Trent Focus for Research and Development in Primary Health Care

How to Use Observations in a Research Project

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Introduction

Imagine that you want to discover what goes on when elderly patients consult with a general practitioner (GP) or a practice nurse. Or to find out how people utilise community pharmacists in their decisions about referral of symptoms to a GP. Or to evaluate the skills of trainers in their educational activities with GP trainees.

One way of researching these kinds of topics would be to interview those involved, or maybe even send out a questionnaire. From such methods, you could find out what the people involved thought about what was going on.

However, sometimes the best way to gain a 'rich picture' of a setting such as a surgery, a clinic or a pharmacy, is direct: by observation. Observational studies allow you - the researcher - to see for yourself what happens, rather than depending on your respondents.

Many studies of health care settings have used observational (or 'ethnographic') methods to explore what goes on, often in intimate interactions between people which happen behind closed doors. This pack shows how we can use observation to enhance our understanding of these kinds of interaction, either as stand-alone descriptions or evaluations, or as part of research studies using a range of methods including statistical analysis.

LEARNING OBJECTIVES

Having successfully completed the work in this pack, including the exercises, you will be able to:

- Describe what is involved in participant and non-participant observation, and the advantages of each approach
- Give examples of the problems and pitfalls in doing observational research, based upon practical exercises
- Produce guidelines for observation, note-taking, and writing up ethnographic data to maximise validity and reliability
- Evaluate the ethical and philosophical issues in observational studies.

Working through this pack

The study time involved in this pack is approximately 10 hours. In addition to the written text, the pack includes exercises for completion. I suggest that as you work through the pack, you establish for yourself a 'reflective log', linking the work in the pack to your own research interests and needs, and documenting your reflections on the ethnographic method. Include your responses to the exercises plus your own thoughts as you read and consider the material.

Section 1: Observation as a research method

Human beings spend much of their working life 'observing' the world in which they live. Perhaps it is evolutionary advantageous to seek to know as much about our environment as we can, or maybe as a species, we are just curious! Either way, observing the world is something with which all of are familiar, even if we have never considered it as a way of doing formal research.

Immediately we should note that 'observation' does not just involve vision: it includes all our senses, although in practice sight and sound will be those which predominate in most research. And crucially, it also involves the *interpretation* of that sense data. No observer simply absorbs the visual or aural data that impinges on her sense organs: psychology has taught us that perception involves information processing, so that the pieces of data can be organised into something recognisable. Thus the light which falls on our retinas when we 'look' at a house causes nervous activity in the visual cortex of the brain. Based on experience, this activity leads to a perception, so that we see something that we recognise as 'house'.

This means that 'observation' is more than just recording of data from the environment. When we observe, we are active, not passive collectors of data like a tape recorder or video camera. Our brains are engaged as well as our eyes and ears, organising data so we can make sense of them. *Perception* is thus part of all human observation.

This aspect of what is involved in observation is crucial to any efforts to use it as a method of research.

EXERCISE 1

Write down what kinds of factors may affect your perception of something you observe.

You probably wrote down some of the following:

- Factors associated with who you are, and your background
- Your experiences of the situation, including whether you are familiar or not with what is happening
- Your culture and how this interprets the situation you observe
- Your attitudes and prejudices (some of which may be unconscious)

It follows from this that observation must be approached with some caution when it is to be adopted as a research method. In research we are not simply observing as part of human life, nor are we engaged in journalistic endeavours (which - however worthy - do not always aspire to the documentation of absolute 'truth'). Research is an activity which attempts to report aspects of the world in ways which minimise error and offer accounts which may be used for some purpose or another, for instance to improve patient care or to shape policy. To use the jargon of research methods, it seeks to be *valid* (accurate) and *reliable* (consistent).

This pack outlines strategies to use observation in research so that the findings that emerge can be used with some confidence. It will introduce you to techniques of observation and help you develop both the skills to use observation and the understanding of the problems of validity and reliability. And it will acknowledge the criticisms of observation as a method, which argue that it must remain subjective and 'unscientific'.

Of course, all empirical research uses 'observation' in the sense that noting the readings on an instrument, or counting the bacteria in a microscope field are 'observations'. But this pack is concerned with a kind of *social* research, which is known as observational or ethnographic. So, before moving on, I want to define the term 'ethnography' which I shall use throughout this pack as a synonym for observation. The word *ethnography* literally means 'writing culture'. It derives from anthropology and sociology, subjects which study other cultures and own cultures respectively. But all social settings are in this sense 'cultural', and as we shall see, ethnography or observation is often used where what we are trying to uncover are the norms, values, and shared meanings of those we are observing.

For example, in a GP surgery, ethnographic observation might consider the use of physical examinations. It would identify under what circumstances such examinations might be used, when within a consultation they occurred, and what strategies are used to ensure that they are conducted appropriately and in accordance with norms of modesty in the wider society. Thus the ethnographic study focuses on the *culture* of the GP surgery, perhaps considering the consequences for the effectiveness of the consultation, and when there may be problems.

EXERCISE 2

Consider the following ethnographic extract, which describes an encounter on a surgical ward. What can you identify in the 'culture' of the encounter which may affect what is happening?

(Mr D, the junior staff and the researcher gather round Mr Y's bed)

Mr D (to patient, looking at chart)	Hallo Mr Y. Well we want to send you home, but I don't like that raised temperature.
Patient Y	No.
Mr D	I don't know what can be causing it. We've cultured the wound and there's no infection there. I just don't know what's causing it ..... Are things ready for you to go home?
Patient Y	Yes, my wife can come and collect me today.
Mr D	Can you go to bed, and she can look after you?
Patient Y	Yes.
Mr D	I don't like that raised temperature. Phone your wife and you can go home now.
Patient Y	Thank you very much.

(extract taken from Fox 1992)

Feedback to exercises is given at the back of this pack.

Section 2: When and why should we use ethnographic methods?

