
Understanding Social Research

Series Editor: Alan Bryman

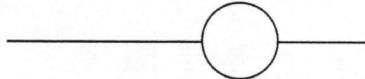
Published titles

Surveying the Social World
Alan Aldridge and Ken Levine

Ethnography
John D. Brewer

Unobtrusive Methods in Social Research
Raymond M. Lee

Biographical Research
Brian Roberts



Surveying the social world
PRINCIPLES AND PRACTICE IN
SURVEY RESEARCH

ALAN ALDRIDGE and KEN LEVINE

2001

Open University Press
Buckingham · Philadelphia

6

Designing the questions: what, when, where, why, how much and how often?

Key elements in this chapter

- Asking meaningful questions
- Handling sensitive issues
- Being clear without being patronizing
- Dealing with ambiguity
- Using open-ended questions
- Minimizing social desirability effects
- Designing interview schedules
- Coding

Understanding what matters to respondents

Surveys are often criticized for being driven entirely by the interests of the researcher. How do we know that what interests us also interests our respondents? This is the problem of salience. Respondents' helpful cooperation does not necessarily show that we have engaged with their real concerns.

Box 6.1 Gauging salience

Open-ended questions

We examine the significance of open-ended questions later in this chapter. For the moment, we simply say that two of the most productive questions the Survey Unit has asked of first-year undergraduate students at the University of Nottingham, UK, are the following:

What would you say you have most liked about being an undergraduate student at the University of Nottingham?

and

What would you say you have most disliked about being an undergraduate student at the University of Nottingham?

Ranking questions

These are closed versions of the open-ended questions given above. We present our respondents with a list of alternatives, and ask them to choose a small number that are the most important to them. Sometimes we ask respondents to rank their selection in order of importance. This technique fails to be avoided, as we explain. But the technicalities stem from something more fundamental, the sociological imagination.

The sociological imagination

Formulating the questions to include in a questionnaire or interview schedule, designing the layout of questionnaires and planning the sequence of questions: all these lie at the heart of survey work and are one of its most enjoyable aspects. There are technicalities to be taken into account and pitfalls to be avoided, as we explain. But the technicalities stem from something more fundamental, the sociological imagination.

Professional sociologists do not have a monopoly on the sociological imagination. It is grounded in social life – above all, in the lives of our respondents. We use our sociological imagination to try to identify the links between public issues and private concerns, between the great issues of our society such as poverty and social exclusion, disability, job insecurity, and the personal experiences of people engaged with them. We ground our imagination by preliminary work such as reading about the topic, talking to people, observing them, piloting our questions and so on.

Question design calls our sociological imagination into play in a number of ways. We need to frame questions that are meaningful, sensitive, precise, searching, and salient to our respondents. We need to construct the questions in such a way that respondents will want to answer them as fully and truthfully as they can.

can be revealing, though it will be very cumbersome if a ranking is required and the list is long. It can also seem somewhat artificial.

Direct questions on salience

We present respondents with a list, asking them to indicate for each item how important it is to them. This approach is blunt, but can be effective.

One very common approach is through a **Likert scale**, thus:

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
--	----------------	-------	---------	----------	-------------------

Catering on campus
is excellent

Halls of residence are
well equipped

and so on.

An alternative way of presenting the response categories is like this:

Strongly agree | 2 3 4 5 Strongly disagree

For each item, respondents are asked to put a ring round the appropriate number.

We suggest later (page 112) that in most cases it is desirable to have an odd numbered scale, normally with five categories, so that there is a middle category. This middle category may be labelled 'neutral', or 'uncertain', or 'neither agree nor disagree'.

Box 6.2 Avoiding unjustified presuppositions and false assumptions

Assumptions and presuppositions are similar but not quite the same.

Fake assumptions

By an 'assumption', we mean something that is taken for granted. All arguments are built on assumptions, but assumptions can be false.

For example, in a postal questionnaire sent to a sample of Church of England clergymen (this was before the church ordained women priests), Aldridge asked respondents the following question:

Is the fundamentalist approach to the Bible valid today?

- Yes
 No
 Uncertain

A very significant minority of respondents objected to this question, on the grounds that the term 'fundamentalist' was not only ambiguous but offensive. Aldridge had falsely assumed that the term was clear and neutral!

Another example known to us is a questionnaire on cremation and burial, which was delivered by post without even a covering letter and which caused distress to many respondents, not least to people who had been recently bereaved. The researchers presumably assumed, falsely, that the topic was not particularly sensitive, and that it could be treated as an unproblematic area of academic enquiry.

Unwarranted presuppositions

By a presupposition, we mean taking the existence of something for granted. The standard philosophical example of this is the question: *Is the present King of France bald?* The point is, of course, that since France is a republic there is no King of France. It is not true that the present king is bald, but nor is it false. In order to ask fruitful questions in our surveys, we need to know what there is and what there isn't in the social world in question. Which of the following posts exist at the University of Nottingham, UK?

- Deputy Pro-Vice-Chancellor
Director of Finance
Dean of the Medical School
Proctor

Answer: the second and third exist, the first and last do not. A well-placed member of the university would know this and could have told you if you had asked. Finding out what exists out there is a vital component of all social

Recognizing differences between respondents

An essential reason for doing a survey is to draw comparisons between respondents. If they all thought and acted alike there would clearly be no point in a survey, since we could simply take one case and generalize from it. Variations between respondents can cause technical difficulties, as we illustrate through the *Travel Survey*, but they are what make a survey worth while. In our experience, making false or dubious assumptions about respondents is one of the most common problems to be overcome.

Box 6.3 Tactics for dealing with ambiguous or unclear terms

Avoidance

The most commonly used terms for a midday meal are *lunch* or *dinner*, and for an evening meal *dinner*, *supper*, or *tea*. One tactic is to use alternatives such as *midday meal*, *main evening meal*, or *main meal of the day*.

