own interest in the topic. During the initial phase, there should also be confirmation that you have permission to record the discussion and reassurances about the confidentiality of comments made during the interview. The aim is to set the tone for the rest of the interview – normally a relaxed atmosphere in which the interviewee feels free to open up on the topic under consideration. Trust and rapport are the keywords.

## Starting the interview

The first question takes on a particular significance for the interview. It should offer the interviewee the chance to settle down and relax. For this reason it is normally good practice to kick off with an 'easy' question: something on which the interviewee might be expected to have well-formulated views and something that is quite near the forefront of their mind. Two tactics might help here.

1. Ask respondents, in a general way, about themselves and their role as it relates to the overall area of the interview. This allows the researcher to collect valuable background information about informants while, at the same time, letting informants start off by covering familiar territory.
2. Use some 'trigger' or 'stimulus' material, so that the discussion can relate to something concrete, rather than launch straight into abstract ideas.

## Monitoring progress

- Identify the main points being stated by the interviewee and the priorities as expressed by the interviewee. With focus groups, what consensus is emerging about the key points?
- Look for the underlying logic of what is being said by the informant. The interviewer needs to 'read between the lines' to decipher the rationale lying beneath the surface of what is being said. The interviewer should ask 'What are they really telling me here?' and, perhaps more significantly, 'What are they not mentioning?'
- Look for inconsistencies in the position being outlined by the interviewee.
- Pick up clues about whether the informant's answers involve an element of boasting or are answers intended to please the interviewer.
- Get a feel for the context in which the discussion is taking place.
- Keep a suitable level of eye contact throughout the interview and make a note of non-verbal communication which might help a later interpretation of the interview talk

## Finishing the interview

Interviews can come to an end because the interviewee has run out of things to say and the interviewer cannot elicit any more information from the person. This is not a good state of affairs unless the interview has no outside time limit. It is better for the interview to come to a close in some orderly fashion guided by the interviewer.

Having kept an eye on the time, and having ensured that most of the required areas for discussion have been covered, the interviewer should draw events to a close making sure that:

- the interviewee is invited to raise any points that they think still need to be covered and have not been covered so far;
- the interviewee is thanked for having given up the time to participate in the interview



# Advantages of interviews

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- **Depth of information.** Interviews are particularly good at producing data which deal with topics in depth and in detail. Subjects can be probed, issues pursued and lines of investigation followed over a relatively lengthy period.
- **Insights.** The researcher is likely to gain valuable insights based on the depth of the information gathered and the wisdom of 'key informants'.
- **Equipment.** Interviews require only simple equipment and build on conversation skills which researchers already have.
- **Informants' priorities.** Interviews are a good method for producing data based on informants' priorities, opinions and ideas. Informants have the opportunity to expand their ideas, explain their views and identify what they regard as the crucial factors.
- **Flexibility.** As a method for data collection, interviews are probably the most flexible. Adjustments to the lines of enquiry can be made during the interview itself. Interviewing allows for a developing line of enquiry.
- **High response rate.** Interviews are generally prearranged and scheduled for a convenient time and location. This ensures a relatively high response rate.
- **Validity.** Direct contact at the point of the interview means that data can be checked for accuracy and relevance as they are collected.

# Disadvantages of interviews

- **Time-consuming.** Analysis of data can be difficult and time-consuming. Data preparation and analysis are 'end-loaded' compared with, for instance, questionnaires which are pre-coded and where data are ready for analysis once they have been collected. The transcribing and coding of interview data are a major task for the researcher which occurs after the data have been collected.
- **Data analysis.** The interview method tends to produce non-standard responses. Semi-structured and unstructured interviews produce data that are not pre-coded and have a relatively open format.
- **Reliability.** The impact of the interviewer and of the context means that consistency and objectivity are hard to achieve. The data collected are, to an extent, unique owing to the specific context and the specific individuals involved. This has an adverse effect on reliability.
- **Interviewer effect.** The data from interviews are based on what people say rather than what they do.
- **Inhibitions.** In the case of face-to-face interviews, the audio recorder (or video recorder) can inhibit the informant. Although the impact of the recording device tends to wear off quite quickly, this is not always the case
- **Invasion of privacy.** Tactless interviewing can be an invasion of privacy and/ or upsetting for the informant. While interviews can be enjoyable, the other side of the coin is that the personal element of being interviewed carries its own kinds of dangers as well.
- **Resources.** With face-to-face interviews the costs of interviewer's time and travel can be relatively high, particularly if the informants are geographically dispersed.

