

# 11

## STRUCTURED METHODS: INTERVIEWS, QUESTIONNAIRES AND OBSERVATION

Constantinos N. Phellas, Alice Bloch and  
Clive Seale

### Chapter Contents

<b>Interviews or self-completion questionnaires?</b>	<b>182</b>
<b>Types of interview</b>	<b>183</b>
Face-to-face interviews	183
Telephone interviews	183
<b>Self-completed questionnaires</b>	<b>184</b>
<b>Designing studies using structured interviews and questionnaires</b>	<b>185</b>
Determining the information to be sought	185
Deciding how to administer the questionnaire or interview	186
Postal surveys	186
Internet-based methods	188
<b>Constructing an interview schedule or questionnaire</b>	<b>192</b>
Keep it short	192
Introduction or welcome message	192
Elements of an effective cover letter	193
Deciding the order of questions	193
Include all potential answer choices	193

Questionnaire layout	194
Question types	195
Levels of measurement	196
Piloting the instrument	197
<b>Structured observation</b>	<b>198</b>
The Roter Interaction Analysis System (RIAS)	198
Flanders Interaction Analysis Categories (FIAC)	200
Deciding to use structured observation instruments	201
<b>Conclusion</b>	<b>202</b>

Learning how to design and use structured interviews, questionnaires and observation instruments is an important skill for researchers. Such survey instruments can be used in many types of research, from case study, to cross-sectional survey, to experiment. A study of this sort can involve anything from a short paper-and-pencil feedback form, to an intensive one-to-one interview asking a large number of questions, to direct observation of relevant behaviour. In general, these data collection instruments fall into three broad categories: self-completed questionnaires, interviews and observation schedules. This chapter concerns all of these, explaining how to design and administer structured interview schedules, design and distribute questionnaires intended for self-completion by respondents, and carry out structured observations.

### Interviews or self-completion questionnaires?

Choosing between an interview and a self-completed questionnaire on which the respondent writes their answers is an important decision. Within these there are also choices to be made, each with advantages or disadvantages. Thus,

interviews can be done face to face or by telephone. A questionnaire can be sent and returned by post or email, completed on the Web, or handed directly to the respondent who completes it on the spot and hands it back. Additionally, some interviews contain pauses for respondents to complete questionnaire sections, so that the resulting instrument is a combination of things. This can be particularly advantageous if a topic is felt to be socially embarrassing to discuss face to face and has been used, for example, in surveys of sexual behaviour.

Interviews have certain advantages over self-completion questionnaires. The interviewer can explain questions that the respondent has not understood and can ask for further elaboration of replies (e.g. 'Why do you say that?'). In general, being asked questions by a sympathetic listener is experienced as more rewarding by respondents than the chore of filling in a form for some anonymous researcher, so it is generally found that fewer people refuse to take part and more questions can be asked of each person. However, interviews are more time consuming for the researcher and it may be the case that interviewer bias, where the interviewer influences the replies by revealing their own opinions, can be avoided by self-completion questionnaires.

Self-completion questionnaires have the advantage of being cheap, but are more suited to issues where there are only a few questions that are relatively clear and simple in their meaning, and the choice of replies can be limited to fixed categories. They are especially useful in surveying people who are dispersed over a wide geographical area, where the travelling demands on an interviewer would be excessive.

## Types of interview

The interview is a more flexible form than the questionnaire and, if intelligently used, can generally be used to gather information of greater depth and can be more sensitive to contextual variations in meaning. The classical survey research tradition, geared to producing quantitative data, is generally associated with interviews where the wording and order of questions are exactly the same for every respondent. Variation in responses can thus be attributed to respondents and not to variability in the interviewing technique. Wording the questions in the same way for each respondent is sometimes called **standardising**. Asking the questions in the same order is called **scheduling**.

Interviews, however, can be non-scheduled, though still partly standardised. This is sometimes called a semi-structured interview. Here, the interviewer works from a list of topics that need to be covered with each respondent, but the order and exact wording of questions is not important. Generally, such interviews gather qualitative data, although this can be coded into categories to be made amenable to statistical analysis.

## Face-to-face interviews

Using face-to-face interviews as a means of data collection has a number of advantages and disadvantages. The main benefits are:

- The presence of an interviewer allows for complex questions to be explained, if necessary, to the interviewee.
- Interviews can generally be longer than when self-completion techniques are used as interviewees are less likely to be put off by the length or to give up halfway through.
- There is more scope to ask open questions since respondents do not have to write in their answer and the interviewer can pick up on non-verbal clues that indicate what is relevant to the interviewees and how they are responding to different questions.
- Visual aids can also be used in the face-to-face situation.
- The interviewer can control the context and the environment in which the interview takes place. For instance, the interviewer can make sure that the questions are asked and therefore answered in the correct order and that the interview takes place in an appropriate setting which is conducive to accurate responses.

There are however, some problems with face-to-face approaches:

- The cost associated with face-to-face interviews can limit the size and geographical coverage of the survey.
- Interviewers can introduce bias, which will affect the reliability of responses. Such bias might emerge from the way in which questions are asked, or in the personal characteristics of the interviewer, or in respondents' wish to give socially desirable responses. For instance, there tends to be an over-reporting of voting activity and of participation in voluntary activities in data gathered through interviews.

## Telephone interviews

Telephone interviews using interview schedules are becoming increasingly efficient with developments in computer technology. **Computer assisted telephone interviewing (CATI)** systems are available and these provide clear

instructions for the interviewer, display the interview schedule and allow electronic recording of responses as they are given. This cuts out the **data entry** part of survey research (i.e. transferring the responses from the interview schedule to the computer) because responses are recorded directly onto the computer. This makes CATI quick and cheap to use. There are other advantages associated with telephone interviews:

- Because the researcher does not have to travel, interviews can take place over a wider geographical area.
- There are fewer interviewer effects – that is, the personal characteristics of the researcher will be less obvious than in face-to face situations and is therefore less intrusive.
- The physical safety of the interviewer is not an issue.
- Telephone interviews are subject to greater levels of monitoring because supervisors can unobtrusively listen in to interviews to ensure that they are carried out correctly.

But telephone interviewing has disadvantages too:

- Questions have to be simple and interviews need to be kept short because they tend to have higher break-off rates (where people refuse to continue) than face-to-face interviews.
- It can be difficult to ask sensitive questions on the telephone.
- There is no opportunity to use visual aids or to pick up so easily on the non-verbal responses of interviewees.
- There are some groups that are underrepresented in telephone surveys. These include people without phones (often due to poverty), older people and people who are disabled or sick.

## Self-completed questionnaires

There are different types of self-completed questionnaire, and this chapter will help you

decide whether to use postal, mailed, web-based or email questionnaires. First though, the good and bad points of such questionnaires can be summarised. With surveys delivered by these means, questions need to be simple and easy to understand and the questionnaire has to be clear and easy to complete because no interviewer is available to assist the respondent. Such surveys can be especially useful when respondents need time to gather information or consider their answers. For example, a survey of pay levels among university employees by gender would require complex information, so a self-completion survey would provide respondents with time to check their records before answering.