Glossing

Another possibility is to gloss the term, that is, to give a brief explanation of what we mean by it. Here are two interview questions [asked only of those respondents who think their soul will live on after death] taken from the Religion and Politics Survey, 1996, conducted by Princeton Survey Research Associates and accessible on the American Religious Data Archive: <http://wwwarda.tn>

- Do you think there is a heaven, where people who have led good lives are eternally rewarded?
 Yes (Believe in heaven)
 No (Don't believe in heaven)
 Don't know/Refused (Don't know if believe in heaven)
- Do you think there is a hell, where people who have led bad lives and die without being sorry are eternally damned?
 Yes (Believe in hell)
 No (Don't believe in hell)
 Don't know/Refused (Don't know if believe in hell)

Using unambiguous language sensitively

Obviously, we want questions that are meaningful, clear, unambiguous, sensitive and revealing. Given the variation between respondents, this is not so easy. There are well-known and not so well-known differences in language use depending on social factors such as age, region, and social class.

An issue that has to be dealt with is the social standing of different usages. In contemporary British usage, supposedly 'correct' usages include these:

- the midday meal is *lunch*, not *dinner*
- the room in which the family gathers (if it does!) is the *sitting room*, not the *living room* or the *lounge*
- a *magazine* should never be called a *book*
- the loo or *lavatory* is not a *toilet*

Many people are highly sensitive to these variations in usage, regarding some of them as impolite, vulgar, or incorrect. How do we avoid ambiguity without patronizing our respondents or 'correcting' their use of English? Some answers are given in Box 6.3.

Clarification
 This is a form of glossing in which we explicitly clarify potential ambiguity. Here is an example from the *Travel Survey*:

On occasions when you travel to the campus by car, where do you park?

Not applicable

In the Science City area

In the central area (including Highfields House, West Drive and Education)

On the periphery (including Halls, History and the Sports Centre)

In this case, the location in our categories of Highfields House and other examples is explicitly clarified. We are in effect glossing what we mean by the central area and the periphery.

Giving examples

In a Survey Unit questionnaire sent to Pre-Registration House Officers in England – people in their final year of basic medical training – respondents were asked about specific formal educational sessions, and then were asked:

Have any other formal educational meetings been arranged (for example, lectures, journal club, X-ray meetings, etc.)?

Giving examples is far more friendly than issuing instructions, but carries the danger of suggesting some answers while possibly distracting attention from others. It is best used when we know that the examples either cover all the main possibilities or send an unambiguous message about what we have in mind. (Incidentally, the question breaks a rule we were taught at school: you do not say 'etc.' if you have already said 'for example'. However, we think that being clear and helpful is more important than being formally 'correct'. On the other hand, many respondents will be shocked to see misspellings, so it is important to check spelling carefully, running a spellcheck program if possible.)

Indirectly eliminating unwanted meanings
This is sometimes possible, though perhaps risky. It depends on respondents picking up cues from the context. Consider the following example:

Over the past seven days, have you bought any of the following?

Please tick all that apply.

- A comic paper
- A newspaper
- A magazine
- A book

In this example, *book* and *magazine* are listed separately, with *magazine* appearing before *book*. The researcher expects the reader to infer from this that *book* is used exclusively of *magazine*.

The role of open-ended questions

Some books warn against using open-ended questions at all in surveys, while others say that open-ended questions should be kept to a strict minimum. Why is this? Three main reasons are given.

- 1 Open-ended questions are more difficult to answer, because respondents or interviewees are called upon to think through (or think up) their answer from scratch, without help from the researcher. This is particularly problematic with questionnaires, since writing an answer requires more time and effort than giving it verbally. If respondents suspect that the reason for open-ended questions is that the researcher has not taken the trouble to think about response categories, this may well affect the response rate and the quality of responses.
- 2 The responses to open-ended questions are more difficult to code, unlike closed questions, where the response categories are pre-coded.
- 3 The responses to open-ended questions are harder to analyse. Partly, this is because of coding problems. In addition, a number of respondents will simply skip over open-ended questions. Open-ended questions typically have a higher rate of non-response than closed questions do.

Despite these real difficulties, open-ended questions can play an important part in survey work, both in questionnaires and interviews. They can be used for a number of purposes.

To introduce variety

Questionnaires and interviews which rely on a very small number of types of question and response – a Yes/No/Don't Know format, for example – may be straightforward, but are also likely to be seen as tedious. One way of introducing variety is through the careful use of open-ended questions.

To tap salience

As discussed above (Box 6.1), open-ended questions can be very useful in helping us to assess the salience of an issue to a respondent.

To show a humanistic approach

Surveys are sometimes thought to be inevitably mundane, boring and insensitive. By using open-ended questions as well as closed ones, we are able to send a clear signal that we approach our research in a humanistic spirit. Our respondents are *informants*, with their own *individual* points of view, which they are quite capable of expressing *in their own words*.

To acknowledge that researchers are not omniscient

In some cases, we have so little idea of what answers might be forthcoming, or the possibilities are so vast, that it is simply not possible to provide respondents with a sensible list of the main alternatives. In the *Travel Survey*, people who cycle to work were asked the open-ended question:

How do you think facilities for cyclists could be improved?

Members of the Survey Unit are not cyclists themselves, and could not easily anticipate what the answers from cyclists would be.

To generate quotations

A few well-chosen quotations from our respondents can convey the flavour of responses far better than any other rhetorical device. We are delivering on our promise to give people a voice. If our survey is being undertaken on behalf of a sponsor, direct quotation from respondents – who may be customers – can have an immediate impact. There will be good news as well as bad. First, the good news, from postgraduate students:

What would you say you have most liked about being a postgraduate student at the University of Nottingham?

'High quality – the experienced teachers, good courses.'
'My lovely friends from all around the world. UK, Taiwan, Turkey, Germany, Greece, Spain, Denmark...'
The safe and beautiful campus.'