# Case studies

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Case studies focus on one (or just a few) instances of a particular phenomenon with a view to providing an in-depth account of events, relationships, experiences or processes occurring in that particular instance. The use of case studies has become extremely widespread in social research, particularly with small scale research. When researchers opt for a case study approach, they buy into a set of related ideas and preferences which, when combined, give the approach its distinctive character.

The starting point and arguably the defining characteristic of the case study approach is **its focus on just one instance of the thing that is to be investigated.**

Occasionally, researchers use two or more instances but, in principle, the idea of a case study is that a spotlight is focused on individual instances rather than a wide spectrum. **The case study approach, then, is quite the opposite of any mass study.** The logic behind concentrating efforts on one case rather than many is that there may be insights to be gained from looking at the individual case that can have wider implications and, importantly, that would not have come to light through the use of a research strategy that tried to cover a large number of instances – a survey approach. **The aim is to illuminate the general by looking at the particular.**

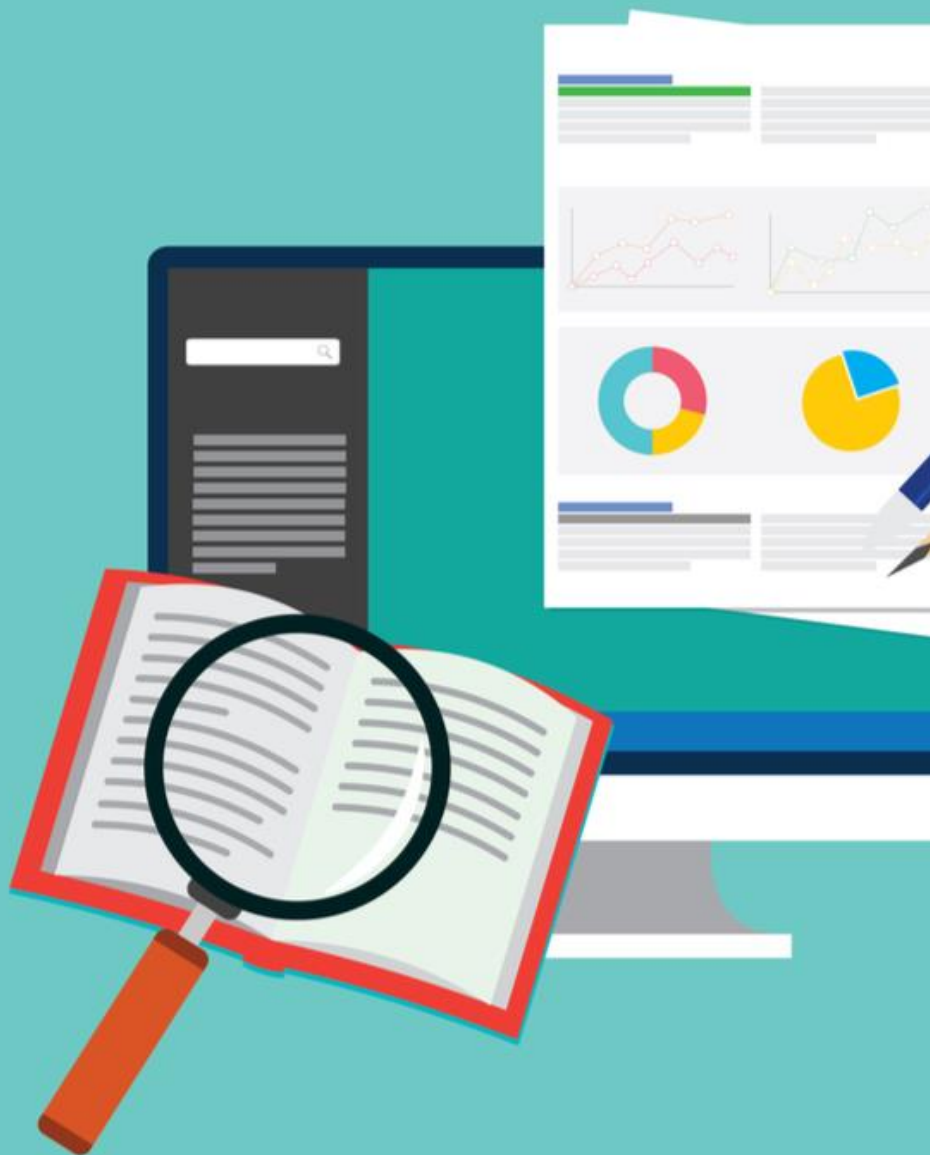


# Key point: the case study strategy

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**The decision to use a case study approach is a strategic decision that relates to the scale and scope of an investigation, and it does not, at least in principle, dictate which method or methods must be used. Indeed, a strength of the case study approach is that it allows the use of a variety of methods depending on the circumstances and the specific needs of the situation.**