To answer the question of when ethnography is an appropriate method, I would like you to read the following extract from Martin Hammersley and Paul Atkinson's book *Ethnography: Principles in Practice*, which incidentally, is a good introductory text. Responding to traditional methods, which use a natural science perspective, they say,

> "...ethnographers have developed an alternative view of the proper nature of social research, often termed 'naturalism' .... Naturalism proposes that, as far as possible, the social world should be studied in its 'natural' state, undisturbed by the researcher. Hence 'natural', not 'artificial' settings like experiments or formal interviews, should be the primary source of data. Furthermore, the research should be carried out in ways that are sensitive to the nature of the setting. A key element of naturalism is the demand that the researcher adopt an attitude of 'respect' or 'appreciation' toward the social world. .... A first requirement of social research according to this view then, is fidelity to the phenomena under study, not to any particular set of methodological principles ... Moreover, social phenomena are regarded as quite distinct in character from natural phenomena .... the social world cannot be understood in terms of causal relationships or by the subsumption of social events under universal laws. This is because human actions are based upon, or infused by, social meanings: intentions, motives, attitudes, and beliefs. .... The same physical stimulus can mean different things to different people, and, indeed, to the same person at different times.
>
> ....According to naturalism, in order to understand people's behaviour we must use an approach that gives us access to the meanings that guide that behaviour. Fortunately the capacities we have developed as social actors can give us such access. As participant observers we can learn the culture or subculture of the people we are studying. We can come to interpret the world in the same way that they do." (Hammersley and Atkinson 1989: 6-7)

Later they suggest that

> "The value of ethnography is perhaps most obvious in relationship to the *development* of theory. Its capacity to depict the activities and perspectives of actors ... challenge the dangerously misleading preconceptions that social scientists often bring to research ... it is difficult for an ethnographer to maintain such preconceptions in the face of extended first-hand contact with the people and settings concerned. Furthermore, while the initial response to such contact may be their replacement by other misconceptions, over time the ethnographer has the opportunity to check his or her understanding of the phenomena under study. Equally importantly, though, the depiction of perspectives and activities in a setting allows one to begin to develop theory in a way that provides much more evidence of the plausibility of different lines of analysis than is available to the 'armchair theorist', or even the survey researcher or experimentalist.

Also important here is the flexibility of ethnography. Since it does not entail extensive pre-fieldwork design, as social surveys and experiments generally do, the strategy and even the direction of the research can be changed relatively easily, in line with changing assessments of what is required by the process of theory construction." (ibid: 23-4)

Having read these passages, please answer the following self-assessment questions.

EXERCISE 3

According to Hammersley and Atkinson:

- What should a naturalistic researcher attempt to achieve in her approach to research?
- Upon what does the capacity of the ethnographer to interpret the phenomena she is studying depend?
- Why is the theory developed by an ethnographer dependable (reliable)?

EXERCISE 4

Reflect on your recent work, and the setting in which you do that work. Think of something that has happened recently which you might research using this kind of observational or ethnographic method.

What kinds of thing do you think your observational research would help you to explore or understand better?

At the end of this pack, we will return to some of the issues which arise concerning the validity and reliability of ethnographic findings, but now we will turn to the practicalities of observational or ethnographic research. One of the first issues concerns the researcher's own position.

Section 3: Observing in the field: finding a role

Have you ever been at a party or social gathering where you don't know many people? Apart from the few fortunates who are absolutely self-confident, this can be a daunting situation. How do you get started in social interactions with this bunch of people? And how do you avoid seeming like the stranger who knows nobody, and sticks out like a 'sore thumb'?

Doing ethnography - starting the collection of data in a field situation - can sometimes seem like this. The basic problem if deciding on a role for oneself. Of course you can wander round with a clipboard taking notes, but that could seem very intrusive and affect the setting you are trying to observe (it is against the spirit of 'naturalism' mentioned earlier).

One solution, which has been adopted by some researchers, is to become completely part of the field which one wants to research. The classic example is the study by Rosenhan (1973), in which sociologists managed to get themselves admitted as patients to a mental hospital. Once admitted, they openly took notes, yet because the staff were used to odd behaviour, did not think this unusual and indicative that the patients were not 'genuinely' ill. The sociologists gained in-depth knowledge of the hospital, including the experience of being an inmate. Another example of this kind of involvement was a study called *The World of Waiters*, Mars and Nicod (1984) which as the name implies was a study of the restaurant trade, in which the author took jobs as a waiter to do the research! Often, no one will know that the researcher is other than a participant. This is known as *covert* research and raises ethical issues about the consent which people give before they become part of your research.

This kind of study might be called *participant observation*, in which the researcher has two roles - as observer and as participant. At the end of the last section I asked you to think about something which happened in your workplace, and how you might use observational research to study it.. If you were to do so, you could adopt this kind of role, continuing in your work and at the same time acting as an observer.

Most of the time, however, it is not really feasible to become a participant. In my own research on surgery (Fox, 1992), I could not work as a surgeon or a nurse, and did not fancy becoming a surgical patient! So I had to adopt a *non-participant observer* role, in which I took no part in the proceedings which I observed.

(N.B. Some authors do not accept this distinction, arguing that all observers participate to an extent. Hammersley and Atkinson (1989) distinguish a continuum between *complete participants* and *complete observers*.)

EXERCISE 5

Write down the advantages and disadvantages of participant and non-participant observation.

EXERCISE 6

To complete your reflections, write down some examples in health care which could best be studied by participant observers, and others where non-participant methods would be most appropriate. What are the factors that need to be considered in each case?

In summary, there are two principal methods of ethnographic study, the first taking on a dual role as both participant and observer, while in the second the researcher is only an observer. However, as noted earlier, there is a continuum between these positions. In some cases participants will be more overt in their observer role, and occasionally observers will start to participate (an example from my own experience of fieldwork was being asked to help out with menial tasks in the operating theatre when staff were short-handed). The latter may seem particularly appropriate where the setting is demanding and the researcher's help may be appreciated.

Section 4: Becoming an observer

So far we have looked at the methodological differences between particular forms of observation. Now the time has come to find out about the practicalities.

EXERCISE 7

Practical Experience of Non-Participant Observation

To understand some of the problems and pitfalls of undertaking this kind of ethnographic study, I would like you to undertake the following exercise:

Undertake a 15 minute period of observation in a health care setting where you are not known personally. This setting could be a doctor's waiting room or out-patient clinic of a hospital, or a busy pharmacy such as Boots the Chemist, or a health and fitness club. You may need to use some ingenuity to gain access to this setting.