The bad news:

What would you say you have most disliked about being a postgraduate student at the University of Nottingham?

'Catering is grossly over-priced, especially sandwiches/hot drinks. The overall feel is of a monopolized market.'
'Lack of proper union facilities, emphasis on halls to exclusion of post-graduates.'

Used judiciously, direct quotations can bring home to readers the salient issues for respondents – an important aspect of the writing of a research report, which is covered in chapter nine.

Occasionally, an open-ended question can produce an unexpected response which can set the researcher thinking more deeply about the issue. A startling example is the following, from a programme of interviews in Islington, London, in 1968 (Abercrombie *et al.* 1970):

Do you believe in God?
'Yes.'

Box 6.4 Making the best use of open-ended questions

Use them sparingly

Open-ended questions require more time and effort on the part of the respondent, particularly in self-completion questionnaires. They are also more difficult to code. As Oppenheim warns (1992: 113), open-ended questions 'are often easy to ask, difficult to answer, and still more difficult to analyse'.

Do not begin with them

It is usually desirable to begin with closed questions, so that the respondent is drawn into the study and rapport is established before the more difficult open-ended format is introduced.

Use them to probe the respondents' view of salient issues

In the survey of postgraduates cited above, two open-ended questions were used to tap into students' best and worst experiences of the university.

Allow an appropriate space for the response

As a general guide, we suggest a space equivalent to three or four lines. Any less, and respondents may conclude that their opinions are not really being taken seriously. Any more, and respondents may feel intimidated or annoyed that an unreasonable effort is being required of them.

Do you believe in a God who can change the course of events on earth?

'No, just the ordinary one.'

This is the only survey question we know of that has given rise to a poem: Donald Davie's 'Ordinary God' (Davie 1988).

- being helpful and cooperative to the researcher by giving the answer they think the researcher wants;
- giving answers that appear to show that they are cultivated people, morally decent, and good citizens;
- demonstrating that they are rational by giving answers that are logical and consistent.

Box 6.5 Tactics for dealing with social desirability effects

- Be specific, asking neither about hypothetical behaviour (*what would you do if?*), nor about regular behaviour (*how often do you?*), but about a specific time period (*what did you do in the last seven days?*).
- Ask indirect questions instead of addressing a sensitive issue head-on.
- Avoid leading questions.
- Make clear – for example in a covering letter – that our research is scientific and ethically neutral.
- Consider using self-completion questionnaires that are completely anonymous and that do not involve personal interaction with a researcher.

sensitive, such as asking about the respondent's age or level of income. Take this example:

Please state your age last birthday:

Under 20

20–30

30–40

40–50

50–60

Over 60

The problem here, obvious once mentioned, is that a respondent aged 30 falls into two categories, namely 20–30 and 30–40. The same problem applies to respondents aged 40 and 50. The categories overlap. The response categories need to be reformulated. For example:

Please state your age last birthday:

Under 20

20–29

30–39

40–49

50–59

60 and over

Questions about respondents' knowledge

Surveys frequently include questions which tap a respondent's knowledge about a given issue – food hygiene, say, or the effects of smoking on health. This is not the same as asking people for their opinions. In a democratic society, a range of opinion is to be expected, but lack of knowledge equates to ignorance, which is socially undesirable. If respondents feel that they are facing some kind of test designed to expose their ignorance, they may be unwilling to participate. In any case, science is always advancing, so we can never be sure we have the complete truth about these questions, and the line between knowledge and opinion is often less clear than we may like to think.

One way of dealing with the potentially intimidating character of knowledge questions is to present them as questions about respondents' opinions. Phrases such as 'in your opinion', 'in your view', and 'from your own experience' may be used to signal this. We can also provide respondents with a 'Don't know' category.

Avoiding overlapping categories

Very often, we ask respondents to indicate where they fall in a particular range. This can help to soften questions that might otherwise be too

Asking about age

Presenting respondents with a set of categories, as above, is one common way in which we can minimize people's sensitivities about age. Instead of asking them exactly how old they are, we ask them to indicate into which age range they fall. For many purposes, this will be all we need. If, however, we need to know respondents' age more precisely, there are some technical problems to overcome.

Consider a child aged 5 years 9 months. How many years old is he? Most respondents will say 5 years, but some, a significant minority, will round the age up to 6. This is a problem when asking about the age of children, but it applies to adults too.

One possibility is to ask respondents to state their age in years and months. This may work reasonably well when asking about young children, though even here there is a small technical problem, in that respondents may round to the nearest month. In any case, we often do not need such precision, and adults typically do not think in these terms about their own age. Another possibility is to ask for date of birth. This is very precise, but can sound excessively bureaucratic and official. A more common solution to avoid the ambiguity is to ask people for their 'age last birthday'.

Avoiding double-barrelled questions

A double-barrelled (or worse, multiple-barrelled) question is one where more than one question is being asked at the same time. For example: 'Do you own a camcorder or video recorder?' is asking about two separate items.

A more subtle example is: 'How often are you in contact with your parents? – here, two people are involved, and the respondents' relations with them may be very different.

One tactic for detecting this problem is to look for the tell-tale words 'and', 'and/or', and the use of the slash, as in cinema/theatre.

In general, the problem of double-barrelled questions is more likely to occur in informal interviews than in structured interviews and self-completion questionnaires. The good news is that such questions are also less of a problem in an informal interview, since any difficulty they cause can easily be repaired. Even so, they are better avoided. Consider the following question:

Do you know if your employer has an equal opportunities policy?

If a respondent says 'Yes', we are right to infer that, unless they are being facetious, they mean that the employer does have such a policy. If they are being facetious, their 'Yes' may mean 'Yes I know the answer, but I'm not going to tell you what it is until you ask the question properly'.

So much for facetiousness. What, then, if the respondent replies 'No'? Here there is a serious doubt: does the respondent mean he does not know, or is he telling us that his employer does not have an equal opportunities policy?