Surveys using self-completion questionnaires have some distinct advantages over face-to-face interviews:

- They are cheap to administer. The only costs are those associated with printing or designing the questionnaires, their postage or electronic distribution.
- They allow for a greater geographical coverage than face-to-face interviews without incurring the additional costs of time and travel. Thus they are particularly useful when carrying out research with geographically dispersed populations.
- Using self-completion questionnaires reduces biasing error caused by the characteristics of the interviewer and the variability in interviewers' skills.
- The absence of an interviewer provides greater anonymity for the respondent. When the topic of the research is sensitive or personal it can increase the reliability of responses.

The main disadvantages of self-completion surveys are:

- Questionnaires have to be short and the questions must be simple as there is no opportunity to probe or clarify misunderstandings.
- There is no control over who fills out the questionnaire, and the researcher can never be sure that the right person has completed the questionnaire.

- Those with low levels of literacy or poor access to email or the Internet are unlikely to complete a questionnaire, meaning that they are excluded from the study.
- Response rates tend to be low and it is difficult to know the characteristics of those who have not filled in the survey and how their non-response will affect the findings.

Response rates in self-completion surveys tend to be maximised when respondents have an interest in the subject of the research and are therefore motivated to complete the questionnaire. In addition, response rates can be increased by sending out reminder letters and emails and follow-up postings of the questionnaire, though this does mean that the fieldwork element of such surveys can be lengthy.

Ways of encouraging a good response rate are also discussed later in this chapter (and were mentioned in Chapter 9 too). In addition, the appearance and layout of questionnaires are important, and this chapter will cover this, as well as discussing different question types and the pre-testing of questionnaires.

## Designing studies using structured interviews and questionnaires

The most important goal of a study using such an instrument is to learn about the ideas, knowledge, feelings, opinions/attitudes and self-reported behaviours of a defined population. To carry out a survey the researcher must:

- 1 determine the information to be sought
- 2 define the population to be studied
- 3 construct the interview schedule or questionnaire and decide how it is to be administered
- 4 draw a representative sample
- 5 administer the instrument
- 6 analyse and interpret the data
- 7 communicate the results.

These procedures are overlapping and each demands careful work. We will focus in this chapter on steps 1 and 3 in particular. Other steps are more fully discussed in other parts of this book.

## Determining the information to be sought

Social research begins with an idea that sometimes might be quite vague and unclear. As a researcher you must systematically develop and refine your initial ideas, usually starting with a good understanding of the related literature (see Chapter 6). There will eventually be a need for concepts in the literature – if they are to be investigated in the study you are going to do – to be operationalised as questionnaire items, so that clear **concept–indicator links** are established. Therefore, you must make clear what you want to find out about. The research questions of the project determine who you will survey and what you will ask them. If your research questions are unclear, the results will probably be unclear. The more precise you can make these, the easier it will be to get usable answers.

Let us imagine that we are about to carry out a survey in order to answer the following research questions:

- 1 Does the possession of a university degree enhance the job prospects to a different extent in different ethnic groups?
- 2 Are people without degrees more likely to have jobs in which they experience alienation?
- 3 How do women and men graduates compare in balancing the demands of home and work?

If you examine these three questions you will see that they contain a number of concepts. These are possession of a degree qualification, ethnic group, having a job, alienation, gender and the demands of home and work. In designing questions, a researcher should ensure that the concepts contained within the aims of the study are *comprehensively* covered. If one forgot to ask

a question about whether people had a degree qualification, for example, it would not be possible to fulfil the aims of the study.

The questions chosen for inclusion in an interview schedule or a self-completed questionnaire can be understood as indicating the concepts contained in the research questions. Ensuring good links between concepts and their indicators lies at the heart of good question design. Some concepts are easier to indicate than others. The concept of *sex* or *gender*, for example, is in most cases not controversial and might, in an interview, be indicated by the interviewer recording their impression rather than asking a question about it. The concept of having a degree qualification might also be indicated fairly easily, by asking a person to list their educational qualifications. Whether a person has a job, however, might pose more problems. What does one do about part-time workers, for example? Do we count housework as a 'job'? Decisions about how to categorise people into ethnic groups are often controversial.

Additionally, many of the more interesting concepts in social research are **multidimensional concepts**, which is to say that they are made up from several different things. Alienation is an example. Finding questions to indicate the extent of a person's alienation requires some further conceptual work, and perhaps some reading to see how different authors have used the term. A researcher interested in finding indicators for this concept would need to subdivide it into several components. Alienation involves, amongst other things, a sense of powerlessness, of normlessness (being outside normal society), isolation and self-estrangement (seeing a part of oneself as if it were a stranger). It is easy, for example, to see how one could be powerless without being isolated, so in order to count as 'truly' alienated a person would need to indicate that they experienced all of its components, requiring questions indicating each of the dimensions of alienation.

The chapter will return to how questions in survey instruments can be designed so that they reflect good concept–indicator links. First,

though, we will consider the decision as to how to administer a questionnaire or an interview.

## Deciding how to administer the questionnaire or interview

We saw earlier that there were several ways to administer a self-completed questionnaire, these being to send and return the questionnaire by post, and internet-based methods (web or emailed questionnaires). The advantages and disadvantages of each were summarised. Less often used, but nevertheless distinct from these approaches, are the **group administered survey** and the **household drop-off survey**. In addition, we saw that there were two main ways to carry out interviews: face to face or by telephone. Either of these might involve computer assistance at the data collection stage, with the interviewer entering responses and being prompted to ask questions as the interview proceeds, though this is more commonly used in telephone interviewing. The best approach will always be based upon a combination of factors such as time, the complexity of the data collection instrument, the sample profile and budget.

## Postal surveys

Postal surveys (sometimes called mail-out surveys) usually involve mailing self-completed questionnaires to a target group of people. The main advantages of postal surveys are that large numbers of questionnaires can be sent out at fairly low cost. Questions that are difficult to ask on the telephone or in face-to-face interviews can be asked in a postal questionnaire. For example, personally sensitive information (about income, sexual orientation, drinking behaviour) are best asked about in a way that saves the respondent the embarrassment of facing a stranger and reporting something they may feel awkward about. Box 11.1 gives an example of a study that asked about illegal behaviour in this way.

## BOX 11.1

### EXAMPLE OF HOW TO ASK PERSONALLY SENSITIVE INFORMATION

A postal survey of UK doctors reported by Seale (2009a) asked them to report on whether they had taken various decisions about the end-of-life care of their last patient who had died. These decisions included things like withdrawing or withholding treatment, considered to unnecessarily extend life when a patient was already suffering a great deal. Doctors were also asked if they had prescribed or administered a drug with the sole intention of ending a patient's life (known as 'assisted dying', 'euthanasia' or 'physician-assisted suicide'). This last type of decision was not legal in the UK at the time of the survey. Doctors were sent a postcard when they were sent the questionnaire, and they were told that they could return the postcard separately to say that they had replied to the survey, so that they would not receive follow-up reminders to reply. The questionnaire itself contained no information that could link the particular questionnaire to the identity of any one of the 10,000 doctors who received it. This reassured respondents who reported illegal action that they could not be identified.