Either during, or immediately after this observation period, *make notes on what you observe.* From your notes, write down some thoughts on what you feel are the interesting issues raised, both about the setting itself, and about the process involved in gaining your data, using the de-briefing headings on the following page (*but don't look at these until you have completed the observation*).

N.B. It would be advisable for you to take some means of identification with you when you go 'into the field'. Occasionally, the behaviour of an ethnographer can seem suspicious to others.

Section 5: Access

In the exercise that you just undertook, access might have been a big issue for you. If you were observing in a chemist's shop, you may have been able to pose as a customer, but if you tried this exercise in a GP waiting room without asking permission, I would have been surprised if someone had not queried your presence.

I intentionally did not raise the issue of gaining permission, leaving it to you to decide how to enter the field. So if you approached someone before doing your observation, you will already have experienced the need to be able to explain why you want to observe a setting. Hammersley and Atkinson have this to say about gaining access:

> 'In many ways, gaining access is a thoroughly practical issue ... it involves drawing on the interpersonal resources and strategies that we all tend to develop in dealing with everyday life. But the process of achieving access is not *merely* a practical matter. Not only does its achievement depend upon theoretical understanding, often disguised as 'native wit', but the discovery of obstacles to access, and perhaps of effective means to overcoming them, themselves provide insights into the social organisation of the setting'
>
> (Hammersley and Atkinson 1989: 54)

EXERCISE 8

What issues are raised by this?

There a number of points that I think are important here. Firstly, gaining access is not necessarily a single event: something once gained which is never again an issue. For example, you may have written a letter asking to come to observe a mother-and-baby clinic, and been given permission by the senior partner in a general practice. But when you arrive, you have to explain who you are and what you want to do. People may be surprised you do not have a questionnaire!. And your presence may have to be explained to every patient at the clinic. So access is continuously negotiated throughout a period of fieldwork, and may be an issue till the moment you finish your observation

Second, who do you approach to gain access? In the example of the clinic, it is highly unlikely that asking the GP surgery receptionist would be sufficient: imagine turning up at a clinic and telling the practice nurse or GP that its all right for you to observe: their receptionist said so! Gaining adequate access requires you to know who has control of the setting and the power to grant access. This means that sometimes one finds oneself unintentionally complicit in the power relations of a setting, you are an imposition from above. For instance, if you are observing a hospital laundry, although you have management approval, the workers may not like the fact you have come to watch their work: you will be seen as a management spy. In such circumstances, the validity of your data may be compromised, as the workers will not behave 'naturally'.

(The classic example of this was a series of studies at the Hawthorne factory in the United States. Observers watched the production line workers in a bid to find ways to improve efficiency. After the study was analysed it was realised that the workers speeded up whenever they were observed,

regardless of any other efforts to improve efficiency. This effect: the unintentional impact of observers on a setting, is now known as the 'Hawthorne Effect').

Thirdly, in some situations, access for observation cannot be obtained by asking permission. This may happen if those involved in a setting see their activities as sensitive in some ways, or because they feel insecure or threatened. Situations which entail intimate activities such as physical examinations or disclosure of personal information may be hard to observe. Settings which are normally closed to outsiders will also be hard to 'infiltrate'. For instance, the informal conversations among senior managers or among portering staff in a hospital will rarely be accessible, as these groups may not wish their private discussions to be overheard by an outsider. Legitimate issues of confidentiality may sometimes be used as a smokescreen by people (usually the powerful) who do not wish to be observed for one reason or another.

In such situations, we must once again consider covert observation, which may entail participant observation. Needless to say, it is probably a lot easier to become a porter than a senior manager. The ethics of such activity will be discussed later.

Section 6: Methods of observation

We will look at the question of what you actually observe when you are an observer in the next section, but before that, it is worth thinking a little about the practicalities of observing.

Having gained access to a setting, the first thing to decide is when to do your observation, and it may not be immediately obvious without an initial foray into the field. For example, the daily activity of a GP surgery begins early in the morning. If you do not arrive until 11 am, much that may be relevant to a study will have been missed.

Secondly, you need to decide how often, and for how long you will observe. These again are things which cannot be legislated: you need to get into the field to find out what will be needed in order to gain an adequate picture. The time scale must not be too short (I am sure you felt 15 minutes hardly gave any insight into the setting you observed), or too long: as with all research, observation is costly in your time and perhaps also for those you observe. At some point you must decide you have sufficient data, and complete the observational phase of the research. I will return to this issue under 'Understanding' below.

Third, you need to find the right place to stand, and I mean this both physically and metaphorically. Physically, you need to be able to record what you observe, and this may mean negotiating a place to be, often in an unobtrusive position. For example, when observing ward rounds, I used to trail along at the back, and try to be un-noticeable as possible. Metaphorically, you need to find a role for yourself which can be held consistently, and which you can negotiate with those you observe so that they feel comfortable. This may mean explaining that you are not a management plant, and that you respect the confidentiality of some of what goes on. Often, saying that you are 'doing research' gives sufficient positioning for most people, and if you look the part, you will be thought of as a student! Such positioning is called 'filtering the presentation': giving everyone a version of yourself which will may them feel happy about your presence. (Note that this is also relevant in covert observation).

At this point I want to raise an issue which you may have been wondering about. So far in this section, we have concentrated on *how* to observe - in other words with the practicalities. But the issue of *how* you observe raises the important question of *what* to observe. After all, who is to say that the GP surgery or pharmacy you chose can tell us anything about GP surgeries or pharmacies more generally? And perhaps the day you observed was quite atypical. So what generalisability is there to observation?

This is actually a huge issue, and perhaps you might like to re-read the earlier extract from Hammersley and Atkinson, to start to get some answers. But I will return to this issue under the question of 'transferability' of research findings, in the section on validity and reliability later.

Section 7: Note-taking

What should be recorded from an observation session, and what should be left out? Your practical experience during the exercise will probably have raised this question immediately. In any setting one is faced with a myriad of things happening, and it is not possible, nor desirable, to note them all. So - as in real life - observational research has to be selective, and what you observe will largely depend upon the question you want to answer.