In conversation, phrases such as 'do you know if?' are used to allow room for people not to know the answer to a question without any implication that they are ignorant and *should* know. In social research, even in informal interviews, we should find other ways of making it easy for respondents to say that they don't know.

The main things that go wrong in designing questions, and how to prevent them

Questionnaires that are too long

We should resist the temptation to ask questions out of idle curiosity. Other things being equal, the longer a questionnaire is the lower the response rate will be. The *Travel Survey* is quite short, with a total of 23 questions for staff and 21 for students – and even here, the maximum number of questions any respondent has to answer is only 19. As well as being as concise as possible, the questionnaire needs to be laid out in such a way that it looks manageable.

The same point applies to interviews, which should not be prolonged unnecessarily. In arranging an interview, it is normal to provide respondents with an estimate of how long it is expected to take. Common examples are: around three-quarters of an hour; no more than an hour; between an hour and an hour and a half. It is necessary to provide such estimates so that respondents can set aside enough time for them. But do we need to provide a similar estimate for a self-completion questionnaire? Should we say things like: 'this questionnaire will take around ten minutes to complete'? If we do, we need to make sure that our estimate is accurate, or our false reassurance will be counterproductive. In any case, whatever we say, our respondents will judge for themselves whether or not the questionnaire looks worth their time and trouble. On balance, therefore, we think it is normally better to avoid such promises.

Ranking questions that are too complicated

Ranking questions appear to offer an excellent means for gauging the relative salience of items to the individual respondent. It appears very attractive to offer respondents a list of items, asking them to rank them according to their importance. Surely this will yield a rich body of data for analysis?

Suppose we wish to ask a sample of postgraduate students from other countries about their orientation to their studies in Britain. We might decide to ask a question such as the following:

Tuition fees should not be abolished
Strongly agree Agree Neutral Disagree Strongly disagree

Working out your own position on a negative statement such as this can be perplexing. It is a particularly acute problem for people who disagree with the negative; in this example, they do not agree that tuition fees should not

be abolished – a double negative. It is far simpler to present respondents with a positive statement, such as:

Tuition fees should be abolished
Strongly agree Agree Neutral Disagree Strongly disagree

which is most important and so on down to 9 for the factor which is least important.

To be able to cultivate a wide range of interests

To experience a different culture

To interact with different kinds of people

To develop intellectually

To acquire knowledge and skills to base your career on

To have a full social life

To make new friendships

To develop your sporting abilities

To develop your language skills

What could possibly go wrong with this? Hard experience suggests that a lot can, and probably will:

- Many respondents will not rank all nine items. Instead, they will rank a few – perhaps three of four – and leave the rest blank.
- Some respondents will want to have tied items, and it is very hard to stop them. For example, they may decide that ‘to interact with different kinds of people’ and ‘to develop intellectually’ rank equal second. How will you analyse their response?
- Some respondents will not treat it as a ranking exercise. Instead, they will place an X or a ✓ against the items that matter to them, leaving all the rest blank.
- Some respondents will write in ‘all of them’.

There are two ways of dealing with the problems of ranking.

One possibility is to simplify the task. In the example above, it would be more straightforward to ask respondents to put a ✓ (a tick or a check mark) against the three items that are most important to them. Even so, they would have a long list of complex items to contend with. As another possibility, we could produce a much shorter list – three items, say – and invite respondents to rank them 1, 2, 3. We recommend that five is the maximum number of items that respondents be asked to rank.

Alternatively, we can change the ranking into a rating. The Survey Unit presented the items as follows:

Students tend to have priorities in what they hope to gain from postgraduate study. Judging by what you feel at the moment, please rate how important the following are to you.

Very	Fairly	Not
important	important	important

To be able to cultivate a wide range of interests

To experience a different culture

~ ~ ~ ~ ~

Lack of variety

A very common failing in questionnaire design is to adopt the same format for all or most of the responses. Often, this takes the form of a long series of statements to each of which the response categories are: strongly agree – agree – neutral – disagree – strongly disagree. The layout of such questionnaires may be neat and tidy, but they run the risk of being tedious to complete. A bored respondent is seldom a good informant.

Vague questions about frequency of actions

It is very common, in all types of social survey, to gather information about periodical actions. We want to know how often respondents do things. For example, how often do they go to the theatre? We might envisage the following:

Do you go to the theatre?				
	Often	Sometimes	Rarely	Never

But what does this tell us? Suppose a respondent goes to the theatre roughly once a week. Is that often, or sometimes? If they go once a month, is that often, sometimes or rarely? The problem is, of course, that different respondents will interpret the categories differently, so we shall have only the vaguest idea of the frequency of attendance among our respondents.

Because the response categories are vague, the danger of social desirability effects is particularly acute. Going to the theatre is a relatively high-status activity, suggesting an active interest in the arts and the intellectual life. Over-reporting may be a problem. In the case of more socially dubious activities – going to the dogs, perhaps? – under-reporting is more likely.

One way of dealing with periodical behaviour is to offer more specific categories of response, such as:

How often on average do you go to the theatre?					
	More than once	Once a week	Once a month	Once a year	Never
	a week				

A difficulty with this is that the response categories, though commonsensical, are not exhaustive. What about someone who goes to the theatre on average every other week – that is, twice a month or six times a year? We have no category for her, and for others whose periodicity does not fit into our categories.

Another problem with this approach is that it assumes that the behaviour in question is regular, an assumption which may be false. Some people go to the theatre several times during holiday periods, but not at all at other times. We have introduced the phrase ‘on average’ into the question, to try to deal with this difficulty, but a difficulty it remains.

Perhaps we should tighten up the response categories. Thus, for example:

How often do you go to the theatre?	1–5 times	11–20 times	Over 20 times
Never	a year	a year	a year

The gain in precision has been bought at the cost of extreme artificiality.