A serious problem with postal surveys is that response rates are usually lower than interview surveys. This is largely because people find talking to someone more pleasant than filling in a form on their own.

Factors that affect response rates are the questionnaire's length, the way it is laid out (e.g. is it easy to answer?), whether the issue it enquires about is important to the respondent, and whether incentives are offered. In addition, in populations of lower educational and literacy levels, response rates are lower. This makes it difficult, for example, to use postal surveys with groups that may be particularly important to understand, such as immigrant populations, or socially deprived people.

A low response rate is a problem because responders may not be representative of the entire population if they are systematically different on some dimension from non-responders. With self-completed questionnaires, as with any survey, you need to look at the characteristics of the people who responded and the people who did not respond. The respondents should have the same characteristics with the people who did not respond. Moreover, respondents should have the same characteristics as the overall population that you are sampling. If they do not,

then it may be possible to weight the results during the analysis so that the sample more closely reflects the population. Thus, if men were twice as likely to reply to a survey as women, the contribution of men's responses to an overall result could be reduced by dividing each response from a man by two, so that the sample result reflects the population. However, it is only possible to weight responses on variables that you know about; a low response rate may involve biases whose effect cannot be estimated.

If you design a sampling method that gives everyone in the population an equal chance of being selected as a potential respondent, your sample will be about the same as the overall population. But if there is poor level of response, most of the time it is almost certain that there will be some important differences between those who responded and those who did not. The assumption that your sample reflects the population as a whole fails, and with it, if weighting is not feasible, the possibility of doing any inferential statistics.

If you estimate that you will get a poor response rate no matter what you do, then you can extract some value from the data by reducing your survey to a few open questions. Read the comments that people give you and think

about them. Although you may not be able to tell whether they are at all representative of your population, you will probably find that they do

offer some interesting insights. There are several ways to improve response rates to postal surveys. These are listed in Box 11.2.

## BOX 11.2

### WAYS TO IMPROVE RESPONSE RATES TO POSTAL SURVEYS

- Mail a postcard telling your participants to watch for a questionnaire in the next week or two.
- Mail non-respondents with reminders, including a further copy of the questionnaire in case they threw it away. The downside is that this method increases your mailing cost.
- Use incentives, such as vouchers, money, donations to a charity or a prize draw. An offer of a copy of the final research report can help in some cases.
- Ensure that the questionnaire can be returned with the minimum of trouble and expense (e.g. by including a reply paid envelope).
- Keep the questionnaire short and easy to answer.
- Ensure that you send it to people for whom it is relevant. It is no good sending a questionnaire designed for doctors to nurses too, as they will find some of the questions odd.

### Internet-based methods

The two main forms of internet-based methods are **email surveys** and **web surveys**. Online research is suited to most survey types, and for very personal and sensitive issues. Participants are also more often willing to give more honest answers to a computer or by email than to a person or on a paper questionnaire. The computer asks questions the same way every time, thus interviewer bias arising from the fact that different interviewers can ask questions in different ways is eliminated. Use the Internet for surveys mainly when your target population consists entirely or almost entirely of Internet users. Surveys of the general population usually will not be of this sort.

**Email surveys** involve sending questions in the text of an email, or in an attachment, which respondents fill in and send back. These surveys are both very economical and very fast. More people have email than have full Internet access. Email surveying can allow large numbers of respondents to be questioned. Geographical

location is not a barrier, although this can sometimes mean having to produce questionnaires in non-English languages. Significant cost savings can sometimes be made (e.g. postage and paper materials). This method of research has become increasingly popular for two main reasons: the rising penetration of computers and the increased ability to use computers by many people. This method may grow in importance as computer use increases.

There are problems, though. Some people will respond several times or pass questionnaires along to friends to answer. Many people dislike unsolicited email even more than unsolicited regular mail. You may want to send email questionnaires only to people who expect to get email from you. You cannot use email surveys to generalise findings to the general population. People who have email are different from those who do not, even when matched on demographic characteristics, such as age and gender. While email use is growing rapidly, it is not universal – three-quarters of the world's email traffic takes place within the USA. Many

'average' citizens still do not possess email facilities, especially older people and those in lower-income and education groups. So email surveys do not reflect the population as a whole. At this stage they are probably best used in a corporate environment where email is common or when most members of the target population are known to have email.

Email surveys cannot automatically skip questions or randomise the order of questions,

or use other automatic techniques that can enhance surveys the way web surveys can. Many email programs are limited to plain text and cannot show pictures or other graphics. If the survey is sent by email attachment, the software used to create this must be of the sort that can be expected to be found on all of the potential respondents' computers. Box 11.3 shows the pros and cons of email surveys.

### BOX 11.3

#### ADVANTAGES AND DISADVANTAGES OF EMAIL SURVEYS

##### Advantages

- Speed; an email questionnaire can gather several thousand responses within a day or two.
- There is practically no cost involved once the set-up has been completed.
- You can attach pictures and sound files.
- The novelty element of an email survey often stimulates higher response levels than ordinary 'snail' mail surveys.

##### Disadvantages

- You must possess or purchase a list of email addresses.
- You may receive duplicate responses and instructions may be ignored.
- Many people dislike unsolicited email.
- You cannot use email surveys to generalise findings to the whole population.

**Web surveys** can be conducted by Internet or Intranet and are rapidly gaining popularity. They involve sending people a link to a web page containing a questionnaire that is filled in online. The questionnaire will have been designed with software that will ensure that **skip instructions** are accurately followed (i.e. an instruction to 'skip to Question 20 if you answer "yes" to Question 10'). These automatic skips are more accurate than relying on an interviewer or a respondent reading a paper questionnaire, and they have the positive benefit that respondents do not need to see a page filled with irrelevant questions.

Web surveys are extremely fast. A questionnaire posted on a popular website can gather several thousand responses within a few hours. Many of the people who will respond to an email invitation to take a web survey will do so the first day, and most will do so within a few days. There is practically no cost involved once the set-up has been completed. Large samples do not cost more than smaller ones (except for any cost involved in drawing up the sample). You can show respondents pictures, and some web survey software can also show video and play sound. Web page questionnaires, as well as supporting complex question-skipping logic,

can involve randomisations of question order and other features not possible with paper questionnaires or most email surveys. These features assure better data. Colours, fonts and other formatting options that are not possible in most email surveys can be used. A significant number of people will give more honest answers to questions about sensitive topics, such as drug use or sex, when giving their answers to a computer instead of to a person or on paper. On average, people give longer answers to open-ended questions on web page questionnaires than they do to other kinds of self-administered surveys. Some web survey software can combine survey answers with the pre-existing information about individuals taking a survey, collected through other methods, such as at the sampling stage.