When you undertook the exercise in observation, you probably did not have an explicit research question, and often when one starts fieldwork it may be a general interest to document 'what goes on' that inspires researchers to adopt this methodology. But immediately you are faced with the complexities of a setting, you will form implicit interest areas.

Note-taking is of course essential. In most observational research notes will be hand-written, taken either at the time, or immediately afterwards. Sometimes it will be possible to use audio or video taping - for instance, to record a consultation between a GP and patient for research or training purposes. However, such recordings will rarely stand alone as data, usually they will be transcribed or summarised in some way, and often it will be necessary for the researcher to add additional information to situate what has been recorded. For example, the audio record of what goes on at a GP reception area will provide accurate data on conversations, but may need the researcher's additional notes to pick up non-verbal detail, or the movements of people involved.

Taking notes may seem quite daunting because of the richness of a setting. To help to focus an ethnographer's attention, Spradley (quoted in Hammersley and Atkinson) suggests the following checklist of the kinds of things which could be recorded:

- Space: the physical place or places.
- Actor: the people involved
- Activity: a set of related acts people do
- Object: the physical things which are present
- Act: single actions that people do.
- Event: a set of related activities that people carry out.
- Time: the sequencing that takes place over time.
- Goal: the things people are trying to accomplish.
- Feelings: the emotions felt and expressed.

(Spradley 1980: 78ff)

To this list I would add another point:

- Reflection: your personal response to any of the above.

EXERCISE 9

Look back at your notes: how many of the above were part of your observation. You can probably remember some other things which fit these points that were not recorded in your notes: go back and try to flesh out your notes in these areas.

Finally, it is worth pointing out that your fieldnotes will not necessarily comprise just a record of what happened while you were observing. They may also include:

- *Interview data.* These may be formal, or may comprise just snippets of interchanges, in which you ask someone to explain something or some event. For example, you may have watched a consultation between a GP and a patient. When the patient leaves, you may wish to ask the GP to clarify why s/he did something or asked a particular question.

I will talk more about the role of the 'key informant' below.

- *Documents.* Often in a field setting we come across relevant materials in the form of documents. These could be as wide-ranging as a poster on a GP surgery noticeboard or an official report or a letter. Often ethnographers will be shown such documents - it may take some negotiation to be able to take a copy of the original.
- *Post-hoc reflections.* Sometimes it is only when we have had some time to reflect on an observation session that we gain some insight, often when we are re-reading the notes or perhaps even in the middle of the night! Add these insights to the notes: they form a part of the continuing 'log' of your fieldwork.

Remember to date all entries in fieldnotes, including these post-hoc insights.

Section 8: Understanding and interpretation

I began this pack with the comment that observation is not simply an act of the senses, it requires the brain to be engaged, to make sense of what we see or hear. Immediately we have observed something, our brains may start to work to interpret it. Let's take as an example the extract we looked at earlier:

(Mr D, the junior staff and the researcher gather round Mr Y's bed)

Mr D (to patient, looking at chart)	Hallo Mr Y. Well we want to send you home, but I don't like that raised temperature.
Patient Y	No
Mr D	I don't know what can be causing it. We've cultured the wound and there's no infection there. I just don't know what's causing it ..... Are things ready for you to go home?
Patient Y	Yes, my wife can come and collect me today.
Mr D	Can you go to bed, and she can look after you?
Patient Y	Yes.
Mr D	I don't like that raised temperature. Phone your wife and you can go home now.
Patient Y	Thank you very much.

(extract taken from Fox 1992)

What we have here is a brief piece of interaction. Having recorded this, we have to make some sense of it, if it is to be of any use as research data. Often the sense we make of something will depend upon our research commitments. Now for the sake of argument, let us imagine that what we are interested in is the information-seeking behaviour of surgeons.

We might pursue this objective by analysing how the surgeon here followed a check-list of questions to clarify what his decision (discharge or continuing hospital stay) should be. We would look at other examples, and see if this 'made sense'. If the surgeon followed a similar line of questioning, this proposition would be supported. If not, then we seek a new explanation.

If, on the other hand, the question concerned the different behaviours of surgeons towards male and female patients, we would interpret this data differently, perhaps picking up on the emphasis on the patient's marital status as a key.

How can we resolve this problem of multiple interpretation? Well, in some senses, there is no resolution, and we have to acknowledge that our understanding may be affected by all sorts of factors, not least, what we are looking for.

One way to seek to gain an understanding which is more valid and reliable is to try to find out what the surgeon and patient thought was happening, and it might be that to ask each in turn could elucidate more about the interaction. These kinds of 'triangulation' can help us by more certain that we are not interpreting things incorrectly.

The Key Informant

One very important person which features in many ethnographic study is the 'key informant' (of course there may be a number of these.) Finding a key informant can be a turning point in an observational study, because suddenly much of a setting can be explored through the eyes of a participant. One has to be cautious about the selection of key informant, however, as their views are likely to be significant in shaping the explanatory framework and even the conclusions of your study. There is no such thing as a perfect key informant, but in general they may have one or more of the following characteristics:

- Someone who while part of the culture to be observed, is able to stand back - either by having come in from another culture, being new to the culture (the 'rookie'), having recently changes status, or someone whose nature is reflective or observant
- Someone who likes and is willing to talk, either someone who is naive and does not realise the import of her/his talk, or is frustrated or rebellious, or who is on the way out in terms of power once held but now forfeited, or who is a victim of power games in the setting.
- Someone who needs to talk to someone for their own emotional sustenance.
- Those with specialist knowledge (Hammersley and Atkinson 1989: 116-7)

Of these, those from category 1 may be the less involved, while those in categories 2 and 3 have strong investments which may colour their explanations, and whose words must therefore be carefully weighed. Those in category 4 will be valuable key informants, but may not disclose as much as the others.

In choosing a key informant, then, we need to weigh up what they are getting from the deal. No key informant's explanations can be given absolute privilege, and sometimes their accounts may need to be tested against others or against your observations to appraise their validity and reliability. The whole question of understanding raises profound issues concerning the validity and objectivity of ethnography. We will return to this in the final part of this pack.

