Writing effective questions 09

Introduction

Previous chapters have considered the choice of question type and highlighted issues and limitations that affect how people answer questions. In this chapter we focus on how the writer creates the questions themselves and some of the practical choices influencing how the questions are implemented, including:

- language, words and phrases;
- determining response options;
- order of response options and possible bias;
- use of pictorial prompts;
- influence of preceding questions.

First, though, this box lists some of the main points of guidance for question writing which will be addressed in this and following chapters.

Key dos and don'ts for writing questions

- Avoid ambiguity. Everyone should understand it in the same way and as you meant it to be understood.
- Don't ask two questions in one. (eg 'Was the waiter friendly *and* efficient?')
- Avoid double negatives. (eg 'Do you agree or disagree that X is *not* good value for money.')
- Use simple, everyday language. (eg 'How *often* do you…' not 'How *frequently* do you…')

- Don't use jargon or technical terms. (eg 'What do you think of this *idea*?' not 'What do you think of this *concept*?')
- Keep any explanations of terms separate so the question is still clear.
- Have options for all possible responses – include 'other' to catch minority responses.
- Make sure response options don't overlap and that differences between similar items are clear.
- Is one answer required or can the respondent choose several? Make this obvious.
- Avoid list items drawing the eye more than others simply by being different. (eg longer or shorter terms.)
- Use manageable time frames for memory recall.
- Match the level of detail with what will feel sensible and relevant to the respondent.
- Avoid questions where the answer could be 'it depends'.
- Make the thinking task as simple as possible – no maths!
- Don't make the respondent feel ignorant.
- Don't make the respondent feel they are different from other people.
- Don't ask leading questions that suggest there is a right answer – balance with all sides of the issue.
- Consider whether you are revealing too early what you are most interested in. (eg response options that focus on one issue more than others.)
- Consider the frame of reference set by previous questions.
- Don't vary terms unnecessarily – keep consistency across questions and highlight any deliberate change of focus.

Use of language

We have said earlier that a role of the questionnaire is to manage, at scale, a conversation between the researcher and respondents. In a normal conversation, however, the two parties involved draw on knowledge of each other in choosing their words to convey the meaning they want. This is known as 'audience design'. For example, how you might phrase a question for your grandmother might be different from how you phrase it for your friend. The answer they give may also be tailored to reflect what they know about your motivations for asking the question. In a questionnaire however, the questions cannot be framed for individual respondents.

In normal conversations there is also the opportunity to check that each party has understood what the other has said and that is has entered their common ground. This grounding can come from a simple acknowledgement (such as 'uh-huh' or 'ok'); from a request for further explanation; or from clarification volunteered by the questioner if it is clear that they have not been understood. With self-completion questionnaires this grounding interaction is not possible. Where an interviewer is involved, some level of grounding might be feasible, however, to avoid introducing bias interviewers are deliberately restricted in the type of clarification they can give. Often, all the interviewer can do is to repeat the question or give a general indication of the level of detail that a question is aiming for. They are trained to avoid elaboration of individual words. Apart from potentially introducing bias, the interviewers themselves may not understand precisely what is meant and pass on their misinterpretation to respondents.

Writing questionnaires is about helping respondents give the best information that they can. Questions should be clear and unambiguous so that they are understood in a common way by all. They should be phrased in everyday language to which the respondents can relate, and in ways that reflect their normal thought processes so that the answers they give are realistic. Because technical terms are often the everyday language of the commissioners of the study, they do not always appreciate that others outside their industry or profession might not understand them or might understand something different by them. Sometimes technical terms are used to describe something, or to differentiate between objects or services, with far greater subtlety than the non-specialist can appreciate. To most motorists a petrol pump is a petrol pump, and they would not distinguish between a 'high line fast flow' and a 'grouped hose blender'. Researchers must ask themselves if it is necessary for the respondent to be able to distinguish between them in the interview. If it is, then the differences must be clearly explained, if possible, without reference to the technical terminology.

