Conducting Observational Research

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Overview of the workshop

• The *what's*, aims and benefits of observation

• Methodological considerations

• Observation as a method
  • Ethical considerations
  • Observation templates
  • Developing field notes

• Analysing and writing about observational data

• Evaluating quality

• Plenty of time for discussion and questions
Where do observations fit into a broader research design?

- Research question(s)

- Paradigmatic approach
  - Ontology
  - Epistemology
  - Theoretical perspective
  - Methodology

- Information about the sample/participants

- Method(s) of data collection

- Method(s) of data analysis
What is going on here?
What is observation?

• **Observation** is a method of data collection in which researchers observe within a specific research field. It is sometimes referred to as an unobtrusive method.

• **Participant observation** involves the observer being a member of the setting in which they are collecting data – there are quite a few variations of this definition.

• Observation is normally associated with an ethnographic methodology (more later) but can be used as part of other research designs.

  • All of the above seek to find out “what is going on here?”
The value of observation

• The research is better able to understand and capture the context within which people interact

• Firsthand experience with a setting allows researchers to open to discovery and inductive, rather than guessing what the context is like

• The research may see things that routinely escape awareness of the participant using a different method

• It provides a chance to learn things that people may be unwilling to discuss in an interview
## Aims of observational research

<table>
<thead>
<tr>
<th>Aims</th>
<th>Description</th>
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<tbody>
<tr>
<td>1. Seeing through the eyes of...</td>
<td>Viewing events, actions, norms, values etc from the perspective of the people being studied</td>
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<tr>
<td>2. Description</td>
<td>Attending to mundane detail to help us understand what is going on and to provide clues to other layers of reality</td>
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<tr>
<td>3. Contextualisation</td>
<td>Whatever the sphere in which the data are being collected, we can only understand events when they are situated in the wider social and historical context</td>
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<tr>
<td>4. Process</td>
<td>Viewing social life as a series of interlocking events</td>
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<tr>
<td>5. Flexible research</td>
<td>A preference for semi or unstructured research design, rather than imposing prior frames of reference onto the study</td>
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<td>6. Avoiding early use of theories and concepts</td>
<td>Rejects premature attempts to impose theories and concepts which may exhibit poor fit with participants’ perspectives</td>
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<table>
<thead>
<tr>
<th>Key features</th>
<th>Objectivism</th>
<th>Constructionism</th>
<th>Subjectivism</th>
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<tbody>
<tr>
<td>Methodological principals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linked to positivist approaches</td>
<td>Linked to interpretivism, constructivism, post-structuralism)</td>
<td>Linked to critical theory</td>
<td></td>
</tr>
<tr>
<td>The purpose of the research</td>
<td>To explain and predict – research should be generalizable; there is an objective truth independent of the researcher</td>
<td>To understand complex human phenomena</td>
<td>To question accepted knowledge and shed light on social injustice so that change can occur</td>
</tr>
<tr>
<td>Role of researcher</td>
<td>Translator</td>
<td>Interpreter</td>
<td>Engaged advocate</td>
</tr>
<tr>
<td>Relationship between researcher and participant</td>
<td>Should be objective: distance and detachment from participant</td>
<td>Not possible to be objective, researcher is a co-constructor and shares relationship with participant</td>
<td>Objectivity harmful – researcher’s position needs to be made clear in terms of how it influences the research and can lead to change</td>
</tr>
<tr>
<td>Research “truths”</td>
<td>Truth can be obtained through rigorous research</td>
<td>Truth is co-constructed, or truth may be considered to not exist</td>
<td>Concept of truth unlikely to exist, meaning shifts over time</td>
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Ethnography v observation

• Ethnography is a methodology developed for the study of cultures and cultural sense-making

• Derived from anthropology

• Is normally linked to inductive research – a focus on local interpretations

• Aimed at understanding an insider’s perspective: habits, norms, practices, rituals, patterns of interaction, rituals

• Can be designed from different epistemological approaches – e.g., critical, interpretivist, postmodernist etc.