Ethics of Field Work

I raised the issue of ethics earlier when discussing covert or participant research, but in all observational research there are a number of ethical issues which need to be addressed.

- *Confidentiality*. One should take all possible measures to ensure that there are no consequences for those we observe as a result of subsequent identification in a report or published work. This means using pseudonyms, and if necessary ensuring that locations of

research cannot be identified. Fieldnotes could contain much that could be seriously embarrassing to our subjects: they should be treated as confidential documents, and care taken to ensure they are not read by others.

- *Informed consent*. People have a right to know that they are the subjects of research. If we take this a principle, it raises issues about the use of any sort of covert observation, and of any intentional mis-information about the purpose of a piece of observation. It has been argued that this principle can be traded against the value of the findings of the research, either for those involved or for others.
- *Privacy*. People have a right not to have their lives invaded. Once again this indicates problems with covert research, and the same trade-off arguments apply. However, we must be particularly careful to ensure that people do not feel an intrusion, however unintended (for example, by reading a research report and recognising themselves, however well-anonymised). It is well worth thinking about how to conduct observational research in an unobtrusive manner, to respect privacy of those who are observed.
- *Validity of research.* It is the view of some researchers that bad research is unethical. If your design is sloppy, and your findings of little value, then you have wasted everybody's time. The quality of a piece of research is an ethical issue in this sense, and we should attempt to conduct research in ways which maximise its validity.

Submissions to Ethical Committees

Ethical issues are notoriously slippery, and ultimately they will be argued and debated. However it is important that the observational researcher acknowledges ethical issues, and that observers reflect upon what their research may mean for those involved. When it comes to health care research, ethical issues are particularly important where studies involve people who are already vulnerable as a consequence of illness. In such situations, many studies must go before an ethics committee, which is constituted from health care professionals, theologians and ethicists. They will take into account all the issues raised above.

EXERCISE 10

Although your earlier fieldwork study probably did not involve patients, imagine you are submitting a proposal to an ethics committee. Write down what you think were the ethical issues raised by the fieldwork exercise you undertook. Do you think you would have designed your observation differently in the light of this reflection? Address any questions which you think an ethics committee might have concerning this research.

Section 9: Putting it into practice: the inside view

I hope that you have found these discussions of issues in fieldwork observation useful. To see what you have learnt, I want you to spend another period in practical observation, but with a slight difference.

EXERCISE 11

Observing a Familiar Setting

I want you to choose a setting that you know well for this observation exercise, and I recommend that you choose your own work environment. You can do this observation exercise either in your normal work time (which will give first hand experience of the problems of playing a role and being an observer), or at a time when it is clear you are practising this observation and not working.

I want you to do two specific things:

- Find a key informant. Use the criteria suggested earlier in choosing someone. You will have to explain to this person what you are doing, just as you would in a real-life situation.
- Ask your key informant to explain the use of spaces in the setting you have chosen. This is often the first thing that an ethnographer does when entering a setting, and may entail quite detailed mapping of the places involved. In particular, I want you to focus on 'front' and 'back' spaces. Front spaces are publicly accessible spaces such as the general shop area in a pharmacy. Back spaces are only accessible by selected personnel: the staff in a pharmacy who are able to go behind the counter and into the dispensary etc. The interactions which go on in back spaces are often very interesting, and an observer needs to find out about these as part of her study of a setting.

Although you will probably know a lot about these spaces yourself, I want you to go through this with the informant, as it will give a focus for a fairly structured discussion. Ensure you cover all the spaces, including those like coffee rooms or corridors, finding out what kinds of interactions go on in these spaces. Once you have gleaned this information, observe, either alone or with your informant, what really goes on in these spaces, looking for confirmations of what you had been told.

I suggest you allocate a maximum of one hour for this exercise, to include the time with the informant, and the observation. You may want to spend some additional time organising your notes from the observation and drawing maps of the front and backspaces.

In this pack, we cannot go much further in terms of developing your fieldwork observation skills. I would certainly encourage you to read fieldwork guides and accounts of ethnographic studies, and some of these are given in the bibliography. However, practice is essential to develop these skills, and until you have to use observation in earnest, your skills may not really become more refined. If you wanted to practice, perhaps using the setting you have just explored, this would be valuable, and might even form a basis of a research study in due course!

However, I want now to turn to some further issues concerning the methodology of observation, to complete this study pack.

Section 10: Validity and reliability in observational studies

The reliability and validity of a piece of research indicate its *trustworthiness*, in other words, the extent to which study findings reflect the world that we are seeking to explore in our observation. Reliability is concerned with the measuring tools we use in research, and whether they are *consistent.* Validity is an indicator of the *accuracy* of research - whether a study gives a true picture of what it is exploring. Reliability is a pre-requisite of validity, but does not guarantee it.

Validity and reliability are important issues for ethnographers -- just as they are for all other researchers. However, because ethnography falls within a naturalistic and qualitative paradigm of research, we must think carefully about what validity and reliability mean for the way that we conduct observational studies. While the relevance of the *trustworthiness* of a piece of research still stands, Lincoln and Guba (1985) suggest that we can ask four key questions when designing or appraising qualitative research such as ethnography, and suggest terms to describe these issues:

How truthful is the finding?	(Credibility)
Can the findings be generalised?	(Transferability)
Could the findings be replicated?	(Dependability)
Can we rule out researcher bias?	(Confirmability)

These four questions relate to traditional (positivist) notions of study validity and reliability, as can be seen in the table below.

Naturalistic	**Positivist**
Credibility *(Are the findings believable?)*	Internal Validity
Transferability *(Are the findings applicable elsewhere?)*	External Validity
Dependability *(If the study were repeated, would the same findings emerge?)*	Instrument Reliability
Confirmability (Has the researcher biased the findings)	Intra-observer Reliability

Table 1: Positivist and Naturalistic analyses of Validity and Reliability

When carrying out observational research, we need to address the four issues of credibility, transferability, dependability and confirmability. However, Lincoln and Guba (1985) argue that we need to think about some of these issues quite differently from the perspective of positivist research. Let us look at each area in turn.