|                      |   |
|----------------------|---|
| <i>Discovery led</i> |   |
| Description          | Describes what is happening in a case study setting (e.g. events, processes and relationships)    |
| Exploration          | Explores the key issues affecting those in a case study setting (e.g. problems or opportunities)  |
| Comparison           | Compares settings to learn from the similarities and differences between them                     |
| <i>Theory led</i>    |   |
| Explanation          | Explains the causes of events, processes or relationships within a setting                        |
| Illustration         | Uses a case study as an illustration of how a particular theory applies in a real-life setting    |
| Experiment           | Uses a case study as a test-bed for experimenting with changes to specific factors (or variables) |



# In-depth study

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The prospect of getting some valuable and unique insight depends on being able to investigate things in a way that is different from, and in some senses better than, what is possible using other approaches.

**What a case study can do that a survey normally cannot is to study things in detail.** When a researcher takes the strategic decision to devote all his or her efforts to researching just one instance, there is obviously far greater opportunity to delve into things in more detail and discover things that might not have become apparent through more superficial research.

# Focus on relationships and processes

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**Quite rightly, a good case study plays to its strengths.** End-products, outcomes and results all remain of interest to the case study researcher, **but if attention were not given to the processes which led to those outcomes, then the value of the case study would be lost.**

The real value of a case study is that it offers the opportunity to explain **why** certain outcomes might happen – more than just find out what those outcomes are.

**For example**, when one is looking at the turnover of labour in an organization, the strength of a case study approach would be that it could investigate the processes that explain the actual level of turnover – the intricate details of the recruitment policy, staff development, nature of the work, levels of pay, background of the workers, etc., and how all these are interrelated – all this over and above giving a detailed description of what the facts of the situation are with respect to labour turnover (the outcome).

# Natural setting

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‘The case’ that forms the basis of the investigation **is normally something that already exists.**

It is not a situation that is artificially generated specifically for the purposes of the research.

It is not like an experiment where the research design is dedicated to imposing controls on variables so that the impact of a specific ingredient can be measured.

As Yin (2009) stresses, the case is a **‘naturally occurring’ phenomenon.** It exists prior to the research project and, it is hoped, continues to exist once the research has finished.



# Multiple sources and multiple methods

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One of the strengths of the case study approach is that it **allows the researcher to use a variety of sources, a variety of types of data and a variety of research methods as part of the investigation.**

It not only allows this, it actually invites and encourages the researcher to do so. Observations of events within the case study setting can be combined with the collection of documents from official meetings and informal interviews with people involved. Questionnaires might be used to provide information on a particular point of interest.

**Whatever is appropriate can be used for investigating the relationships and processes that are of interest.**

The use of more than one research method sits comfortably with the case study approach although, in practice, the use of the case study approach **has been aligned with qualitative research far more than it has with quantitative research.**



# Case study research characteristically emphasizes

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| <b>Depth of study</b>   | <b>rather than</b> | <b>Breadth of study</b>   |
|-------------------------|--------------------|---------------------------|
| The particular          | rather than        | The general               |
| Relationships/processes | rather than        | Outcomes and end-products |
| Holistic view           | rather than        | Isolated factors          |
| Natural settings        | rather than        | Artificial situations     |
| Multiple sources        | rather than        | One research method       |

# What is a 'case'?

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The case study approach can use a wide range of social phenomena as the unit of analysis. **It can be based on things like an individual, an organization, an industry, a workplace, an educational programme, a policy or a country.** The range of potential 'cases' is very wide.

To qualify as something that lends itself to case study research, however, it is crucial that the unit **has distinct boundaries**. The use of a case study approach assumes that the researcher is able to separate some aspect of social life so that it is distinct from other things of the same kind and distinct from its social context. Without some notion of a boundary, it becomes impossible to state what the case is. If the case has no end-point, no outside, then it bleeds into other social phenomena and ceases to have any distinct identity.