But the problems are also clear. Current use of the Internet is far from universal. Internet

surveys do not reflect the population as a whole. This is true even if a sample of Internet users is selected to match the general population in terms of age, gender and other demographics. People can easily quit in the middle of a questionnaire. They are not as likely to complete a long questionnaire on the Web as they would be if talking with a good interviewer. If your survey pops up on a web page, you often have no control over who replies; anyone from New York to Tokyo cruising that web page may answer. Depending on your software, there is often no control over people responding several times to bias the results. You may also want to restrict access by requiring a password (good software allows this option) or by putting the survey on a page that can only be accessed directly (i.e. there are no links to it from other pages). Box 11.4 summarises these advantages and disadvantages of web-based surveys.

#### BOX 11.4

### ADVANTAGES AND DISADVANTAGES OF WEB-BASED SURVEYS

#### Advantages

- Web page surveys are extremely fast.
- No cost is involved once the set-up has been completed.
- You can show pictures, video and play sound.
- Web page questionnaires can be set with skip instructions.
- Web page questionnaires can use colours, fonts and other formatting options not possible in most email surveys.
- A significant number of people will give more honest answers to questions.
- People give longer answers to open-ended questions.
- Survey answers can be combined with pre-existing information you have about individuals taking a survey.

#### Disadvantages

- Internet access is far from universal, so Internet surveys do not reflect the population as a whole.
- People can easily quit in the middle of a questionnaire.
- No control over who replies and how many times they reply, unless the software is set to accept only one reply and is password protected.

Self-completion surveys can also be group administered. For example, a researcher may ask a class of school pupils to fill in a questionnaire. If a pupil is uncertain about the meaning of a question, he or she can ask for help from the researcher, meaning that the quality of the data is improved. A school is an example of a setting where it is relatively easy to assemble groups of respondents; other places, such as places of work, may afford the same opportunities and therefore be particularly well-suited to this mode of administration. More rarely, the household drop-off survey may be used. The researcher using this method will go to a respondent's home and leave the questionnaire with a respondent to be returned later. This means personal contact with the respondent is made, which may involve the opportunity to explain the purpose of the survey and so increase motivation to respond. In addition, some questions from the respondent may be asked and answered, which can affect the quality of the resultant data.

Box 11.5, adapted from Trochim (2010), summarises the major features of group, postal and household drop-off surveys, comparing these with face-to-face and telephone interviews. You can see from this that interviews are particularly suited where a flexible method using open-ended questions is required, and that they possess the further advantage that the ability to read and write is not required of respondents, which can be important if interviewees are either not literate or are unfamiliar with the language of the inquiry. Questionnaires, on the other hand, have significant cost advantages, as well as the capacity to cover a geographically dispersed sample. Phone surveys retain some of the advantages that face-to-face interviews have over questionnaires, but not all. In some respects, the group (and drop-off) approach to administering questionnaires, while sacrificing the wide geographical coverage which questionnaires have, mitigates the impersonality of questionnaires, allowing for improved data quality due to the capacity to explain more about the study and the questionnaire to respondents.

### BOX 11.5

#### GROUP, POSTAL AND HOUSEHOLD DROP-OFF SURVEYS, COMPARED WITH FACE-TO-FACE AND TELEPHONE INTERVIEWS

Issue	Group	Questionnaire		Interview	
		Postal	Drop-Off	Personal	Phone
Visual presentations are possible	Yes	Yes	Yes	Yes	No
Long response categories are possible	Yes	Yes	Yes	Possible	No
Privacy is a feature	No	Yes	Yes	Yes	Yes
Flexible method	No	No	No	Yes	Yes
Open-ended questions feasible	No	No	No	Yes	Yes
Reading and writing is needed	Yes	Yes	Yes	No	No
You can judge quality of response	Yes	No	No	Yes	Possible
High response rates likely	Yes	No	Yes	Yes	No
Can explain study in person	Yes	No	Yes	Yes	Possible
Low cost	Yes	Yes	No	No	No
Low staff costs	Yes	Yes	No	No	No
Access to dispersed samples	No	Yes	No	No	No
Respondent has time to compose answers	No	Yes	Yes	No	No
Personal contact involved	Yes	No	Yes	Yes	No
Long survey is feasible	No	No	No	Yes	No
Quick turnaround	No	Yes	No	No	Yes

Source: adapted from Trochim, 2010

## Constructing an interview schedule or questionnaire

### Keep it short

One principle that is consistent whether you are doing an interview or sending someone a questionnaire is that the instrument should be kept as short and simple as possible. If you send people a 25-page questionnaire, or tell them that an interview is likely to take an hour or more, most potential participants will give up before they begin, and particularly so when the instrument is a self-completion questionnaire, which is not as emotionally rewarding to fill in as it is to spend time talking about oneself with an apparently sympathetic, non-judgemental stranger. If you consider that a question is not essential, then do not include it. An effective way to avoid including pointless questions in a questionnaire is to ask yourself what you will do with the information gained from each question. If you cannot give yourself an acceptable answer, then leave it out. Stay away from the temptation to include just a few more questions. Try placing your questions into three groups:

- 1 Must know
- 2 Useful to know
- 3 Nice to know

Afterwards, discard questions in the last group unless the previous two groups are extremely short. Furthermore, it is vital the questions themselves are simple and unambiguous, particularly in self-completion surveys where participants, unlike interviewees, cannot ask the researcher 'What do you mean by that?' if they do not understand a question.

### Introduction or welcome message

Always start with an introduction or welcome message. In a postal questionnaire, this message can be in a cover page or on the questionnaire form itself; in an interview, this can be read or spoken by the interviewer. A good-quality introduction will encourage people to take part and increase the response rate. In contrast, having no welcome message will reduce the response rate. An example of an introductory message, for a survey in which the researcher remained present while the questionnaire was filled in, is given in Box 11.6.

#### BOX 11.6

### INTRODUCTION OR WELCOME MESSAGE: BELIEFS, ATTITUDES AND KNOWLEDGE ON HIV/AIDS

The University of Nicosia in association with the Ministry of Health, the Cyprus Family Planning Association and the Cyprus University of Technology are studying the attitudes, beliefs and knowledge of students and migrants from third countries (non-European) who live and work in Cyprus on the topic of HIV/AIDS.

The project aims to develop an HIV/AIDS Public Health Educational Programme for people who come to Cyprus to study and/or work in order to equip them with all the relevant information regarding HIV and AIDS.

Therefore, in order to carry out the above-mentioned research successfully, we need your own contribution by filling in this questionnaire and then inserting it in the envelope provided. Questionnaires are completely anonymous and the information collected will be used for the purposes only of this current survey. We urge you to complete the questionnaire alone. Should you have any queries or things you do not understand, please ask our researchers who stand nearby and they will be glad to assist you.

Thank you very much for participating in this survey.

Dr Constantinos N. Phellas  
Dean of the School of Humanities, Social Sciences and Law  
University of Nicosia

## Elements of an effective cover letter

Start with the title of the survey, for example 'Beliefs, attitudes and knowledge on HIV/AIDS'. If you are asking about opinions, personal belief or attitudes it is usually a good idea to give the name of the research organisation or university rather than the sponsor or the funding organisation. For example, it is better to tell respondents that a study is being done by the 'Research Unit on Social Issues' than it is being sponsored by a political party with which the respondent might have little sympathy. People prefer a neutral organisation.