A wholly different approach is to ask people about their behaviour over a specified time period. We might ask them how often they have been over the last week, or the last month, or the last year. This has the advantage of being specific. There are, however, a number of problems to be tackled if this approach is adopted.

To start with, there is considerable ambiguity in asking about weeks or months or years. Imagine a respondent filling out a questionnaire on Friday 18 November. What will she or he understand by the phrase, 'over the last week'? Does it mean the period since Sunday 13 November (Sunday being the first day of the Christian week)? Does it mean the period since Monday 14 November (Monday being for many people the first day of the working week)? Or does it mean the seven days since Saturday 12 November? In many cases, researchers probably mean seven days – in which case we need to say so.

If we use the phrase 'over the last month', this might mean the period since the beginning of the month, or the last 30/31 days, or, more roughly, the last four weeks.

As for years, 'over the last year' might mean the period since the beginning of the year, or the last 365/366 days. In some situations, it will not be clear whether the year referred to is the calendar year beginning 1 January or some other year, such as the financial year or the academic year. In the case of 'over the last twelve months', the fact that we might be a few days short of a full year is unlikely to matter – the period is long enough for it to be a trivial issue.

In contrast, asking people what they did 'yesterday' is not ambiguous. It minimizes the problems of memory recall. The longer the time period the greater the opportunity for memory to be coloured by self-image. A short time period therefore helps to combat social desirability effects.

One potential problem with asking about behaviour 'yesterday' is that it may have been an unusual day. A respondent who, say, has two glasses of wine every day may not have had a drink on that particular day for some special and not often to be repeated reason. In some cases this will not matter. If we have a large sample of respondents, and if we are interested in aggregate data rather than in individuals, these variations will be very minor and will probably be cancelled out (another respondent will, unusually for her, have drunk two glasses of wine on a special occasion).

What will matter is if the time period is exceptional for a significant number of respondents. If we interview people on 2 January about their

eating and drinking over the 'last seven days, we have chosen a period which in many societies is a major feast, and not typical of the rest of the year.

Unless over-indulgence at Christmas and New Year is the object of our research, we should choose another period. This is an obvious example, but there are many others where we need to be careful: holidays, the holy days of faiths other than our own, and the beginning and end of cycles such as academic terms.

Selecting a sensible and meaningful time frame is not impossible, but requires some thought and often a little research. The most effective way of asking about periodical actions will vary from case to case. Given that point, Box 6.6 lists some general guidelines, all based on the need to be as specific and unambiguous as possible.

Box 6.6 Asking about periodical actions

- Avoid 'often – sometimes – occasionally – never' and variants on the theme. Such terms are vague, and mean different things to different people.
- Do not ask about 'the last week', ask about 'the last seven days'.
- If asking about a year, be clear what period is meant – for example, 'since 1 January', 'since the start of the academic year', 'over the last twelve months'.
- Keep the time period as short as you sensibly can, to minimize problems of memory recall and social desirability effects.
- Make sure the time period is meaningful, and sensibly matches the periodicity of the behaviour in question.
- Make sure the time frame is not an unusual one – unless that is the point of the research.

Lack of clarity about confidentiality and anonymity

If we tell respondents that our questionnaire is anonymous, it means that we have no way of identifying which questionnaire belongs to which respondent. This is a strong reassurance, and obviously impossible in interview situations. Even in a self-completion questionnaire, anonymity can be problematic, as discussed on page 23. For example, consider a survey of university staff that asks respondents to state their sex, their rank, and their academic department. Clearly, the researchers could more confidently guarantee anonymity to a male lecturer in a large engineering department than it could to a female professor in a small department of economics. Since anonymity is an absolute categorical guarantee, we need to be sure we can genuinely deliver it.

If we offer our respondents confidentiality, we need to be clear what is involved. The researchers, after all, know who has said what. Confidentiality means that we will not disclose this information to anyone else. Guarantees of confidentiality typically involve the following:

- the use of pseudonyms to disguise the names of respondents, places and organizations;
- changing minor and irrelevant details in order to disguise these names;
- keeping the data securely;
- not allowing access to the data to anyone outside the research team; destroying the data at the end of the project, or anonymising it and placing it in an archive.

The most frequently raised problems, and our answers

In our experience, there are a number of issues that repeatedly trouble people when designing questions. The issues most commonly raised with us, and our responses to them, are these.

Should I include a middle category?

For example, in asking respondents about their level of agreement or disagreement with a statement, which of the following Likert scales is preferable?

Strongly agree	Agree	Disagree	Strongly disagree
Strongly agree	Agree	Neutral	Disagree
1	2	3	4
lively	dull	friendly	unfriendly

Some researchers worry that if they include the middle category it will be too attractive. Respondents will simply duck the question and take the easy way out. Therefore, so the argument runs, it is better to force respondents into giving either a positive or a negative answer.

Against this is the point that respondents may legitimately be neutral. Forcing them into either the pro- or the anti-camp is artificial, and can be extremely annoying to people who are genuinely neutral on an issue.

Another version of this problem arises in the use of semantic differential scales, where respondents are asked to rate their views on a bipolar numerical scale, with opposing adjectives at each pole. Here is an example, taken from the Survey Unit's omnibus questionnaires. Students are presented with a series of terms describing the university, and asked to put a ring round the number which comes closest to their own view, thus:

lively	1 2 3 4 5	dull
friendly	1 2 3 4 5	unfriendly

When using such scales, we recommend having either five or seven ratings – more is too complicated and adds very little.

With an odd number of response categories there is a middle position – here, response category 3. But if we presented respondents with an even number of categories, thus:

lively	1	2	3	4	5	6	dull
friendly	1	2	3	4	5	6	unfriendly

we would deny them the middle option. This way of approaching the problem is a little less obvious than the earlier example, but even so it is artificial and potentially annoying.

In short, we recommend that a middle category be provided unless there are compelling reasons for not doing so. If questionnaires are well designed, respondents will not give a neutral answer merely because they are bored or intimidated. If respondents are neutral or indifferent to an item, that is a worthwhile finding.