Fundamentally,

- a 'case' needs to be a fairly self-contained entity;
- a 'case' needs to have fairly distinct boundaries.

# The relevance of a case study

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The researcher **needs to pick out one example** (or just a few) from a wider range of examples of the class of thing that is being investigated. Whatever the subject matter, the case study normally depends on a conscious and deliberate choice about which case to select from among a large number of possibilities. Two points follow from this.

First, **cases are not randomly selected**: they are selected on the basis of known attributes. As a distinct alternative to the randomization principle associated with classic experiments and large-scale surveys, instances selected for a case study are chosen on the basis of their distinctive features.

Second, **the criteria used for the selection of cases need to be made explicit and need to be justified as an essential part of the methodology**. Initially, this involves identifying the key features of the case and providing relevant information about that feature.



# For example,

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if the research topic was '**small firms in the automotive industry**' the criterion for the selection of any particular organization as the basis for a case study would be '**size**'.

If size is defined in terms of the number of employees, then details would need to be given about the number of employees in the selected firm and how this compares with (1) definitions of small firms (the theory) and (2) a profile of the size of other firms throughout the automotive industry.

**Such details are vital because they justify the choice of the particular firm as a suitable example of the broader category of the thing being studied (small firms) and they form the basis for any generalizations that can be made from the case study findings.**



# The selection of cases

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All case studies need to be chosen on the basis of their relevance to the practical problems or theoretical issues being researched. But, having established this, the selection of the specific case will also reflect a range of other considerations as well. These other factors concern the way the case study is to be used and the amount of flexibility the researcher is able to exercise in the selection of the specific case.

## **Typical instance**

The most common justification to be offered for the selection of a particular case is that it is typical. The logic being invoked here is that the particular case is similar in crucial respects with the others that might have been chosen, and that the findings from the case study are therefore likely to apply elsewhere. Because the case study is like most of the rest, the findings can be generalized to the whole class of thing

## **Extreme instance**

A case might be selected on the grounds that, far from being typical, it provides something of a contrast with the norm. An illustration of this would be the selection of an organization which is notably smaller or notably larger than usual. Among local authorities in the country, a very small one might be chosen for a case study, and the logic for doing so would be that this would allow the influence of the factor (size) to be more easily seen than it would be in the average size authority. In an extreme instance, a specified factor is seen in relief – highlighted in its effect.

## **Test-site for theory**

The logic for the selection of a particular case can be based on the relevance of the case for previous theory. This is a point Yin (2009) stresses. Case studies can be used for the purposes of ‘theory-testing’ as well as ‘theory-building’, to use Layder’s (1993) distinction. The rationale for choosing a specific case, then, can be that it contains crucial elements that are especially significant, and that the researcher should be able to predict certain outcomes if the theory holds true.

## **Least likely instance**

Following the idea of test-sites for theory, a case might be selected to test the validity of ‘theory’ by seeing if it occurs in an instance where it might be least expected. So, for example, a researcher who wants to test the ‘theory’ that school teachers place a high value on their autonomy could deliberately select a situation where such autonomy would seem to be least valued: a school with team teaching in open plan classrooms. If there is evidence supporting the ‘theory’ even under such ‘least likely’ conditions, then the ‘theory’ has all the more credibility.

# Can you generalize from a case study?

- How representative is the case?
- Isn't it possible that the findings, though interesting, are unique to the particular circumstances of the case?
- How can you generalize on the basis of research into one instance?

1. **Although each case is in some respects unique, it is also a single example of a broader class of things.** If, for example, the study is based on a small primary school, this is to be treated as an instance of other schools which are small and which are in the primary sector. It is one of a type (Hammersley 1992; Ragin and Becker 1992; Yin 2009).

2. **The extent to which findings from the case study can be generalized to other examples in the class depends on how far the case study example is similar to others of its type.** To pursue the example of the small primary school, the applicability of the findings from the case study to other small primary schools will depend on how far the case study example shares with other schools in the class (small size, primary sector) features which are significant as far as the operation of such schools are concerned. If so, the generalizability of the findings from the particular case study school to small primary schools in general will depend on the extent to which its profile on these factors is typical of those found elsewhere.