1. Credibility

Related to the **internal validity** of a study, credibility requires that we concern ourselves with the **accuracy of description** in a piece of qualitative research. We need to state the precise parameters of the study - who was studied, where and when, and by what methods. If we identify these aspects, and if we have a reliable means of measurement (dependability and confirmability), our study will be valid for the specific setting investigated. We can add to the credibility of observations by using informants, who will ensure we are not misunderstanding what we observe. Use audio or video recording where possible to avoid inaccurate notes, and practice note-taking in field situations. Check out final reports with our informants too, to make sure inaccuracy has not occurred in analysis.

It is sometimes possible to use observation in conjunction with other methods, such as a survey. This can add to the credibility of findings, by 'triangulating': if findings from two sources agree this supports the conclusions from each.

(Sometimes it is useful to use observation in the initial phase of research, because of the richness of the data produced, it helps to focus the research on relevant issues, perhaps informing the construction of a questionnaire or interview schedule. Other programmes may begin with a survey to identify background factors, and follow this with in-depth observation to flesh out the quantitative findings.)

2. Transferability

When de-briefing from the first observation exercise, I raised the question of whether it is possible to generalise from ethnographic data. After all, in most qualitative research, the method of sampling is not strictly *representative*, but will be aimed at maximising the diversity within the study setting, to ensure as 'rich' a picture of the setting as can be gleaned. Clearly, this method of sampling will not supply **external validity** in the way that is usually sought in quantitative research, which wishes to generalise beyond the study population.

Yet ethnographies often make claims that their findings are of value as more than just descriptions of a few isolated instances observed in a study. Part of the answer was raised in the Hammersley and Atkinson extract: ethnography is a naturalistic method, which seeks to describe the world 'as it is' (the issue of credibility or internal validity discussed above). That, naturalistic researchers argue, is sufficient. In a major divergence from positivist approaches, Lincoln and Guba warn us that we must be very cautious when claiming transferability. In fact, they argue that no claims should be made about the applicability of the findings to other settings. If other researchers wish to generalise from a study to other situations, the onus must be on them rather than the original researcher to demonstrate a study's applicability elsewhere.

3. Dependability

The dependability of a study relates to the consistency of the measuring instrument, which in this case is the observer herself, and her capacity to make sense of the world. This 'instrument' should be able to draw the same conclusions from similar observations (internal reliability), while in theory, more than one observer should be in agreement when observing the same thing (inter-observer reliability). Note that dependability is essential (but not sufficient) to ensure credibility.

However, while positivist research (particularly in the natural sciences) assumes an unchanging world, so that if an identical study were to be performed it would be expected that the same findings would emerge, the naturalistic paradigm acknowledges that the social world is continually changing. Observational studies may themselves affect the world they are, as in the Hawthorne studies mentioned earlier. The presence of an observer, especially one who asks a lot of questions too, may lead subjects to reflect more fully on what -- up to now -- they took for granted.

If change is inevitable, dependability is a problem, because we cannot ensure that if we observe 'the same thing' on different occasions that it actually means 'the same thing' for the people involved. Lincoln and Guba suggest that in such a changing world, all an observer can do is to try to *predict* as much as possible of what these changes may be, and account for them by *casting widely for data* within the setting. Multiple examples are valuable because they give some evidence of continuity or consistency.

4. Confirmability

Confirmability could also be called objectivity or intra-observer reliability. It means that the instrument (the researcher) will not have an in-built bias such that some kinds of observation are treated differently from others.

However, in a naturalistic paradigm, we have to accept that observer bias is a fact of life: we all have values and we cannot wholly avoid allowing these to colour the way we interpret data in a qualitative analysis. To minimise this bias, ethnographers need to recognise their biases, and seek to fault their own assumptions or 'pet theories' about what they are researching. Informants are useful to remind an observer of her potential biases (although inevitable informants have biases too). Bringing in colleagues to offer alternative readings, and feeding back results of an analysis to the original respondents can help to reduce these biases. Again, you should be able to see how the confirmability of a study is a pre-requisite for its credibility.

To ensure that you grasp these difficult discussions of validity and reliability, try to complete the following exercise.

EXERCISE 12

Maximising validity and reliability

You want to conduct some observational research on the ways receptionists in a GP surgery deal with telephone requests for repeat prescriptions. What features of your research design do you build in to maximise credibility, transferability, dependability and confirmability?

Section 11: Some criticism of observational research

In this pack, I have tried to provide an introduction to the practicalities of doing observational research, and addressed some of the theoretical issues which arise. All research methodologies have limitations, and each - be it a randomised controlled trial or an ethnography - is based on certain assumptions about the world which it seeks to explain or explore. There is certainly not time to go into the ramifications of the philosophy of science which have occupied natural and social scientists for centuries, but it is worth recognising that such debates exist and continue. I recommend readers to explore some of these debates if and when they have time, perhaps referring to a book such as Steve Woolgar's *Science: the Very Idea* which offers an introduction in a concise format.

For now, I want to merely point to two criticisms that have been levelled at ethnographic methods. Readers may pursue the relevant texts if they wish, to draw their own conclusions.

The first criticism is that ethnography, while useful for describing settings or situations, is compromised when it comes to trying to generate theoretical understanding which can help to explain more than just the specific instances observed. One recent proponent of this critique is Martin Hammersley, whose collection of essays entitled *What's Wrong with Ethnography* sets out this position coherently. He argues that:

> '.... commitment to the goal of theoretical description on the part of ethnographers had led them to adopt what I call ... the reproduction model. From this point of view, ethnographic descriptions must simply portray the phenomenon of interest 'in its own terms'. However, this presumes that there is a single objective description of each phenomenon, and this is not the case: there are multiple, non-contradictory, true descriptions of any phenomenon. How we describe an object depends not just on decisions about what we believe to be true, but also on judgements about relevance. The latter rely, in turn, on the purposes which the description is to serve. Much the same is true of explanations: what we take to explain a phenomenon depends not just on our ideas about what causes what, but also on the purposes for which the explanation is being developed. Ethnographers' commitment to the reproduction model obscures, from readers and perhaps even from ethnographers themselves, the relevances that structure their accounts. As a result, the rationales for those accounts may be incoherent; and wittingly or unwittingly, ethnography may become a vehicle for ideology'.
>
> (Hammersley 1992: 28)

Hammersley's own commitment is to 'save' ethnography as a valid research tool, and he offers a resolution of his criticism later in his book, based on a 'critical realism' which attempts to recognise the possibility of interpretations which are valid. The work of Lincoln and Guba discussed earlier can also be seen as an effort to codify techniques of observation which will lead to consistent and accurate findings, while warning about generalization. But for others, the value-laden character of interpretations based on observational studies mean that it cannot be considered as a scientific technique and must either be abandoned in favour of more rigorous methods such as the survey or experiment, or limited to 'simple description'.