Should I include a 'don't know' category?

This is a similar problem with a similar answer. Whenever respondents can sensibly be thought not to know about an item, or to be uncertain about it, we should allow them to express their doubt or uncertainty. Suppressing the possibility of legitimate 'don't knows' and 'uncertains' merely distorts the social reality, and may be very off-putting to respondents. If a substantial percentage of our respondents say they don't know about an item, that is not a problem but a finding.

Should it be sex, or gender?

Among the basic information we gather in a survey, we usually want to know whether our respondents are male or female. In an interview we do not need to ask, and it would be absurd to do so. But what about a self-completion questionnaire? Should we label this variable sex, or *gender*?

This is an extremely complex issue. At first sight, the answer is clear-cut: it should be sex. Until recently, sex was invariably the label used on questionnaires. The distinction drawn by sociologists is between sex as biologically given (male and female), and gender as socially constructed (masculine and feminine). But this raises a host of theoretical, philosophical and ideological issues. Sociologists have become increasingly concerned about the implication of biological determinism that is frequently read into the term 'sex'. The same holds true of 'race', a term which is now usually placed inside inverted commas to show that we repudiate all bogus theories of race and racial superiority, recognizing instead our common humanity. Nowadays we rightly ask about ethnicity, not 'race'. In a similar fashion, rightly

or wrongly, 'sex' is coming to be a suspect term as far as questionnaires are concerned. Some people prefer 'gender'; but others dismiss this as misplaced 'political correctness'.

The answer is definitely not to duck the question completely. So much of social life is structured by gendered inequalities between the sexes that to fail to record the sex of our respondents is to capitulate to ignorance.

Fortunately, we can deal with the problem by formulating our question as follows:

- Are you:
 Female Male

Questionnaire layout

As well as framing individual questions that are as accurate, searching and sensitive as we can make them, we also need to ensure that the overall layout of a questionnaire (and the structure of an interview schedule) is clear, coherent and sensitive. A few simple guidelines should help. In Box 6.7, we comment on how we applied these in the *Travel Survey*.

Introduction

A few sentences briefly introducing the questionnaire, including any overall guidance on its completion, are a must. It does not matter if they repeat some of the matters dealt with in the covering letter.

Instructions

As well as any overall guidance on the completion of the questionnaire, we need to make clear to respondents how individual questions are to be answered. In the *Travel Survey*, you will see that we have given instructions such as 'Please \ one box' or 'Please \ all that apply'.

Sections

It is often helpful to respondents, particularly if the questionnaire is fairly long, to divide it into sections, each with a brief introduction to set the scene. Our omnibus survey of postgraduate international students contained the following sections:

- *Section A – Before you came*
- In this first section we are interested in your reasons for choosing the University of Nottingham and your particular postgraduate research/course.

• Section B – Now you are here

In this section we are interested in your opinions and experiences of the University as a postgraduate.

• Section C – Use of the Internet

Increasing numbers of students are now using the Internet and the University of Nottingham's Web site for information. In the next few questions we want to ask you about your use of this technology.

• Section D – Research students only

This section is for students registered for MPhil and PhD degrees. If you are studying for any other postgraduate qualifications please go directly to section E.

• Section E – Background details

In this section we ask a few questions about yourself and your degree course/research.

Use of columns

If possible, it is a good idea to divide each sheet of the questionnaire into two columns. This uses the space efficiently; it cuts down on unnecessary blank space, and it prevents questions from straggling across the page. Questions should be numbered vertically down the columns, as in the *Travel Survey*:

like this:	1	4	not like this:	1	2
	2	5		3	4
	3	6		5	6

Question numbering

Numbering the questions is essential in order to avoid confusion. Some writers suggest that questions can have subletters (3a, 3b, 3c and so on). Their main reason for this is that it makes the total number of questions seem less than it is. We believe, however, that it is possibly confusing and tends to look fussy, so we recommend that questions are numbered 1, 2, 3 and so on without any sublettering. Where an overall question has a number of particular examples – as in questions 13 and 14 on the *Travel Survey* – there is no need for separate numbering; they can all be presented under the one question.

Sequence of questions

If possible, we begin with relatively straightforward questions that will be easy to answer. These will 'break the ice', building up the respondent's confidence in the survey. More complex and subtle questions are introduced later. If we wish to ask questions about personal matters such as age, sex,

ethnicity, income, and marital status, these are normally placed at the end, by which time we hope to have gained the respondent's full confidence. An alternative is to put these questions at the very beginning, which is why they are sometimes known as 'face-sheet data'. Although bureaucratically neat, in that it 'gets them out of the way', we believe that starting this way is potentially off-putting, and we do not recommend it.

Question skips

It is often impossible to devise a questionnaire in such a way that all the questions are appropriate for everyone to answer. We may well need to have filter questions; depending on your answer to a filter question, you either go on to the next question or skip to a later one.

Too many question skips can be extremely confusing, and can make a questionnaire look cluttered. We therefore try to keep the number of filter questions to the absolute minimum, and to be as clear as possible about where we expect respondents to skip to. This is one of the reasons why questions should be numbered.

Filter questions often take the following form. Question 3 asks respondents if they play a musical instrument. If yes, they go on to answer questions 4, 5 and 6, which ask which instruments they play, how often they do so, and how much they enjoy it. If the answer to question 3 is no, then clearly questions 4 to 6 are irrelevant, so we need to instruct respondents: 'If no, please go to question 7'. Too much of this can be confusing, and sometimes rather annoying: if respondents have to keep skipping questions, it may seem as if the questionnaire is not really designed for them at all.

One way to minimize the confusion and potential annoyance is to include the skip within the question. Here is an example from the omnibus survey of international postgraduates:

Have you received any information about postgraduate training courses since you began your degree?

Can't remember	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
↓					
Please <input checked="" type="checkbox"/> all that apply					

If yes, who was offering to provide the courses advertised?