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**3. Reports based on the case study include sufficient detail about how the case compares with others in the class for the reader to make an informed judgement about how far the findings have relevance to other instances.** When it comes to making generalizations on the basis of case studies, some of the responsibility falls to the reader. The reader of the findings will use the information to make some assessment of how far the findings have implications across the board for all others of the type, or how far they are restricted to just the case study example. The reader, though, must be provided with the necessary information on which to make an informed judgement on this matter.

# Advantages of the case study approach

- The main benefit of using a case study approach is that the **focus on one or a few instances allows the researcher to deal with the subtleties and intricacies of complex social situations**. In particular, it enables the researcher to grapple with relationships and social processes in a way that is denied to the survey approach. The analysis is holistic rather than based on isolated factors.
- The case study approach **allows the use of a variety of research methods**. More than this, it more or less encourages the use of multiple methods in order to capture the complex reality under scrutiny

In parallel with the use of multiple methods, the case study approach **fosters the use of multiple sources of data**. This, in turn, facilitates the validation of data through triangulation.

- The case study approach is particularly suitable where the researcher has little control over events. Because the **approach is concerned with investigating phenomena as they naturally occur**, there is no pressure on the researcher to impose controls or to change circumstances.
- The case study approach can fit in well with the needs of **small-scale research through concentrating effort on one research site** (or just a few sites).
- **Theory-building and theory-testing research** can both use the case study approach to good effect.

# Disadvantages of the case study approach

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- The point at which the case study approach is most vulnerable to criticism is in relation to the **credibility of generalizations made from its findings**. The case study researcher needs to be particularly careful to allay suspicions and to demonstrate the extent to which the case is similar to, or contrasts with, others of its type
- Unwarranted though it may be, case studies **are often perceived as producing 'soft' data**. The approach gets accused of lacking the degree of rigour expected of social science research. This tends to go along with the view of case study research as focusing on processes rather than measurable end products, as relying on qualitative data and interpretive methods rather than quantitative data and statistical procedures
- **Negotiating access** to case study settings can be a demanding part of the research process. Research can flounder if permission is withheld or withdrawn. In case studies, access to documents, people and settings can generate ethical problems in terms of things like confidentiality.
- It is hard for case study researchers to achieve their aim of investigating situations as they naturally occur without any effect arising from their presence. Because case study research tends to involve protracted involvement over a period of time, there is the possibility that the presence of the research **can lead to the observer effect**.

# Observation. Participant observation

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Observation offers the social researcher a distinct way of collecting data. It does not rely on what people say they do, or what they say they think. It is more direct than that. Instead, it draws on the direct evidence of the eye to witness events at first hand. It is based on the premise that, for certain purposes, it is best to observe what actually happens.

**There are essentially two kinds of observation research used in the social sciences.**

The first of these is **systematic observation**. Systematic observation has its origins in social psychology – in particular, the study of interaction in settings such as school classrooms. It is normally linked with the production of quantitative data and the use of statistical analysis.

The second is **participant observation**. This is mainly associated with sociology and anthropology, and is used by researchers to infiltrate situations, sometimes as an undercover operation, to understand the culture and processes of the groups being investigated. It is normally associated with qualitative data.



# These two methods might seem poles apart in terms of their origins and their use in current social research, but they share some vital characteristics:

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**Direct observation.** In this respect they stand together, in contrast to methods such as questionnaires and interviews, which base their data on what informants tell the researcher, and in contrast to documents where the researcher tends to be one step removed from the action.

**Fieldwork.** The second common factor is their dedication to collecting data in real-life situations – out there in the field. In their distinct ways, they both involve fieldwork. The dedication to fieldwork immediately identifies observation as an empirical method for data collection

**Natural settings.** Fieldwork observation – distinct from laboratory observations – occurs in situations which would have occurred whether or not the research had taken place. The whole point is to observe things as they normally happen, rather than as they happen under artificially created conditions such as laboratory experiments. There is a major concern to avoid disrupting the naturalness of the setting when undertaking the research. In this approach to social research, it becomes very important to minimize the extent to which the presence of the researcher might alter the situation being researched.