In your covering letter you should introduce yourself, and say why you are doing the survey and how they have been chosen as a respondent. Do not go into depth about this, as respondents can try to influence the results with false answers if they know too much about your specific hypotheses. Mention the incentive, if any, and explain how to return the questionnaire. Include the name and telephone number of someone the participant can call if he or she has any questions. In addition, include instructions on how to complete the questionnaire itself. This may take the form of a sample question with one of its fixed-choice response options circled, ticked or crossed – however you want respondents to indicate their replies.

In addition, it is often a good idea to explain why taking part will improve some aspect of the respondent's life (e.g. make a health organisation/hospital better able to meet his or her needs), or provide him or her with the opportunity to express their viewpoint, or simply appeal to the respondent's sense of altruism, as in a plea 'please help'.

## Deciding the order of questions

In general, it is desirable to start with the most important questions so that if a person gives up halfway through and still returns the questionnaire, or agrees that an interview can be used, at least you might get the most essential information.

But even if more personal or sensitive questions are important for the project, it is better to leave these until the end of the questionnaire or interview, since by then the participant should have built a 'rapport' with the project or with the interviewer that will encourage honest responses to such personal questions.

## Include all potential answer choices

You should include 'Don't know' or 'Not applicable' responses to all questions, except where they are clearly irrelevant, such as gender or age. This can be vital in dealing with participants who are frustrated because the response options do not fit them. On the one hand, sometimes options such as 'Don't know' or 'Not applicable' will really represent some participants' most sincere answers to some of your questions. On the other hand, participants who feel they are being forced into giving an answer they do not want to give commonly do not complete interviews or return questionnaires. For example, people will often abandon a questionnaire that asks them to specify their income, without offering a 'Decline to state' choice. For the same reason, include 'Other' or 'None' whenever either of these seems to be a reasonably possible answer. When the answer choices are a list of potential opinions, preferences or behaviours, you should usually offer these answers.

Leave a space at the end of a questionnaire for 'Other comments' and, in an interview, ask respondents if there is anything at all that they would like to add. This allows respondents whose feelings and thoughts are aroused by the questions to express themselves in their own way.

Occasionally, participants make casual remarks that are vital regarding some areas you have never thought of, but which they consider critical. You may decide to include the answers to sections like this, or to other open-ended questions, in the analysis. You can do this by 'post-coding' them. This involves inventing a category scheme into which each answer can be

placed. If each category has a separate numerical value, these replies can be entered into a spreadsheet in the same way as fixed-response options.

Make sure you include all the appropriate alternatives as answer choices. Leaving out a choice can give misleading results. For example, if you ask participants if they eat after 6 p.m. and the choices are only 'Yes' or 'No', then you will more likely find that the great majority of the respondents choose 'Yes'. Questionnaires that offer respondents more appropriate choices, such as 'Never', 'Some of the time', 'Most of the time' and 'Always' are likely to collect more realistic data.

### Questionnaire layout

An attractive layout in a self-completion questionnaire is important so that it appears easy to understand and relatively effortless to complete.

This can also be important in structured interviewing, as interviewers can be daunted, or confused, by poor layout. If you plan to enter data into a spreadsheet from responses marked on a paper questionnaire or interview schedule, you also want to make it uncomplicated for your data entry. Therefore, try to keep your answer spaces in a straight line either horizontally or vertically. A single answer choice on each line is best. The best place to use for answer spaces is the right-hand edge of the page. It is much easier for a participant or interviewer to follow a logical flow across or down a page. In addition, using the right edge is easier for data entry.

Squeezing questions into a small space (Figure 11.1) can make the questionnaire harder to complete, even though you can save a lot of paper.

Questions and answer choice grids (Figure 11.2) are popular with many researchers. They look

1 Circle the letters of the three courses in which your son or daughter has the best performance in class.					
2 Circle the numbers of the three courses your son or daughter enjoys most.					
Mathematics	A	1	Religious Education	G	7
Modern Languages	B	2	Science	H	8
Art	C	3	Physical Education	I	9
Geography	D	4	Environmental Study	J	10
History	E	5	English Language	K	11
Music	F	6	Design & Technology	L	12

FIGURE 11.1 Squeezing a lot into a small space

Please respond to the following questions by circling the response that best describes you.						
		Strongly disagree	Disagree	Uncertain or unsure	Agree	Strongly agree
1	I am comfortable about people finding out that I am gay.	1	2	3	4	5
2	It is important to me to control who knows about my homosexuality.	1	2	3	4	5
3	Even if I could change my sexual orientation I wouldn't.	1	2	3	4	5

FIGURE 11.2 A question and answer choice grid with responses in numbers

Please respond to the following questions by circling the response that best describes you.						
1	I am comfortable about people finding out that I am gay.	Strongly disagree	Disagree	Uncertain or unsure	Agree	Strongly agree
2	It is important to me to control who knows about my homosexuality.	Strongly disagree	Disagree	Uncertain or unsure	Agree	Strongly agree
3	Even if I could change my sexual orientation I wouldn't.	Strongly disagree	Disagree	Uncertain or unsure	Agree	Strongly agree

**FIGURE 11.3** A question and answer choice grid with responses in words

attractive and save paper. They also can avoid a long series of repetitive question and answer choice lists (Figure 11.3). But unfortunately, grids (Figure 11.2) are a bit harder than the repeated lists (Figure 11.3) for some participants to understand. Although both Figures 11.2 and 11.3 show the answer choices in neat columns and have space between the lines, Figure 11.2 is undoubtedly easier to read. The numbers in Figure 11.2 will also speed data entry. The creation of questionnaires is a mixture of science and art.

### Question types

A distinction is made between **open questions**, **closed questions** and **fixed-choice questions**. An open question asks the participant to formulate his own answer, whereas a closed question constrains the participant to a greater extent. A fixed-choice question requires the respondent to pick an answer from a given number of options. Examples of each are given in Box 11.7.

#### BOX 11.7

### EXAMPLES OF OPEN, CLOSED AND FIXED-CHOICE QUESTIONS

#### Open

- Why did you take up smoking?  
(Space for reply)

#### Closed question

- Do you want to quit smoking, or not?

#### Fixed choice question

- What type of assistance do you think would most help you quit smoking? (Please choose only one option)
  - 1 Medication
  - 2 Counselling
  - 3 Combination of medication and counselling
  - 4 More support from family and friends
  - 5 None of the above
  - 6 I do not want to answer

With an open question respondents are asked a question and can reply however they wish. In contrast, closed questions frame responses in a certain way, and fixed choice questions even more so. Closed and fixed-choice questions provide primarily quantitative data and are frequently used in confirmatory research.

### Levels of measurement

There are four levels of measurement: nominal, ordinal, interval and ratio. The four levels differ in how closely each matches the characteristics of the abstract number system.