The respondent should be put at ease by the tone of the questions and not feel challenged or irritated by the words and phrases used. Respondents who become alienated or fatigued will decide to stop the interview or will make little effort to respond accurately.

Minority language versions

Clearly if a questionnaire is to be used in several countries there will be a need to translate it into different languages. Chapter 17 looks at the issues of designing for multi-country projects in more detail, however even within one country translation may be needed if the sample is likely to include people who speak a language other than the majority language; or whose command of that language is unlikely to be sufficiently good to be able to complete an interview in it. By denying sections of the survey population the opportunity to participate in the study, the questionnaire writer is effectively disenfranchising them from influencing the findings.

This is most likely to be a concern in studies commissioned by the public sector. In the UK, many government studies require questionnaire versions in Welsh, Urdu and Hindi among other languages, and in the United States a Spanish-language version is often required.

The relevance of minority-language speakers to the study will naturally vary by the subject of the study and the degree of accuracy required in the data. For a study of housing conditions, it is likely to be important that recently arrived immigrant communities are represented in the sample.

For most commercial studies the difference that a small number of non-majority language-speaking consumers make to key conclusions from the research is likely to be small, particularly in comparison to the variation caused by sampling error, non-response rates and even interviewer error.

Avoiding ambiguity

Ambiguity is a major challenge for the question writer in choosing the exact words and phrases to use.

While some respondents may see the ambiguity and make a decision on which way to answer, others may not see it and understand it in a way that was not intended. Either way, the researcher using the data does not know the basis on which the respondent has answered.

Ambiguity is not always easy to spot. It is not always possible to anticipate every respondent's circumstances, and a question that may not be ambiguous to most respondents may, because of their circumstances, contain an ambiguity for a few. For example, 'How many bedrooms are there in your property?' is likely to be a simple question for most people. But what is meant by a bedroom? If someone has a study that doubles as an occasional spare bedroom, should that be included?

In most instances this level of ambiguity will not be a major issue. Where the number of bedrooms is collected as classification data to provide a cross-analysis of data by approximate size of house, then this degree of ambiguity may be acceptable to the researchers. Where this information is central to the data collected, say in a study of housing conditions, then the ambiguity must be addressed (eg possibly expanding the question to ask the number of rooms currently used as bedrooms, the number occasionally used as bedrooms and the number that could be used as bedrooms).

Online self-completion vs interviewer surveys

In an online survey the priority is to keep the reading task as succinct as possible to maintain motivation. Researchers who conduct pilots to understand how respondents are completing their questionnaires soon realize that often the question itself only receives a glance – and then the attention drops to the answer options. Therefore, practical guidelines include:

- Keep question wording as short as possible – 10–12 words maximum if you can.
- Keep key words at the beginning of the question.
- Use response codes as part of the question. (eg 'Have you heard of… [response list]?')
- Remove padding. (eg 'Which of the following…')
- Use pleasantries sparingly.

For interviewer surveys the key difference is that the wording used should also help the interviewer build rapport with the respondent. Questions should not be overly wordy, but if they are too succinct the interview can begin to feel like an interrogation. Therefore, there can be slightly more preamble to questions and more pleasantries.

Determining the response options

A quantitative questionnaire will rely largely on questions that involve pre-coded response options rather than verbatim/open-ended inputs. These pre-codes therefore determine what data is collected, so if they have insufficient accuracy or are incomplete, then data will be lost that may be important to answering the objectives. In many instances the response options needed will be obvious (eg simple 'yes/no' pre-codes), but in others care must be taken to ensure that they are:

- as precise as necessary;
- meaningful – making sense to the respondent and being useful to the researcher;
- mutually exclusive and distinct so there is no ambiguity about which is chosen;
- complete – with 'other' being provided to record minority responses.

If there are a lot of 'other' answers written in, the question would have been better recorded as an open-ended one.

Failure to record the reply accurately or completely

The response to the question, 'do you like eating pizza?' sounds as if it should be a simple 'yes' or 'no', but respondents may wish to qualify the answer depending on whether it is home-made or shop-bought; by the toppings or the occasion. If they are unable to do so, an answer of 'don't know' may be recorded. Whatever is recorded is not the complete response.