• Can include auto-ethnography or performance ethnography

• Ethnography involves observation, but not all observation has to be ethnographic
An example of ethnography

- http://www.youtube.com/watch?v=WtOuZMe_FqU
Methodological principles

• Angrosino (2005) makes two important methodological distinctions:
  
  • Objectivist approach to ethnography/observation
    • Related to positivist research
    • Researchers claim that they are able to maintain objectivity and that they do not influence, interfere with people or activities under observation
    • They adhere to strict rules of rigour that prevent researchers’ biasing the data
    • To not do so would involve “going native” – the data would be rendered suspect
  
  • Postmodernist approach to ethnography/observation
    • Related to approaches such as social constructionism etc
    • Researchers influence and affect the research setting and are very much a part of this
    • An “extra pair of hands”
    • Observational objectivity is neither feasible nor desirable – the researcher is part of the production of knowledge
  
• Regardless, we should acknowledge the Hawthorne Effect created by researchers when conducting observation
An example of a research design using observation

Research questions
1. How do members of operating teams interact and communicate?
2. What contributes to the communication climates in different operating theatres?
3. Do interprofessional values exist in theatre teams. If so, how do they impact on the behaviour and interactions of operating theatre team members?

Research site: operating theatres in general, vascular and orthopaedic surgery; compare one metropolitan and one regional hospital site

Participants: surgeons, registrars, nursing staff (scrub, scout and anaesthetic), team leaders, theatre technicians, patients

Other key personnel: Director of clinical services; director of medical services; theatre manager; patient admissions manager; admissions staff; team leaders of each theatre

Ontology: Social constructionist
Epistemology: Interpretivist
Methodology: Ethnography

Methods of data collection:
1. Observations (approximately 40 hours in theatre across the two sites);
2. Field memo’s
3. Informal conversations with staff in the theatre and/or theatre suite (e.g. Change rooms, staff room, corridors etc)
4. Conduct semi-structured interviews to follow up and clarify findings from observations (include questions about medical jargon, differences in procedure amongst team leaders etc)

Data analysis: coding of observation notes; field notes (which includes details of informal conversations with staff; analytic memos; recording of personal experiences, context); thematic analysis

Research team: Myself (organisational behaviourist); A (sociologist); S (sociologist); E (epidemiologist).
Key points to consider when using observation as a method

• Is it compatible with your research aims, questions and paradigmatic approach?

• How will it add value to your research in addition to or in place of other methods?

• Are there any ethical, access or other issues that might make observations difficult?

• How will you collect observational data? Structured template, unstructured, semi-structured?

• How will you organise your field notes, personal notes etc?

• Will other data methods be used? If so, how will they add value? If you are seeking to triangulate, how will this be compatible with epistemology etc?
Ethical issues in ethnography/observation

• Ethical issues are not dissimilar from other forms of qualitative research...
  • Informed consent of all involved
  • Guarantee of anonymity
  • Giving back to the research site

• ...but there are some additional issues we should be aware of
  • We commit ourselves to long-term relationships
  • Trust is a very important issue
  • We will see and hear things of a sensitive nature
  • We may become a “sounding board” for others

• Van Maanen (1988) describes us as “part spy, part voyeur, part fan, part member”
Practice your own observation – Part 1

1. Unstructured observation

Find a spot nearby where you can conduct a 10 minute uninterrupted observation. As part of this activity, note down what is happening in your location including:

- What is happening within the location
- Ambience, atmosphere, environment
- Physical characteristics of the setting
- How you are feeling and how you think this might influence what you are observing and recording

The aim of the activity is to develop a set of notes that describe the scene as much as possible.
What do we “look for” when doing observation?

• Observations have to be tied to the research question(s), which should act as a guide.

• Observations can be unstructured, semi-structured or structured. Semi-structured and structured involve the development of an observation template.

• Observations should normally have some structure but not to the point that we are “locked in” to a particular theoretical approach.
  • Unstructured observation can be a waste of time if we are time poor but we also need to allow for other things to emerge from the data.

• Piloting data collection is an important way of determining what is important to include or what could possibly be ignored.

• Allow data to emerge through the process – field notes towards the end of data collection might look very different from field notes at the start.
What do we look for in observation?

• What is your role in the setting? Are you a background observer, an extra pair of hands, or a participant?
  • Should you develop a set of notes away from the observation setting?