If this first criticism of ethnography is based on the multiplicity of possible explanations of observations, so too is the second. But this latter's concern is with the way in which observational studies (primarily in anthropology) have contributed to the construction - often aberrant or invidious - of identities for those who have been observed, while claiming objectivity for those doing the observing. This criticism has focused on the constructions of 'reality' in ethnographic accounts of field settings, and often has a political agenda in challenging the (superior) researcher's interpretation of the (inferior) subjects' lives. Crapanzano writes that:

> 'Like translation, ethnography is also a somewhat provisional way of coming to terms with the foreignness of languages -- of cultures and societies. The ethnographer does not, however, translate texts the way the translator does. He (sic) must first produce them. .... No text survives him other than his own. ...

The ethnographer is a little like Hermes: a messenger who, given methodologies for uncovering the masked, the latent, the unconscious, may even obtain his message through stealth. He presents languages, cultures and societies in all their opacity, their foreignness, their meaninglessness; then like a magician, the hermeneut, Hermes himself, clarifies the opaque, renders the foreign familiar, and gives meaning to the meaningless. He decodes the message. He interprets. ...

> The ethnographer does not recognize the provisional nature of his presentations. They are definitive. ... Embedded in interpretation, his presentations limit re-interpretation. Ethnography closes in on itself.'
>
> (Crapanzano 1986: 51-2)

Like others in this school of textual criticism of ethnography, Crapanzano questions this closing-down that occurs in ethnographic texts such that the people represented become little more than ciphers in a code which the ethnographer has broken. They challenge the capacity of an ethnography to get at a single 'truth', and as with the first school of critics, point to the multiplicity of possible explanations of one's observations.

The consequences of this challenge are profound, and Stephen Tyler, writing in the same collection as Crapanzano, Clifford and Marcus's book *Writing Culture*, suggests that observational studies must abandon explanation in favour of 'evocation': a mode of reflection which does not seek a truth but rather tries to enable the observed's point of view to come across in reports of observations (Tyler 1986: 123ff). This 'postmodern ethnography' de-privileges the author of an ethnographic report, and encourages a reflexivity in readers which can help them to sense something of the field setting and the people who are involved. It seeks to redress the imbalance between researcher and researched, giving the latter more of a voice than traditionally is the case in ethnography (as in almost all research).

I hope this brief exploration of some critiques of ethnography as a method has helped to point out that observational research must be conducted with one's eyes open. Not simply to what one observes, but also metaphorically, to the assumptions about how we try to know the world and give it meaning in the research process. I believe that these criticisms indicate a need for *reflexivity* on the part of anyone who wants to use observation in research. By which is meant, a capacity to think about one's own part in creating the setting one is observing (both as a person there, and in the work of interpretation, which follows observation). In that spirit of reflexivity, I would invite you to complete this pack in a final reflective exercise.

EXERCISE 13

1. What have you learnt concerning the uses of observation in research?

2. What do you think are the limitations of observational methods?

3. How might you respond to some of the criticisms of ethnography, both in how you behave 'in the field' and how you try to write up your interpretations?

4. Why do those who use observational methods in research need to be 'reflexive'?

Conclusion

Observation is a well-established methodology for exploring the social world, and should be considered in situations where detailed descriptions of a setting and the meanings and values of its inhabitants need to be explored. Observation needs to be approached in a rigorous and structured way, both in terms of the techniques used to gather data, and the methodological considerations of validity, reliability and the ethics of research. Some criticisms of ethnography challenge the possibility to provide accurate explanations of settings, and researchers need to be reflexive about their own activities as researchers and writers of observational studies.

Answers to exercises

Some of the exercises in this pack are to a large extent based on self-selected examples. It is not feasible to provide specific answers for these however you should draw on the guidelines provided in the text when approaching them. Answers to exercises 2, 3, 5, 7, 11 & 12 are provided below:

Exercise 2

How did you get on? The kinds of things you might have written down would be:

- The ceremonial form of the 'ward round' with consultant and junior staff
- The physical arrangements of the surgical ward, including the relative position of the patient (lying down) and surgeon (standing)
- The recourse to technical knowledge of pathology
- The use of the chart as a datum accessible and comprehensible only to the staff
- The dependency of the post-operative patient
- The marital arrangements of the patient and the cultural assumptions implicit in the questions asked about these.

You may have others too - there is potentially great richness in such a short extract.

So, when we use the term ethnography to describe the method of observation, we are reminded that what goes on is not always simply a 'rational' activity but has a richness associated with the meanings which such activities have for participants. And it is because observation can get at such meanings - some would argue in a way that none other can (Geertz, 1983) that it is a useful method for use when researching health and health care.

Exercise 3

The ethnographer attempts to study phenomena in their natural setting and to acknowledge or 'respect' the characteristics of that setting. She sets out to understand the meanings of phenomena occurring in the settings for the people who are involved, and as far as possible to avoid preconceptions.

Hammersley and Atkinson argue that because we are ourselves part of the social world (we are 'social actors') then we understand much about the rules of social life and can apply this to what we observe during ethnographic research.

They argue that the theory that is developed in an ethnographic study is based on first-hand experience in the field rather than from the comfort of an armchair. Secondly, it is not affected by an artificial research design (as happens in surveys and experiments). Finally, because ethnography involves extended contact, there is much more evidence upon which to base theory, and the researcher's biases are likely to be attenuated over time, making this data reliable (dependable).