It is common to see a question establishing behaviour patterns given the possible answers:

- More than once a week
- Once a week
- Once a month
- Once every three months
- Less often than once every three months

The question could have been: 'How often do you visit the cinema?' How would someone who went to the cinema twice in the last week and not at all in the three months before that respond? They would have to judge which is the least inaccurate response.

The alternatives – allowing for all possible responses – could become complicated, both to understand and to analyze. A judgement is needed as to whether this type of situation is likely to occur for the majority; in which case an alternative approach needs to be found, or for a very small minority; in which case the inaccuracy may need to be accepted as a compromise.

Order bias

If the question involves prompted response options, whether on screen or read out by an interviewer, the order they are presented can have a significant effect on the responses recorded. Such bias can occur with:

- scalar responses (eg rating scales or frequency scales);
- any list from which responses are chosen;
- batteries of attitude or image dimensions.

The questionnaire writer must consider how to minimize the order bias for each of these.

Scalar responses

Primacy and recency effects

Artingstall (1978) showed that when respondents are given a scale (eg a rating or frequency scale) in face-to-face interviewing they are significantly more likely to choose the first response offered than the last. This is known as the 'primacy effect'. Thus, if the positive end of a scale is always presented first a more favourable result will be found than if the negative end of the scale is always first. The finding held true for any length of scale (by an increase of about 8 per cent in positive responses) and was independent from the demographic profile of the respondents.

What this and other work shows is that the order of presentation has an effect. It does not say which order gives the best representation of the truth. However, it underlines the need to be consistent in the order in which scales are shown if comparisons are to be made between studies. One approach to dealing with the bias is to rotate the order of presentation between two halves of the sample. This does not remove the bias but at least has the effect of averaging it.

In new product development research, it is not uncommon always to have the negative response presented first on scales rating the concept or the product. This then gives the least favourable response pattern, thereby providing a tougher test for the new product and ensuring that any positive reaction to the idea of the product is not overstated.

When visual prompts are used, respondents notice and process the possible responses in the order that they are presented (Artingstall, 1978). Where prompts are read out (as in telephone interviewing), a recency effect is more marked, as respondents remember better the last option or last few options they have been given. This effect has been demonstrated by Schwarz et al (1991). With telephone interviewing, therefore, a recency effect should be expected, unless respondents are asked to write down the scale for reference before answering the question.

Response lists

As shown in Figure 9.1, showing a list of alternative responses is a common form of prompting to make respondents choose from a fixed set of options.

Figure 9.1 List of alternative responses

Thinking about the advertisement that you have just seen, which of these would you say describes it? You can mention as many or as few phrases as you wish.	
A	It was difficult to understand
B	It made me more interested in visiting the store
C	I found it irritating
D	It's not right for this type of product
E	I quickly got bored with it
F	I did not like the people in it
G	It said something relevant to me
H	I will remember it
I	It improved my opinion of the store
J	It told me something new about the store
K	It was aimed at me
L	I enjoyed watching it
M	None of these

The respondent is expected to read through all of the options and select those that apply. In this question, respondents can choose as many statements as they feel are appropriate, making this a multiple response question. In other questions, they may be asked to choose one option making it a single response question. The convention is that responses in single response questions are collected by radio buttons on screen, and multiple response questions by boxes as shown in Figure 9.2.