- Training body outside the University
- The University Graduate School
- Faculty/Department
- Unsure who the provider was
- Other (please specify the provider)

Another possibility is to require respondents to skip to a whole new section, as a way of eliminating confusion.

If a questionnaire has more than one or two question skips, it may well be a sign that something is wrong. Probably we are trying to survey too many different groups of people about too many different things. Perhaps we can cut out some of the questions? If not, then perhaps we can send different questionnaires to different groups? For example, the Survey Unit devised two versions of the *Travel Survey* questionnaire, one for students and one for staff. The main questions were exactly the same; all that differed were questions about the respondents' work.

Sending different questionnaires to different categories of respondent can obviously only be done if we can identify in advance the category to which a respondent belongs. What if we cannot do so? One possibility is to abandon the idea that we can conduct the research by self-completion questionnaire, which is simply too inflexible an instrument for our purposes. We should consider interviewing respondents. One advantage of the interview format is that it is the interviewer, not the respondent, who has to do the skipping.

Conclusion

Here we thank our respondents for their cooperation. We may invite them to offer any further comments at the end of the questionnaire or on an additional sheet. We must also remember to let them know or remind them how to return the questionnaire to us. For example:

Thank you for taking the time to complete this questionnaire. If you would like to make any further comments please attach a piece of paper. Please return the questionnaire in the FREEPOST envelope provided either in the internal or external mail.

Box 6.7 The layout of the *Travel Survey*

The *Travel Survey* illustrates these principles in action. Each survey has its own particular difficulties to be overcome. We have already mentioned, on this page, the problem of designing a questionnaire suitable for both students and staff. In the end, a separate questionnaire was sent to each.

The sequence of questions was straightforward. We began with factual questions about respondents' journey to work, such as the distance from home to work, the time taken and the means of transport used. We then moved to questions which ask respondents for suggestions about how facilities could be improved. These questions require a little more reflection, but they may also appeal to respondents since they give them an

opportunity to have an influence on improving the University's provision. Finally, we ask a series of more personal questions. We hope that, having completed the earlier parts of our questionnaire, respondents will have confidence in us and our research. We offer the guarantee that 'under no circumstances will attempts be made to identify individuals'. Even though the questionnaire is anonymous this reassurance is still necessary, particularly so for people in a minority – a woman technician, for example.

If the sequence of questions was easy to decide, a far more troublesome issue was the sheer complexity of many people's journeys to work. People do not necessarily use the same means of transport every day of the week or every week of the year. Some variations follow a regular pattern, others are unpredictable. A car driver may use the bus on Fridays, when her partner has the car to visit his parents. A pedestrian or cyclist may take the bus or a taxi if it is raining heavily. A member of staff may use the car during school term time, in order to drop children off at school; outside school term, the parent may cycle to work. Some people have long and complicated journeys to work; they drive or walk to the railway station in Derby, depending on the weather, catch the train to Nottingham (or Beeston, if that particular train stops there), and then take a bus or a taxi to the university depending on the time and the state of their finances.

The Survey Unit's questions had to be sensitive to all these possibilities, while keeping the questionnaire short and straightforward. Hence, for example, question 3: *What mode of transport do you use most often for the longest stage of your journey to campus?*

We also faced the problem of question skips. We wanted to ask people for their suggestions about how facilities could be improved. However, we did not want to ask car drivers to speculate about the needs of cyclists, or pedestrians to address what they guessed might be the concerns of people using public transport. Instead, we wished to ask people about problems with which they were themselves familiar. Hence the format of questions 8 to 14. We used a combination of visual and verbal signals (the instructions, the shading, and enclosing questions 8 to 14 within a border) to indicate who should answer which questions. The outcome, which appeared to be successful, is deceptively simple – but it took time to get it right.

Designing interview schedules

So far, we have concentrated on the design of self-completion questionnaires. What about interview schedules? Essentially, the same principles apply. Even though the interview has the advantage that the researcher can explain any unexpected difficulties and try

to smooth over any sensitive items, this is no excuse for poor design. As much thought needs to go into an interview schedule as into a self-completion questionnaire. This is true even when the interview is informal and unstructured. The interviewer needs to be become very familiar with the interview schedule or guide, so that the interview can proceed smoothly without the distraction of the interviewer fumbling for the next item.

The principles governing the sequence of items are the same as for self-completion questionnaires. Questions about personal details are usually held back until the end. As with questionnaires, it is helpful to indicate to interviewees any significant changes of topic within the interview. Here is the way in which Saunders (1990) introduced the various sections of his interviews with home owners in the UK:

I would like to begin by asking a few questions about your past and present housing.

I'm interested in getting some idea of how you spend your spare time. I would now like to ask a few questions about your household's income and outgoings.

Finally, returning to the theme of your house and home . . .

Among the specific issues arising in the planning and execution of interviews, and not covered by our discussion of self-completion questionnaires, the most important are: using probes; using show cards, including prompts; recording the responses; and responding to interviewees' queries. We deal with each of these in turn.

Probes

Probes may be classified into two types: probes seeking more detailed factual information, and probes designed to encourage respondents to elaborate on their opinions or accounts of their own experience.

In a structured interview, we may need to probe respondents for fuller or more detailed information. In order to decide on what probes to use, we need to know exactly what information we require.

Unless an interview is entirely structured, there are likely to be occasions when we want to draw our interviewees out, asking them not merely for more information but also to expand on their thoughts, feelings and experiences. We do not, however, wish our interview to seem like an interrogation or inquisition.

Box 6.8 gives a list of ways in which we can probe for a fuller response. We list them in order of intrusiveness, with the least intrusive first.