**Nominal variables** (sometimes also called **categorical**) involve placing participants into separate categories such as diagnostic or political groups, so are said to have the property of identity. Use a nominal question when the potential answers are categories and the participant must fit into only one category. Examples are given in Box 11.8. **Ordinal variables** have both the property of identity and magnitude, which is to say that they involve some notion of order or rank between the categories (e.g. highest to lowest, largest to smallest), but no strong sense that the distance between two adjacent points on a scale is equal to the distance between two other adjacent points. Examples are shown in Box 11.9.

#### BOX 11.8

##### EXAMPLES OF QUESTIONNAIRE ITEMS THAT PRODUCE NOMINAL OR CATEGORICAL VARIABLES

Gender: Male ..... Female .....

Marital status:

- Single
- Married
- Divorced
- Separated
- Widow/widower
- Remarried
- Cohabiting with sexual partner
- Other (please specify)

#### BOX 11.9

##### EXAMPLES OF QUESTIONNAIRE ITEMS THAT PRODUCE ORDINAL VARIABLES

- Preference scores (e.g. ratings where 10=good, 1=poor, but the difference between a 10 ranking and an 8 ranking cannot be quantified)
- SES (low, middle or upper socioeconomic class)
- Grades in school (A, B, C, D, F; cannot determine how much higher the top ranked student is from the second)

- The ranking of food preferences, as in 'Which food do you like most? 1 means the least preference, 3 mean the most preference

Pasta	
Pizza	
Vegetarian	

Interval variables have the properties of identity, magnitude and equal intervals between points. A common example of an interval scale is the Fahrenheit scale of temperature. In the Fahrenheit temperature scale the distance between 10 degrees and 20 degrees is the same as the distance between 35 degrees and 45 degrees. However, since interval scales do not have an absolute zero point, the ratio of two scores will not be meaningful: it would not be appropriate to say that 40 degrees is twice as hot as 20 degrees. Other examples include IQ tests, neuroticism scores, attitude measures, personality measures, self-reported depression level, ability to solve problems. Such scales are normally constructed by adding together a number of separate questionnaire items that indicate a concept.

Ratio scales have all the properties of interval scales as well as a true zero point. Therefore, all mathematical operations are appropriate, including taking the ratio of two numbers. For example, someone who earns €3,000 earns twice as much as someone who earns €1,500. Data from ratio scales are also sometimes called *score data*. Examples include height, weight, age, annual income, number of responses, time duration, reaction time, heart rate, child's rate of hitting

other children, number of acts of aggression, the number of stressful behaviours.

### Piloting the instrument

The last step in designing a questionnaire or interview schedule is to test (or 'pilot') it with a small number of participants prior to conducting your actual research. Preferably, you should test the questionnaire on the same type of people you will include in the real study. If that is not possible, at least ask a few other people to answer the questionnaire, such as friends or colleagues. The people used during the pilot study should be excluded from your final sample as their experience of seeing the earlier questionnaire may make them answer the real thing differently.

This kind of testing can reveal unanticipated problems with question wording, instructions to skip questions and so on. Crucially, it can help you see if both interviewers and participants understand the meaning of your questions in the way that you understand them. You can also see how long it takes to complete the questionnaire or interview and try to identify and eliminate items that will not generate usable data. Box 11.10 suggests the type of questions to ask when piloting a questionnaire or interview schedule.

#### BOX 11.10

### WHAT TO ASK WHEN YOU PILOT A QUESTIONNAIRE OR INTERVIEW SCHEDULE

- How long did it take to complete?
- Were the instructions clear?
- Were any questions ambiguous?

(Continued)

(Continued)

- Were any questions objectionable?
- Was the layout clear and easy to follow?
- Were any topics omitted?

## Structured observation

A comparison of structured observation with participant observation (for which see Chapter 14) is similar to the comparison between the structured interviewing or questionnaires described in this chapter and the qualitative interviewing techniques that are described in Chapter 12. Both participant observation and qualitative interviewing involve the researcher encountering the people and events studied with a relatively open mind as to what might become relevant to the research problem being addressed. They produce data amenable to qualitative analysis, and data gathered by such loosely structured methods is normally not subjected to statistical analysis, or if it is, usually of a simple sort. In contrast with these exploratory methods, the 'structured' approach means that the researcher figures out ahead of time what kind of event, or response, is going to be counted as relevant for the research problem.

The pay-off with these structured methods is to generate data that is reliable, generalisable and is often comparable with other studies if the same measurement instruments have been used. Although less structured methods can be valuable in discovering new things that could not have been anticipated at the start of a study, there are often problems in knowing whether they have been reliably described (would another researcher have seen it this way?) or there are doubts about whether newly discovered phenomena are particularly widespread – perhaps they only occur in the few cases that the qualitative researcher has been able to study in depth? What one qualitative researcher means when they describe a phenomenon may be different from what another researcher means, even if they use the same words to label it with. Structured methods try to avoid these problems.

Structured observation, like structured interviewing or the use of self-completion questionnaires, is suitable for projects where the researcher has quite specific questions or hypotheses to investigate. For example, a researcher might ask whether one group of doctors behaves differently from another group when interacting with patients, whether different types of patient are spoken to in different ways by the same doctor, or whether different school teachers vary in how much they allow pupils to ask questions in class. It could be that the researcher wants to know whether particular behaviours are related to other variables, such as coping better with an illness or passing school exams. If the researcher thinks they know what kind of behaviour is important (e.g. asking questions; giving information; eliciting feelings; maintaining eye contact), a standardised observation schedule can be used to categorise different bits of observed behaviour. The advantage of using an observation schedule that someone else has designed and which has been used on other studies is that the study about to be carried out using this same schedule will generate data that is directly comparable with the findings of other research work.

## The Roter Interaction Analysis System (RIAS)

The **Roter Interaction Analysis System** (Roter, 2000) is one of many structured observation tools, in this case a standardised schedule for coding talk in health care encounters. It is designed so that trained users can code interaction as it happens in real time, though ideally by viewing it on a videotape. RIAS and other structured observation tools are not normally used on typed

transcripts of audio-recorded talk, because most researchers using such data collection tools wish to analyse a fairly large number of interactions in order to obtain sample sizes amenable to statistical analysis. To achieve reliability, inter-rater reliability tests involving comparisons of two raters who have independently rated several interactions are carried out (inter-rater reliability tests are discussed in detail in Chapter 26).

Box 11.11 shows the main categories used in this system. You can see that the RIAS divides speech into three broad categories:

- *process* statements, such as asking for clarifications or indicating that one is listening hard
- *affective* or emotional statements, such as providing reassurance or showing concern
- *content* statements, such as asking questions, giving answers or providing advice.

Box 11.12 describes a study in which the RIAS was used to examine communication in medical consultations. The researchers found that South Asian patients who were not fluent in English received significantly different consultations.