Figure 9.2 Single and multiple responses

Single Response Which flavour of yoghurt are you most likely to buy?		**Multiple response** Which other flavours are you likely to buy?	
Apricot	O	Apricot	☐
Black cherry	O	Black cherry	☐
Blackcurrant	O	Blackcurrant	☐
Gooseberry	O	Gooseberry	☐
Mandarin	O	Mandarin	☐
Peach	O	Peach	☐
Pineapple	O	Pineapple	☐
Raspberry	O	Raspberry	☐
Strawberry	O	Strawberry	☐
None of these	O	None of these	☐

Primacy and recency effects

As with scales, primacy effects should be expected with response lists. The effects have been demonstrated by Schwarz et al (1991), even where there are a small number of possible responses, down to three or even two if they are sufficiently complex to dissuade respondents from making an effort to process the possible answers in full. In a longer list of 13 items, Krosnick and Alwin (1987) demonstrated increased selection of the first three on the list. Duffy (2003) confirms the existence of primacy effects and adds that a significant minority read the list from the bottom. This would suggest that a recency effect can also be expected, as it is in telephone surveys.

Indeed, both primacy and recency effects have been demonstrated by Ring (1975). He showed that with a list of 18 items there is a bias in favour of choosing responses in the first six and the last four positions. The implication is that those in the middle of the list either are not read at all by some respondents or are not processed as possible responses to the same extent.

Where a list is of such a size, then reversing the order and presenting one order to half of the sample and the reverse order to the other half does not adequately address the problem. Ring's experiments showed that with a list of 18 items, the first 14 should be reversed and the last four reversed. This asymmetrical split better balances the bias across the items than simply reversing them.

In practice, however, a simpler approach is usually taken that just randomizes the order of presentation between respondents. This does not eliminate bias but spreads it across the statements more evenly.

Satisficing

Some people, when buying items such as a washing machine or car, will spend a great deal of time researching which of the available models best meets their needs and requirements. Other people will buy one that satisfactorily meets their minimum needs and requirements, and are not interested in investing the time to research all of the available models to determine which is marginally better. The latter approach is known as 'satisficing'

Satisficers will exhibit this behaviour in answering questionnaires when presented with a list of statements from which to choose a response. They will read it until they find an adequate answer that they feel reasonably reflects their view, rather than reading or listening to all of the statements to find the answer that best reflects their view. This is another source of order bias, which will tend to reinforce the primacy effect.

Satisficing is likely to increase with interview fatigue as respondents stop making the effort to answer to the best of their ability. Researchers using online panels should also be aware that Toepoel et al (2008) found that experienced respondents – as are found on access panels – tend to be subject to satisficing more than inexperienced respondents, probably as part of a strategy to complete the survey as quickly as possible.

Satisficing is likely to be more prevalent with telephone than with face-to-face interviewing (Holbrook et al, 2003).

Batteries of statements

Fatigue effect

Where there is a large battery of either image or attitude statements, each of which is to be answered according to a scale, there is a real danger of respondent fatigue. This can occur both with self-completion batteries and where the interviewer reads them out. The precise point at which respondent fatigue is likely to set in will vary with the level of interest that each respondent has in the subject. However, it should be anticipated that, where there are more than about 10-15 statements, later statements are likely to suffer from inattention and pattern responding. To alleviate this type of bias, the presentation of the statements should be rotated between respondents. Online or with CAPI, statements can often be presented in random order, or in rotation in a number of different sequences.

As mentioned in Chapter 8, statements can be broken into topic groups with just one group shown per screen. Once the respondent gets to the fifth such screen, however, they are likely to think that it is becoming repetitive. Get the balance right between reducing the impact of too many words on the screen and keeping the number of screens down to no more than four.

Statement clarification

The order in which statements are presented to respondents can sometimes be used to clarify their meanings. If there is a degree of ambiguity in a statement that would require a complex explanation, a preceding statement that deals with the alternative meaning can clarify what the questionnaire writer is seeking. For example:

- How would you rate the station for the facilities at the station?

On its own, it could be unclear to respondents whether car parking should be considered as one of the facilities at the station. If, however, this statement is preceded by one about car parking:

- How would you rate the station for…
  - *Facilities for car parking*
  - Other facilities and services at the station

Respondents can safely assume that the facilities are not meant to include car parking as that has already been asked about.

Where a random presentation of statements is used, care must be taken to ensure that such explanatory pairs of statements always appear together and in the same order.