• Some things to consider - Context:
  • What does the site look like? Smell like? Feel like? How is it set up physically? Take note of this for richness of data

  • Draw the site or take a photo (ethics permitting) – this will jog your memory later and can be used as part of the data

  • Consider the following photo...what do you “see” and how these photos make you feel? Do you have prior knowledge or experience? How does our background influence the way we see this? (important for reflexivity if you are using more interpretive approaches)
What do we look for in observation?

- Are there certain aspects of the site that you find physically distracting? If so, how do these effect your data collection?

- Are there aspects that you find psychological or physiologically distracting? How do these effect your data collection?

- What is happening when nothing seems to be happening?

- How do I collect data without affecting the research setting too much? Or does it matter? Am I learning from being involved in interactions in the setting?

- In observations, our data comes predominantly from field notes
Field notes

- Silverman highlights a number of different questions we should consider when conducting observations and writing field notes

  1. What are people doing? What are they trying to accomplish?
  2. How exactly do they do this?
  3. How do people characterise and understand what is going on?
  4. What assumptions do they make?
  5. Analytic questions: What do I see going on here? What did I learn from these notes? Why did I include them?

- Other things to consider:

  - What else is happening in this site that is relevant to my research question(s)?
  - How do I feel collecting this data? Comfortable, imposter etc – how will this affect the data (reflexivity)?
  - If you are not sure whether you should record it, record it anyway – it’s better to have too much than not enough.
  - What do I do with my data now that it’s collected?
2. Structured observation

Based on the unstructured observation, develop a specific research question about the location. Now repeat the observation for a 10 minute period but only noting data that refers specifically to your research question.

As part of this exercise, consider the issues we have discussed in terms of what to look for and how to write field notes.
Now what do we do?

• Observational data should be analysed as appropriate to your overall analytical strategy.

• Is your work inductive or deductive?

• What happens if more than one observer is on the research team? How should you treat the analysis of data? How does this fit with your broader epistemological approach to the research?
Ensuring quality in observational research

• A common mistake often made in research is judging qualitative work using the criteria of quantitative research
  • Terms such as reliability, validity, objectivity, measurability, representativeness & generalizability are based on quantitative or scientific work
  • “The language of positivistic research is not congruent with or adequate for qualitative work” (Ely et al, 1991: 95; see also Creswell, 2007)

• Another common mistake is the assumption that quality criteria does not need to be used in qualitative research
  • Qualitative researchers must ensure that their work is legitimate and rigorous
  • There are many different approaches to qualitative research therefore a “one size fits all” approach should not be taken when evaluating quality
  • Qualitative studies often use terms such as authenticity, trustworthiness, reflexivity, particularity, subjectivity and many more!

• Your observational work should ‘follow the rules’ of your epistemological approach at all times
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<tr>
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<th>Critical theory</th>
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<tbody>
<tr>
<td>Objectivity of the researcher (minimize bias)</td>
<td>Subjectivity acknowledged (takes into account biases)</td>
<td>Critical perspective – increases awareness about injustices</td>
</tr>
<tr>
<td>Validity of the data</td>
<td>Trustworthiness</td>
<td>Identifies nature and sources of inequalities and injustices</td>
</tr>
<tr>
<td>Systematic rigour of fieldwork procedures</td>
<td>Authenticity</td>
<td>Represents the perspectives of the less powerful</td>
</tr>
<tr>
<td>Triangulation across data sources, methods, analysts</td>
<td>Triangulation across data sources or theoretical perspectives <em>(problematizing)</em></td>
<td>Makes visible the ways in which those with more power exercise and benefit from power</td>
</tr>
<tr>
<td>Reliability of codings and patterns analyses</td>
<td>Reflexivity</td>
<td>Engages those with less power respectfully and collaboratively</td>
</tr>
<tr>
<td>Correspondence of findings to reality</td>
<td>Maintaining integrity of unique cases/findings</td>
<td>Builds the capacity of those involved to take action</td>
</tr>
<tr>
<td>Generalizability (external validity)</td>
<td>Crystallisation rather than generalisation</td>
<td>Identifies potential change-making strategies</td>
</tr>
<tr>
<td>Strength of evidence supporting causal hypotheses</td>
<td>Contributions to theory and dialogue</td>
<td>Clear historical and values context</td>
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Discussion and Questions
References