Box 6.8 Some sample probes for eliciting a fuller response

- 1 An expectant pause.
- 2 An encouraging sound: 'mnmnm', 'uh-huh'.
- 3 Repeating part or all of the interviewee's reply: 'So, you switched to sociology after your first year at university?'
- 4 Summarizing their response: 'So, your reason for switching to sociology was that you were aiming for a career in market research?'
- 5 Asking for an example: 'Can you give me an example of the problems you had with economics?'
- 6 Asking for clarification: 'I'm not quite sure I've understood why you were unhappy with economics. Could you tell me a little more?'

It is desirable to make this kind of probe as unthreatening as possible. An expectant pause is often enough. Silences, if they appear in danger of becoming embarrassing, can be filled with 'mnmnm's and 'uh-huh's, perhaps nodding the head to indicate encouragement. Repeating part or all of what the interviewee has said is often very effective in moving the interviewee to elaborate their earlier response.

These ways of probing are typically more effective than bluntly asking for 'more details'. Although it is tempting to probe by asking, 'Is there anything more you would like to say?' or 'Is there anything you would like to add?', these are as much ways of bringing a topic to an end as they are of opening it up. They invite responses such as, 'No, that's about it', or 'I can't think of anything else, no'.

Show cards

We often want to ask a series of questions which have the same response categories. One way of handling this would be to ask: 'Would you say that you are very satisfied, satisfied, neutral, dissatisfied or very dissatisfied with the following?' followed by reading out each item in turn. This can be awkward, because it relies on the respondent's remembering what the response categories were. The longer the list, the greater the problem is likely to be. Respondents may say things like: 'I'm not very satisfied, no.' The problem will be that we do not know whether to record this as 'dissatisfied' or 'very dissatisfied', so we will have to ask, 'Does that mean that you are dissatisfied or very dissatisfied?' The respondent may feel that he is being corrected in some way for having failed to remember what the appropriate response categories were.

This difficulty is avoided by having the response categories written out on a show card, which we hand to the respondent. In this example, the response card is acting as a prompt or reminder to the respondent.

A II action as normes show cards can be used to present lists of

items to respondents, for example asking respondents to indicate which items they possess from a list of consumer goods. Similarly, a list of age bands or income brackets is typically given to respondents on a show card. Show cards are also used to present material to respondents for comment. Vignettes are typically presented in this way. Interesting examples of vignettes may be found in Finch and Mason (1993) *Negotiating Family Responsibilities*.

Responding to interviewees' queries

In an interview, it is not uncommon for respondents to raise queries and questions. If these are points of clarification, or reassurance about confidentiality, we should be in a position to reply to them openly and straightforwardly.

In some cases, particularly in less structured interviews, respondents may ask questions about the interviewers' own beliefs and experiences. For example, in his interviews with clergy Aldridge was asked about his own religious beliefs or lack of them. His response was to say that he would be very happy to talk about those issues at the end of the interview, but would like for the moment to concentrate on the interviewee's own beliefs and experiences. Respondents were invariably happy to proceed in that way.

Recording the responses

In unstructured and semi-structured interviews, the researcher will typically be recording the responses as she goes along. Just as self-completion questionnaires have to be easy for the respondent to complete, so interview schedules have to be clear and straightforward for the interviewer.

Things will be made easier if there is a clear visual distinction between the questions to be asked of the respondent, and instructions to the interviewer about question skips and probes. Very often, the instructions to the interviewer are printed in bold capital letters.

Unstructured interviews will usually be tape recorded, with the interviewee's agreement, whereas there is no point in taping a fully structured interview. What about semi-structured interviews? If there is a large number of open-ended questions, it may be worth recording the interview and transcribing the relevant parts of it. Full transcription is time-consuming: even with a transcription machine, for every hour's worth of recording you should allow five hours for transcription.

Setting up for coding

When designing a questionnaire or schedule, we need to look ahead to the stage at which we will be analysing the data. All but the simplest surveys will call for inputting the data into a computer.

In self-completion questionnaires and structured interview schedules, all or most of the items will be **pre-coded** questions. We decide in advance what all the categories of response will be. In order to simplify and speed up the process of entering data into the computer, it is helpful to have numbers, in clear but unobtrusive typeface, by the side of each of the response categories. The *Travel Survey* shows how this is done. Question 3, for example, looks like this:

3 Which mode of transport do you use most often for the longest stage of your journey to work?

Please all that apply

- | | |
|------------------------|------------------------------|
| Walk | <input type="checkbox"/> [1] |
| Bicycle | <input type="checkbox"/> [2] |
| Rail | <input type="checkbox"/> [3] |
| Bus | <input type="checkbox"/> [4] |
| Car as driver | <input type="checkbox"/> [5] |
| Car as passenger | <input type="checkbox"/> [6] |
| Motorbike as driver | <input type="checkbox"/> [7] |
| Motorbike as passenger | <input type="checkbox"/> [8] |

Even where respondents are presented with an open-ended question, we sometimes precode the responses. This is only possible where we have a reasonably clear idea of what the responses are likely to be. Where we have little idea, or where the range of potential answers is unmanageably large, then precoding is not possible. The open-ended questions on the *Travel Survey* (questions 8, 9, 12, and the last part of 13) were not precoded. With open-ended questions, the problem of coding can be acute. Respondents express themselves in their own unique way, and we have to classify their responses under a predetermined heading. Where more than one person is involved in coding, consistency is even more difficult to achieve. Consistency is a problem, but the need to use our imagination and insight to interpret respondents' answers is not a problem but essential to the sociological imagination.

Key summary points

- Question design engages the sociological imagination
- Surveys can explore sensitive issues
- Technical problems can be overcome

Points for reflection

- Would you enjoy completing the questionnaire you have designed? – or taking part in the interview whose schedule you have produced?
- Are there any questions you are asking merely out of idle curiosity?

Further reading

Oppenheim (1992) *Questionnaire Design, Interviewing and Attitude Measurement* (new edition) is a clear and thorough guide. Devine and Heath (1999) *Sociological Research Methods in Context* examines eight major sociological studies, six of which used a survey as one part of their research strategy.