Types of prompts

Prompts can be scale points, attitudinal phrases, image dimensions, brands, income ranges or anything that the questionnaire writer wants to use to guide the respondents or to obtain reaction to. They can be purely verbal or they can utilize pictures, illustrations or logos. However, it is important to be clear about the different jobs that verbal and pictorial stimuli do.

Picture prompts

Pictures can be used in a number of different ways as prompts. If they are to be used, then questionnaire writers must be careful to ensure that they know exactly what role the pictures are playing.

Brand awareness

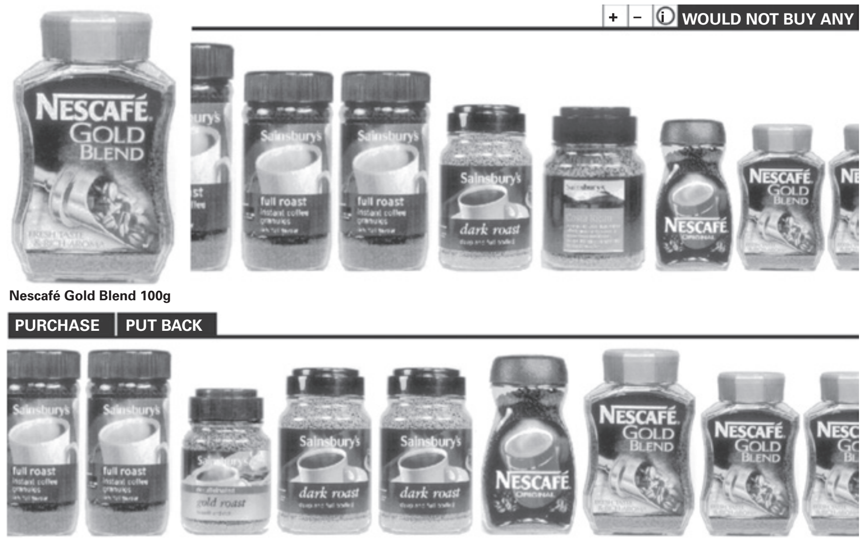
One use of picture prompts is to show brand logos or icons (instead of a list of brand names) to measure prompted brand awareness. This is generally straightforward to do online; is offered as an option by several of the DIY survey providers; and is often included to make the interview more interesting for the respondent. However, questionnaire writers should be aware that they might be changing the question. For example, prompted awareness is a question of recognition. If a list of names is used, the respondents are being asked which of the names they recognize. If brand logos are shown, the question becomes which of the logos they recognize. The researcher infers awareness of the brand through recognition of the logo. This is likely to be higher than simple name recognition, as the logo gives more clues.

The improvement in apparent brand awareness is likely to be stronger for the smaller brands in a market. Prompted awareness of Coca-Cola does not require the use of a visual prompt to be very high among carbonated drink consumers. There is little opportunity for visual prompts to make an improvement. But for smaller brands, the opportunities for improvement offered by visual prompts are much greater. The total average number of logos recognized per respondent is usually likely to be greater than the average number of brand names from a simple list. Neither approach is necessarily incorrect, but each is likely to give a different level of response.

Likelihood to purchase

When asking about likelihood to purchase, much more information is given to respondents if a pictorial stimulus is used. Rather than show a list of brands and prices, a mocked-up shelf can be shown, as in Figure 9.3. The cues and information that are given by the pack shots mean that respondents do not have to rely on memory and recall of the brands when making their decision. Price information can easily be excluded, included, or changed as required.

Figure 9.3 A mocked-up shelf of the brands' desired positionings



Brand image

Showing logos can also alter the responses to questions about brand image. It is normal to establish prompted brand awareness before asking about images of certain brands. If prompted brand awareness is established using a list of names, the mental picture taken into the image question is the image of the brand as it exists in isolation within the respondents' minds. The image is purely what the brand name stands for and the images that are associated with it. After prompting with a logo or pack shot, however, respondents are given clues and reminders of what the brand is trying to stand for. The logo or pack will have been designed to reflect the desired brand positioning and may well communicate something of those values to the respondents in the interview, or at least act as a reminder of them. The image question is therefore also prompted with at least a partial reminder.