### BOX 11.11

#### MAIN CATEGORIES OF THE ROTER INTERACTION ANALYSIS SYSTEM (RIAS)

Process	Affective	Content	None
1. Social behaviour	2. Agreement	10. Asks questions – medical	16. Others
3. Paraphrase	5. Showing concern	11. Asks questions – social	
4. Verbal attention	6. Reassurance	12. Gives info – medical	
8. Giving direction	7. Disagreement	13. Gives info – social	
9. Asking clarification	14. Counsels/directs – medical		
	15. Counsels/directs – social		

Source: adapted from Neal et al., 2006

### BOX 11.12

#### COMMUNICATION BETWEEN SOUTH ASIAN PATIENTS AND GPs

Richard Neal and his colleagues (2006) wanted to compare the ways in which white and South Asian patients communicated with white general practitioners. They video-recorded 101 consultations with white patients and 82 with South Asians (mostly Pakistani and Bangladeshi) involving health centres in four different towns in West Yorkshire, including Bradford. Within the South Asian group, 51 classified themselves as 'fluent' in English and 29 regarded themselves as 'non-fluent', with two unable to be classified in this way.

The speech recorded in the videotapes was coded into categories by two researchers using the RIAS, who first independently coded 18 of the consultations and compared their results, to check whether each coder was coding in the same way. In addition, the researchers timed the length of the consultation, and the time each person spent talking within it.

(Continued)

(Continued)

South Asians fluent in English had the shortest consultations and those who were not fluent had the longest. The consultations with white patients contained significantly more affective statements, largely because of more statements that expressed agreement between doctor and patient. GPs asked most questions in consultations with non-fluent South Asian patients, but also spent the smallest amount of time giving information to this group.

The researchers note that the RIAS categories rigidly required statements which the researchers felt often had several functions under a single heading. They also wondered whether doctors' and patients' behaviour changed because they knew they were being recorded.

### Flanders Interaction Analysis Categories (FIAC)

Another, somewhat simpler structured observation tool which has been used widely in educational research is the **Flanders Interaction Analysis Categories (FIAC)** (Flanders, 1970), shown in Box 11.13. This is designed to be used so that an observer can sit in the corner of a

classroom and code the interaction as it happens. Every three seconds, the observer records the predominant event that has happened during that period, so that 20 numbers are written on the recording sheet during each minute of observation. As you can imagine, this takes some practice, and inter-rater reliability is again an important issue to address, so as to ensure that any one observer is recording events correctly.

#### BOX 11.13

### FLANDERS INTERACTION ANALYSIS CATEGORIES (FIAC)

#### Teacher talk

- Response
  - 1 Accepts feeling
  - 2 Praises or encourages
  - 3 Accepts or uses ideas of pupils
- Initiation
  - 4 Asks questions
  - 5 Lecturing

#### Pupil talk

- 8 Response
- 9 Initiation

#### Silence

- 10 Silence or confusion

Source: after Flanders, 1970

In broad terms, the FIAC can characterise teaching styles in terms of how teacher-centred they are. Clearly, if most of the time teachers occupy category 5 (lecturing), without asking questions (category 4) or allowing any pupil initiation (category 9) they are at the teacher-centred end of the spectrum. If, however, classroom interaction includes a lot of category 9 talk (pupil initiated talk), to which the teacher responds by accepting feelings, praising or encouraging, and accepting and using the ideas put forward by pupils (categories 1, 2 and 3), the teacher is more towards the pupil-centred end of the spectrum. It is possible that teacher-centred and pupil-centred styles have different impacts on pupil learning, so that the ready identification of such styles using the FIAC, if combined with measures of learning outcomes, can be revealing.

FIAC is a simple system which largely expects classroom interaction to occur as a dialogue between the teacher and one or more pupils. Clearly, if a group discussion took place between pupils, categories 8 and 9 would come into play a great deal, but to summarise the complexities of what might happen in such a discussion, these two categories are exceedingly simple. The teacher's behaviour, by contrast, is described by five different categories (1–5), so the FIAC contains the built-in assumption that it is this speaker whose behaviour is going to be of most interest to researchers, which may not be true of some research projects in which pupil behaviour is of greater concern.

Against this, the FIAC (and the RIAS) are both widely used instruments, so the researcher using one of these will be able to compare his or her results with those of many other studies – something which is hard to do when not using an instrument that has become as well established as these two have become.

### Deciding to use structured observation instruments

The researcher planning to use a structured observation instrument therefore faces choices

similar to that of the person wanting to use structured interviews or questionnaires: whether to get a ready-made instrument (or items for a new instrument) 'off-the-shelf', or whether to make one up oneself. The latter choice means that something can be designed that relates precisely to the particular research questions being asked in a project. The former 'off-the-shelf' choice may involve some sacrifice on this front, but may gain the advantage of using something already well-validated and widely used.

If you do decide to construct your own observational instrument, a number of considerations then become relevant. For example, do you want to observe verbal or non-verbal behaviour, or both? In examining speech, do you want to look at 'extra-linguistic' features of speech (such as speaking speed, volume, interruptions), or the content of what is said? Sometimes you want to know how many times something happened, but sometimes you may want to know whether sequences of interaction occur; for example, is a question always followed by an answer? Are answers always followed by a response from the person who asked the question? And how long is devoted to each unit of behaviour that you have recorded? Do you observe a single individual for a period of time, or are you observing the whole group?

As well as deciding what to record and how to record it, you may need to decide whether (1) to devise an instrument that can be used by someone recording the scene who is on the spot, or (2) whether ratings should take place on viewing or hearing electronically recorded events, or (3) whether ratings should be done on the basis of typists' transcripts of talk. Option (3) is the most time-consuming, but perhaps the most reliable and valid approach, especially if combined with option (2). But there is a trade-off here with resources: it may be preferable to go for option (1) if large numbers of events are to be observed economically.

On the other hand, think of reactivity: is the presence of an 'on-the-spot' observer going to change behaviour more than the presence of a

recording device? Observers doing on-the-spot observation have sometimes found that people in the setting try to interact with them, or behave in such a way that it is obvious they are reacting to the presence of an observer. In these situations, it is best to keep researcher interactions with research participants to minimal acknowledgments, and to get people habituated to being observed. If you observe a lot of sessions, you may find that interaction stabilises over time, people interact with you less and participants tell you afterwards that your presence has not affected them.

To develop your own observation schedule you should:

- relate the categories to your research question
- realise that you can't observe everything, so focus on the relevant
- be objective; require as little inference on the part of observers as possible
- define what is in or out of each category clearly
- always be able to assign behaviour to a code, even if an 'other' category
- ensure that categories are mutually exclusive (even if some behaviours attract multiple codes)
- make it easy to record behaviour
- carry out an inter rater-reliability test (see Chapter 26).

Additionally, in developing your categories, an exercise in blind coding (where two people attempt to use the instrument to observe the same event) can be helpful, as this can identify

categories whose definitions are causing problems of interpretation and which therefore need further refinement. This is similar to piloting a questionnaire or an interview schedule.