In summary, we can see from this that observation is valuable where we can access natural settings, where we are interested in the meanings which people give to phenomena in those

settings, and where we may want to develop theoretical understanding of what is going on. For instance, a researcher may want to know what happens when people from non-British backgrounds consult with a GP. This research is best carried out in the actual setting of the GP consultation, it depends on understanding the perspectives, attitudes and values of the participants, and we want to move from the raw findings to a theory of what is happening - perhaps focusing on language difficulties or cultural differences.

Exercise 5

The advantages of participant observation mainly derive from the fact that the researcher's presence is unlikely to affect the setting, because her/his presence as researcher is masked by the role of participant. But this is a disadvantage too, because the roles are confused, and it is quite possible that the participant role will bias the way the observer perceives what is going on. Another disadvantage is that the observer may miss vital things because she is too busy participating. Finally, covert research may not be considered ethical and there are issues about deceiving subjects and their rights to privacy.

Non-participant observation has the advantage of being unbiased, but the disadvantage of potentially affecting the interactions. It has the advantage of enabling detailed observations to be made without distraction, but there may be a problem of gaining access - with some aspects of a setting being 'off-limits' to an outsider, or subjects refusing to be observed. There is also the problem mentioned at the start of this section, of finding a way of being unobtrusive even though the researcher does not seem to have a role within the setting. Finally, non-participant observation has the advantage that it can be applied in many more settings, as the researcher does not need to become 'part of the action'.

Exercise 7

How did you get on? If you found this a challenging experience, then you are in good company: almost every ethnographer finds the first entry into 'the field' daunting, and difficult, especially if it is unfamiliar territory. You may have felt uncomfortable, visible and vulnerable. Coping with these feelings is an important issue, because they can be so dominant that it becomes impossible to observe anything at all!

Write down your reflections under the following headings.

Main Themes. What are the themes that your notes indicate are of importance for understanding this setting. These may take the form of very tentative ideas or questions that further observation or interviews might elucidate.

Access. How did you choose the setting? How did you negotiate access? How did you explain your presence to anyone who asked? How did you sustain your presence as an outsider in this setting? What could you do differently to enhance access? Do you think your presence may have affected what went on?

Method of Observation. What procedures did you use to organise your observations? Was the time frame (15 minutes) appropriate, and if not, how might you decide how long is needed? Were

you able to find a suitable place from which to conduct your observations? What might you do differently next time?

Note-taking. How did you take notes? Were you able to take notes during the observation? What did you take notes about, and how did you choose what to report? How accurate do you think your notes are? And how could you improve their accuracy?

Understanding. How did you make sense of what you observed? Were there any incidents which you could not understand? How would you go about getting the views of a participant on areas which you do not understand?

Ethics. What do you think were the ethical issues involved in your undertaking this observation as a non-participant? How do you balance these against the opportunities which observation gives to obtain accurate data about a setting?

Any other issues not addressed in these headings.

Well, I hope that you found this experience interesting, and that your reflections help you to see more clearly come of the issues involved in observation. We will now look at the points concerning the process of observation raised in the de-briefing.

Exercise 11

I hope you found this an interesting experience, particularly because it required formal observation of a setting you know very well. Did you glean any new insights about this environment? What were the consequences of choosing a setting in which you are perhaps a regular participant? Use the headings that we used earlier to de-brief from this exercise:

- *Main Themes.* What are the themes, which your notes indicate, are of importance for understanding this setting. These may take the form of very tentative ideas or questions that further observation or interviews might elucidate.
- *Access.* How did you choose the setting? How did you negotiate access? How did you explain your presence to anyone who asked? How did you sustain your presence as an outsider in this setting? What could you do differently to enhance access? Do you think your presence may have affected what went on?
- *Method of Observation.* What procedures did you use to organise your observations? Was the time frame (one hour) appropriate, and if not, how might you decide how long is needed? Were you able to find a suitable place from which to conduct your observations? What might you do differently next time?
- *Note-taking.* How did you take notes? Were you able to take notes during the observation? What did you take notes about, and how did you choose what to report? How accurate do you think your notes are? And how could you improve their accuracy?
- *Understanding.* How did you make sense of what you observed? Were there any incidents that you could not understand? How would you go about getting the views of a participant on areas that you do not understand?

- *Ethics.* What do you think were the ethical issues involved in your undertaking this observation as a non-participant? How do you balance these against the opportunities which observation gives to obtain accurate data about a setting?

Exercise 12

Credibility

What you need to do is try to ensure that your description is accurate. Negotiate good access, and make sure you can observe what is going on (this may entail a means of listening-in to telephone conversations. Practice note-taking, and use audio tape for interviews, and perhaps to record the conversations. Make sure you document precisely all features of the setting (perhaps starting with the spaces, as in the practical exercise), who was observed, and when. Talk to those people involved (the receptionists) to find out what they think they are doing, and when you draw conclusions, feed these back to the participants to see if they agree with your findings.

Transferability

You do not make claims about the generalisability of the study, but by documenting the parameters (who, when, where), other researchers or policy-makers can judge the limits of transferability to other settings.

Dependability

To try to recognise the variability in the setting, and its changing character, you try to account for this variability: documenting different instances and situations and the different personnel involved (not just one or two receptionists). In this way, try to describe the setting as fully as possible. If you think there may be changes occurring (even perhaps as a result of your observation) leave the field and return later, making observations on different days. In extremis, consider the possibility of covert observation (recording telephone calls without receptionists' knowledge).

Confirmability

To try to avoid biases (for example, drawing conclusions based on personal experience), you try to reflect on what those biases might be, you check with informants that you are not making incorrect assumptions. When it comes to analysing data, ask friends or colleagues to read you interpretations and come up with queries or alternative explanations.

I hope you identified some of these aspects of how to maximise the validity and reliability of this study. Appraising validity and reliability are essential for research to be worthwhile, and any observational research design needs to think about these four aspects before entering the field. Bear in mind the earlier argument that bad research is not only a waste of time but also unethical.

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Further reading and resources

All the following are worth reading, if you are interested in pursuing your studies further.

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Hammersley, M. and Atkinson, P. (1989) Ethnography. Principles in Practice. London: Routledge.