Again, it is not a question of one approach being incorrect. Using a brand list may be described as giving a 'purer' measure of an image. This is an image, it can be argued, that the potential purchasers have in their minds before leaving home to go shopping, and it will act upon their intent to purchase the brand. But it can be equally argued that most brands are rarely seen without their logos, and that it is the image in the purchasers' minds at the point of purchase that is important.

The questionnaire writer should consider which is the more appropriate approach for the market in question and decide which approach to use accordingly.

Advertising recognition

Establishing recognition of advertising relies on showing picture prompts. These often consist of a series of stills taken from the advertisement in question. It also may or may not have all references to the brand removed, depending on whether being able to name the correct brand is to be asked. Online (or with CAPI) there is a choice between showing still shots and showing the actual ad as film. The two methods will generally lead to different responses, with higher awareness recorded among respondents shown the film.

> Before using pictures or graphics, think carefully about:
>
> - how it changes what you are measuring;
> - what respondents will take out of the graphic;
> - how consistent that take-out will be between respondents.
>
> Generally, avoid using pictures of people – including cartoons – unless you know exactly what each picture communicates.

Influence of preceding questions

Chapter 3 covered broad guidelines for ordering questions, including:

- No prompting of any information before spontaneous questions on the same subject.
- Key questions should come as early in the questionnaire as possible.
- The interview should normally start with the more general questions relating to the topic and work through to the more specific or detailed subject matter.
- Behavioural questions should be asked before attitudinal questions on the same topic.

These issues should have been considered when the questionnaire was planned, but still need to be thought about as the detailed questionnaire is written. In particular, the question writer needs to consider what the respondent's frame of reference is likely to be by the time they come to each question. For example, in an employee study if there has been a series of questions about the team and then the focus switches to the individual then this change should be explicitly highlighted. Otherwise, some may not notice and be answering on the wrong basis. Consistent use of language and terms is important – don't vary them unnecessarily as some people will think it signals that they should be taking other things into account.

In a questionnaire exploring reaction to a website transaction the terminology kept varying:

Q1 'online facility'

Q2 'website'

Q3 'site'

Q4 'internet facilities'

Q5 'internet site'

There would be a high likelihood of confusing some respondents as to what they should be considering at each question.

Once all the questions have been written it is sensible to review how the language flows throughout the questionnaire as a whole. Does it feel like it has been written by one person? Is the style and tone consistent throughout? This is particularly important when questions are copied from other surveys that may have been written by someone else. A questionnaire that keeps changing tone or style can irritate by making the respondent feel that insufficient effort has gone into its creation – why, therefore, should they continue to make effort themselves?

Funnelling

Funnelling sequences are used to take respondents from general questions on a topic through to questions that are more specific without allowing the earlier questions to condition or bias the responses to the later ones.

Typically in the funnelling sequence, whether respondents are asked a question depends on their response to the previous one. This means that people for whom questions are irrelevant can be routed round them. Because people continue in the question sequence without knowing what the criteria are for doing so, we can be more confident that the response we obtain to the final question is not biased. In the example in Figure 9.4, had we just asked one question, ie, 'If you have seen any advertising for Bulmer's cider on television recently, what did it say?' this question would lead to overclaiming of

Figure 9.4 Funnelling sequence

Q1. Which, if any, of these have you see advertised recently?

BEER
CIDER
GIN
WHISKY
WINE
NONE OF THESE
IF CIDER SEEN ADVERTISED GO TO Q2.
OTHERS TO Q5.

IF SEEN CIDER ADVERTISED
Q2. Which brand or brands of cider have you seen advertised recently?

IF SEEN BULMER'S ADVERTISED GO TO Q3.
OTHERS TO Q5.

IF SEEN BULMER'S ADVERTISED
Q3. Where did you see advertising for Bulmer's?

IF SEEN ON TELEVISION GO TO Q4.
OTHERS TO Q5.