**The issue of perception.** Systematic observation and participant observation both recognize that the process of observing is far from straightforward. Both are acutely sensitive to the possibility that researchers' perceptions of situations might be influenced by personal factors and that the data collected could thus be unreliable. They tend to offer very different ways overcoming this, but both see it as a problem that needs to be addressed

# Perception and observation

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In fact, there is a tendency to highlight some information and reject some other, depending on:

- **Familiarity.** We tend to see what we are used to seeing. If there is any ambiguity in what is being observed, we tend to interpret things according to frequent past experiences.
- **Past experiences.** Past experience 'teaches' us to filter out certain 'nasty' stimuli (avoidance learning) or exaggerate desirable things.
- **Current state.** Physical and emotional states can affect what is perceived by researchers. Physiological states such as hunger and thirst can influence the way we interpret what we 'see'. Emotions, anxieties and current priorities can likewise alter our perceptions.

# Creating an observation schedule

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## Literature review

Initially, the possible features of the situation which might be observed using a schedule can be identified on the basis of a literature review. Such a literature review will present certain things as worthy of inclusion, and should allow the researcher to prioritize those aspects of the situation to be observed. It would be nice to have a huge number of items in the schedule, but this is not practical. Researchers are limited by the speed and accuracy with which it is possible to observe and record events they witness. So the items for inclusion need to be restricted to just the most significant and most relevant, because it is simply not feasible to include everything. Previous research and previous theories provide the key to deciding which features of the situation warrant the focus of attention.

## Types of events and behaviour to be recorded

Observers can measure what happens in a variety of ways. The choice will depend on the events themselves and, of course, the purpose to which the results will be put.

### Observations can be based on:

- **Frequency of events.** A count of the frequency with which the categories/items on the observation schedule occur.
- **Events at a given point in time.** At given intervals (for instance, 25 seconds) the observer logs what is happening at that instant. This might involve logging numerous things which happen simultaneously at that point.
- **Duration of events.** When instances occur, they are timed, so that the researcher gets information on the total time for each category, and when the categories occurred during the overall time-block for the period of observation.
- **Sample of people.** Individuals can be observed for predetermined periods of time, after which the observer's attention is switched to another person to give representative data on all those involved in the situation

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## Suitability for observation

When the items for inclusion in the schedule are being selected, there are seven conditions that need to be met. **The things to be observed need to be:**

**Overt.** First and foremost, items should entail overt behaviour which is observable and measurable in a direct manner. Things like attitudes and thoughts need to be inferred by the researcher, and are not observable in a direct manner.

**Obvious.** They should require a minimum of interpretation by the researcher. The researcher should have little need to decipher the action or fathom out whether an action fits one or another category.

**Context independent.** Following from the point above, this means that the context of the situation should not have a significant impact on how the behaviour is to be interpreted.

**Relevant.** They should be the most relevant indications of the thing to be investigated. It is important that the researcher chooses only valid indicators, things that are a good reflection of the things being studied.

**Complete.** They should cover all possibilities. Care needs to be taken to ensure, as far as is possible, that the categories on the observation schedule cover the full range of possibilities and that there are not gaps which will become glaringly evident once the observation schedule is used in the field.

**Precise.** There should be no ambiguity about the categories. They need to be defined precisely and there should be no overlap between them. There should be the most relevant indicators of the thing being investigated.

**Easy to record.** They should occur with sufficient regularity and sequence for the observer to be able to log the occurrences accurately and fruitfully.

## Sampling and observation

When deciding what thing is to be observed, the researcher also needs to make a strategic decision concerning the kind of sampling to be used. Researchers using systematic observation generally organize their research around set time-blocks of observation in the field. For example, these might be one-hour chunks of time. These time-blocks themselves need to be chosen so as to avoid any bias and to incorporate a representative sample of the thing in question.

### Example of an observation schedule

For the purposes of illustration, consider an observation schedule intended for use in art classes in a secondary school. The art classes are the 'situation' for which the observation schedule needs to be designed. Its 'purpose' is to measure the amount of lesson time wasted by students queuing to clean their paint brushes in the sink.

**Location: School A**

**Date: 28 April**

**Time: 11 a.m. to 12 noon**

| <i>Identity of student</i> | <i>Student starts queuing</i> | <i>Student arrives at sink</i> | <i>Queuing time</i> |
|----------------------------|-------------------------------|--------------------------------|---------------------|
| Student Ann                | 11.15                         | 11.15                          | 0                   |
| Student Tom                | 11.15                         | 11.18                          | 3                   |
| Student David              | 11.15                         | 11.20                          | 5                   |
| Student Diane              | 11.16                         | 11.23                          | 7                   |
| Student Tony               | 11.17                         | 11.24                          | 7                   |
| Student Eileen             | 11.19                         | 11.26                          | 7                   |
| Student                    |                               |                                |                     |
| Student                    |                               |                                |                     |

# Participant observation

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By participant observation we mean the method in which the observer participates in the daily life of the people under study, either openly in the role of researcher or covertly in some disguised role, observing things that happen, listening to what is said, and questioning people, over some length of time.