## Conclusion

This chapter has elaborated a number of basic principles that should guide the design and administration of structured interview schedules, self-completed questionnaires and structured observation schedules. First, we discussed the importance of preliminary conceptual work and expressing the aims and objectives of your study so that good concept-indicator links could be established. The chapter also summarised the advantages and disadvantages of different kinds of self-completed questionnaires and interviews. The chapter then turned to the design of questions and questionnaires, emphasising the importance of good layout, design and question order, as well as other factors that influence response rates. Different levels of measurement and different response formats for questions were described and illustrated. The chapter then discussed the piloting, or testing, of questionnaires and interview schedules in order to develop them. Finally, the use of structured observation instruments was considered in more depth, with the examples of the RIAS and the FIAC to help. Familiarity with these topics should equip you to design and carry out a study involving one of these instruments with a high degree of competence.

## FURTHER READING

Textbooks often do not cover the topic of how to design an interview schedule or self-completed questionnaire at length, although Coolican (2004), Bryman (2001), Bernard (2000) and Robson (2002) all have useful chapters. Coolican discusses several different approaches and offers a good general guide as well as advanced information to new researchers. Bernard and Robson both present a refined discussion of

different ways of approaching self-completed questionnaire design. Croll (1986) is a useful guide to structured classroom observation and Bryman (2001) has a chapter on this.

### Student Reader (Seale, 2004b): relevant readings

- 9 Sir Claus Moser and Graham Kalton: 'Questionnaires'
- 10 Herbert H. Hyman with William J. Cobb, Jacob J. Feldman, Clyde W. Hart and Charles Herbert Stember: 'Interviewing in social research'
- 11 A.N. Oppenheim: 'Attitude scaling methods'
- 12 Kim Sheehan and Mariea Hoy: 'On-line surveys'
- 21 Julius A. Roth: 'Hired hand research'
- 22 Aaron V. Cicourel: 'Fixed-choice questionnaires'
- 23 Cathie Marsh: 'The critics of surveys'
- 24 Hanneke Houtkoop-Steenstra: 'Quality of life assessment interviews'
- 25 R.C. Lewontin: 'Sex lies and social science'

### Journal articles illustrating the methods discussed in this chapter

- Mills, M., Davies, H.T.O., Macrae, W.A. (1994) 'Care of dying patients in hospital', *British Medical Journal*, 309: 583–586.
- Nichols, E. and Childs, J.H. (2009) 'Respondent debriefings conducted by experts: a technique for questionnaire evaluation', *Field Methods*, 21: 115–132.
- Potter, J. (2003) 'Studying the standardized survey as interaction', *Qualitative Research*, 3: 269–278.
- Smith, M.V. (2008) 'Pain experience and the imagined researcher', *Sociology of Health & Illness*, 30 (7): 992–1006.

### Web links

- e-Source: Chapter 4 on 'Sample surveys' by Sarah M Nusser and Michael D Larsen: [www.esourcere-search.org](http://www.esourcere-search.org)
- e-Source: Chapter 5 on 'Social survey data collection' by Stephen Woodland: [www.esourcere-search.org](http://www.esourcere-search.org)
- Survey and questionnaire design: [www.statpac.com/surveys](http://www.statpac.com/surveys)
- Questionnaire Design and Analysis: [www.tardis.ed.ac.uk/~kate/qmcweb/qcont.htm](http://www.tardis.ed.ac.uk/~kate/qmcweb/qcont.htm)
- Observation – some examples: [www.readingrecovery.org/reading\\_recovery/accountability/observation/index.asp](http://www.readingrecovery.org/reading_recovery/accountability/observation/index.asp) and <http://informationr.net/tdw/publ/INISS/Chap1.html>
- Super Survey Knowledge Base: [http://knowledge-base.supersurvey.com/glossary.htm#survey\\_problem](http://knowledge-base.supersurvey.com/glossary.htm#survey_problem)
- Leeds University Guide to the Design of Questionnaires: [http://iss.leeds.ac.uk/info/312/surveys/217/guide\\_to\\_the\\_design\\_of\\_questionnaires](http://iss.leeds.ac.uk/info/312/surveys/217/guide_to_the_design_of_questionnaires)
- StatPac survey and questionnaire design: [www.statpac.com/surveys](http://www.statpac.com/surveys)
- Creative Research Systems: survey design: [www.surveysystem.com/sdesign.htm](http://www.surveysystem.com/sdesign.htm)
- (Structured) observation: [www.grahamtall.co.uk/Observation.htm](http://www.grahamtall.co.uk/Observation.htm)

## KEY CONCEPTS FOR REVIEW

**Advice:** Use these, along with the review questions in the next section, to test your knowledge of the contents of this chapter. Try to define each of the key concepts listed here; if you have understood this chapter you should be able to do this. Check your definitions against the definition in the glossary at the end of the book.

Closed questions	Multidimensional concept
Computer assisted telephone interviewing (CATI)	Nominal variable (categorical)
Concept–indicator links	Open questions
Data entry	Ordinal variables
Email surveys	Roter Interaction Analysis System (RIAS)
Fixed-choice questions	Scheduling
Flanders Interaction Analysis Categories (FIAC)	Skip instructions
Group administered self-completion surveys	Standardising
Household drop-off survey	Web surveys

## Review questions

- 1 What are the advantages and disadvantages of interviews compared with self-completed questionnaires?
- 2 How do telephone interviews differ from face-to-face interviews?
- 3 Look at Box 11.5 and decide how the criteria listed would apply to email and web-based questionnaires.
- 4 Describe the main types of question used on structured interview schedules and self-completion questionnaires.
- 5 Explain the differences between nominal, ordinal, interval and ratio scales or variables.
- 6 What are the advantages and disadvantages of the use of structured observation instruments such as the RIAS or the FIAC?
- 7 What considerations should you bear in mind when designing your own structured observation instrument?

## Workshop and discussion exercises

- 1 Design 10 questions that could be used on a self-completion questionnaire investigating pupils' experiences of sporting activities in school, and type them onto a sheet of paper. Get some fellow students to fill in the questionnaire and ask them the questions in Box 11.9. What items of behaviour would you include if you decided to study the same topic using a structured observation instrument?
- 2 You want to study one of the following groups. In each case, outline the arguments for using either a structured interview, a self-completion questionnaire or structured observation, and describe how you would administer it.
  - Homeless people
  - Ex-offenders

- Politicians
- University students
- School pupils
- Social welfare claimants
- Small business owners
- Magazine readers

- 3 In a group of three or more, design a short interview schedule, containing some open, some closed and some pre-coded questions. The topic may be anything of which people in the group can reasonably be expected to have some experience (e.g. watching or participating in sports events, studying research methods).

One person should use the interview schedule to interview another person in the group while the others observe, considering the following issues:

- What difficulties were there in doing the interview?
- Did the interviewer appear or feel at ease?
- Did the respondent appear or feel at ease?
- Did the respondent find the questions unambiguous and easy to answer?
- Did he or she find them relevant to his or her life experience?

Swap roles, until everyone has had a go at interviewing, replying and observing. How would you now redesign the interview schedule?

- 4 Use the FIAC (Box 11.13) to study interaction in a student seminar. What categories would need to be changed or added in order to more fully reflect what is going on?