IF SEEN BULMER'S ADVERTISED ON TELEVISION
Q4. What did the advertisement say?

GO TO Q5.

having seen the advertising, because there is an assumption that Bulmer's cider has been advertised on television recently. Some respondents would then claim to have seen it, even though they had not.

Funnelling sequences are straightforward with online questionnaires, although the logic routines used by some DIY survey providers are easier to follow than others. For paper self-completion questionnaires, the logic is there for all to see and so is best avoided.

Question order bias

Priming effects

Where there is a key question to be asked, such as approval of a proposal, response to a new concept or rating of an issue, the act of asking questions about the respondent's feelings about the proposal, concept or issue prior to the key questions can have an effect on the response to it.

This can be desirable, as the researcher will want respondents to give an answer that takes into account their considered view. However, the researcher can be inadvertently suggesting to respondents what they should answer. McFarland (1981) reported that asking a series of specific questions about the energy crisis led to a higher rating of the severity of the crisis than when the questions were not asked. Questionnaire writers need to be aware of the influence that prior questions can have and write the questions and interpret the responses accordingly. In particular, introducing financial considerations can affect responses. In an experiment by the Minnesota Department of Transportation, questions were asked about the acceptability of levels of service (for road maintenance, traffic signals, rest areas, etc) and how people thought the budget should be allocated (Laflin and Hanson, 2006). Asking about budget allocation before levels of service gave lower expectation scores than if these were asked first. Making people think about money and budgetary constraints appeared to make them more willing to accept lower service levels.

Consistency effect

A particular type of priming effect is the consistency effect. This can occur because respondents are led along a particular route of responses to a conclusion to which they can only answer one way if they are to appear consistent.

Consider and compare the sequence in Figure 9.5 and Figure 9.6. It should be expected that the responses to Q2 will show significant variation between Figures 9.5 and 9.6. By using statements that reflect one side of an argument – in this case for and against the building of a new airport – respondents are led to Q2 along different paths. Most people like to appear to be consistent. If they agree with the statements in Q1, it is then very difficult not to answer 'yes' at Q2 in the first example, or 'no' in the second example.

To be even-handed, the preliminary question should contain statements that relate to both or all sides of an argument. The researcher may want to put questions to respondents about the issues before asking the key question, to help them to give a considered answer to that question. However, the preliminary questions must fairly represent all the issues if they are not to bias the response to the key question.

How is the survey introduced?

The way the survey is introduced will set some expectations in respondents minds that will affect what they are thinking as they approach the questions. Details of information that respondents need to be given before agreeing to

Figure 9.5 The consistency effect (first sequence)

Q1. How strongly do you agree or disagree with these statements?

	Agree strongly	Agree	Neither agree nor disagree	Disagree	Disagree strongly
Delays at airports in this country are becoming unacceptable.	❒	❒	❒	❒	❒
There is insufficient capacity at this country's airports.	❒	❒	❒	❒	❒
Airports in this country are dangerously overcrowded.	❒	❒	❒	❒	❒
There is a shortage of jobs in this region.	❒	❒	❒	❒	❒

Q2. Do you support the government's proposal to build a new airport in this region?

YES ❒
NO ❒
DON'T KNOW ❒

Figure 9.6 The consistency effect (second sequence)

Q1. How strongly do you agree or disagree with these statements?

	Agree strongly	Agree	Neither agree nor disagree	Disagree	Disagree strongly
The countryside round here is disappearing too quickly for my liking.	❒	❒	❒	❒	❒
There is too much building on green-field sites.	❒	❒	❒	❒	❒
I would not want to see this country's plant and animal life killed off.	❒	❒	❒	❒	❒
Noise pollution is a major nuisance round here.	❒	❒	❒	❒	❒

Q2. Do you support the government's proposal to build a new airport in this region?

YES ❒
NO ❒
DON'T KNOW ❒

the interview are covered in Chapter 15. Here we will focus on how the requirement to introduce the survey topic and any screening question needed to identify the right respondents might influence them.