Participant observation revolves around the three possibilities:

**Total participation**, where the researcher's role is kept secret.

**Participation in the normal setting**, where the researcher's role may be known to certain 'gatekeepers', but may be hidden from most of those in the setting.

**Participation as observer**, where the researcher's identity as a researcher is openly recognized – thus having the advantages of gaining informed consent from those involved – and takes the form of 'shadowing' a person or group through normal life, witnessing at first hand and in intimate detail the culture/events of interest



# Advantages of participant observation

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- **Basic equipment.** Participant observation uses the researcher's 'self' as the main instrument of research, and therefore requires little by way of technical/statistical support.
- **Non-interference.** It stands a better chance of retaining the naturalness of the setting than other social research methods
- **Insights.** It provides a good platform for gaining rich insights into social processes and is suited to dealing with complex realities.
- **Ecological validity.** The data produced by participant observation have the potential to be particularly context sensitive and ecologically valid.
- **Holistic.** Participant observation studies offer holistic explanations incorporating the relationships between various factors.
- **Subjects' points of view.** As a method of social research, participant observation is good for getting at actors' meanings as they see them

# Disadvantages of participant observation

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- **Access.** There are limited options open to the researcher about which roles to adopt or settings to participate in.
- **Commitment.** Participant observation can be a very demanding method in terms of personal commitment and personal resources.
- **Danger.** Participant observation can be potentially hazardous for the researcher; physically, legally, socially and psychologically risky.
- **Reliability.** Dependence on the 'self' of the researcher and on the use of field notes as data leads to a lack of verifiable data. Representativeness of the data. There are problems of generalizing from the research.
- **Deception.** When researchers opt to conduct full participation, keeping their true identity and purpose secret from others in the setting, there are ethical problems arising from the absence of consent on the part of those being observed, and of deception by the researcher.

# Qualitative data analysis

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The analysis of qualitative data can take a number of forms, reflecting the particular kind of data being used and the particular purposes for which they are being studied. There is, therefore, no single approach to the analysis of qualitative data that covers all situations. However, there are some general principles that are commonly associated with qualitative data analysis and these can serve as signposts to the kind of things that project researchers should bear in mind when doing qualitative research. **Broadly speaking, the analysis of qualitative data tends to be regarded as:**

- **iterative:** rather than analysis being a one-off event taking place at a single point in time, the analysis tends to be an evolving process in which the data collection and data analysis phases occur alongside each other
- **inductive:** analysis tends to work from the particular to the general. From the detailed study of localized data the analysis attempts to arrive at more abstract and generalized statements about the topic. •
- **researcher-centred:** the values and experiences of the researcher are seen as factors influencing the analysis. The researcher's 'self-identity' is treated as significant in relation to the analysis.

# Types of qualitative data (words and images)

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| <i>Source of data</i>  | <i>Research method</i> | <i>Format of data</i>                       |
|--|------------------------|---|
| Interview talk   | Interviews             | Recorded speech                             |
| Reports, diaries, minutes of meetings<br>Scripts (e.g. for political speeches or media programmes)   | } Documents            | Printed text                                |
| Interactions between people (including naturally occurring actions, responses, language)<br>Events (e.g. ceremonies, rituals, performances)<br>Artefacts, symbols, cultural objects (e.g. paintings, advertisements) | } Observation          | Photographs<br>Pictures<br>Video recordings |
| Answers to open-ended questions  | Questionnaires         | Printed text                                |

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# Preparing qualitative data for analysis

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First, **the original data should be protected**. Back-up copies should be made of all original materials and it is generally advisable to use these back-up copies during the process of data analysis so that the originals can be preserved and protected against any unintentional corruption or damage.

Second, **the data should be catalogued and indexed**. Each piece of 'raw data' should be identified with a unique serial number for reference purposes. The importance of this is that when analysing the data it is vital that the researcher is able to return to points in the data which are of particular interest. Without an adequate reference system, it will be virtually impossible for the researcher to navigate back and forth through the data, or to record which bits of data are significant.

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Thank you for your attention!