The subject matter should sound interesting in order to gain their cooperation, but bear in mind the data that you want to collect when deciding how much to reveal. For example, if you wish to measure the penetration of ownership of diamond jewellery, do not say that the survey is about diamond jewellery. If you do, people with no diamond jewellery and no interest in it will think that the survey is not for them and will not respond. Any measurement of penetration will then be over-estimated. In other markets light users of the product may be under-represented.

Using the company name in the introduction

If the survey is coming from an organization with which the respondent already has a relationship, then you may wish to be very specific about the content (eg a customer satisfaction survey from their mobile phone provider). The survey may well be heavily branded as being from this provider, so you have given nothing away and highlighting the relationship is likely to improve response rates.

In many instances, though, the survey will be carried out under the name of the research company and the client's name will not be revealed. This is partly for security in that the client does not want to tell the world that they are carrying out this survey, but also because to do so is likely to bias responses by highlighting the client's name. That would be sufficient to increase the mentions given to the client in awareness and image questions; would completely remove the possibility of asking about spontaneous awareness; and some respondents will think that they may not get their reward if they are critical of the client or their products.

Under some circumstances it is necessary by law to be prepared to reveal where the research company acquired the contact details of the respondent. This is returned to as an ethical issue in Chapter 15.

Screening questions

Frequently we want to include in the sample only people with certain characteristics, which can be demographic or product-focused. There may be quotas that we want to fulfil and want to screen out people who are in quota cells that are complete. The first few questions are therefore often screening questions to determine whether we want the respondent to continue with the main questionnaire as part of our sample.

These questions should be relatively few in number. An online panel member who gets screened out after five minutes and receives no payment may feel justifiably aggrieved. A two-tier payment system may be appropriate in these circumstances. Equally, someone stopped on the street or in a mall, who agrees to be interviewed but is then told after a few questions that they are not wanted may also be puzzled or perplexed.

Typically, screening questions will follow a funnel:

- Which of these do you own/do…?
- How often do you…?
- Which brand do you own/buy…?

At each stage, respondents who do not meet the criteria are politely screened out and told that they are not the person we are looking for – in a way that makes it clear that it is not their fault.

It is important that our selection criteria are disguised (see Chapter 7), so that the respondent does not know (or cannot guess) what to answer in order to qualify and use this to self-select. Experienced online panel members will often try to work out what they should answer in order to qualify and earn points/money.

If we are looking, for example, for people who visit Starbucks at last once a week we do not ask:

- Do you visit Starbucks at least once a week?
  - Yes
  - No

We ask:

- Which of these coffee shops do you ever visit?
  - Caffè Nero
  - Caffè Ritazza
  - Coffee Republic
  - Costa Coffee
  - Pret A Manger
  - Starbucks
  - None of these

If the respondent visits Starbucks, we ask:

- How often do you visit a Starbucks?
  - Every day
  - Several times a week
  - At least once week
  - At least once a month
  - At least once every three months
  - Less often

In this way, our interest is disguised and it is difficult for respondents to self-select.

Standardizing questions

Where a question has been asked in a previous study it is usually to the advantage of the researcher to ensure that, unless there is a good reason otherwise, the same question should be used and the same pre-codes. Doing this allows the researcher to build up a body of knowledge about how this question is answered, and so spot any response pattern that deviates from it. It also means that results from different studies can be compared more easily.

Many major manufacturers and some research companies have standard ways of asking particular questions that allow them to build up this body of knowledge. The value of standardized questions becomes clear when we realize that even small changes in the wording of a question can change responses (Converse and Presser, 1986). For example, changing 'forbid' to 'not allow' has been shown to significantly change response patterns. Unfortunately, because language is subtle, there are no general rules about when a wording change will change responses, so the questionnaire writer must be cautious about making changes if comparison with other surveys is a priority. If there is doubt, alternative wording should be tested before being used.

Tracking studies

Consistency of question wording is important in ongoing or tracking studies to ensure that changes in data over time are not due to wording changes.

To ensure data consistency, it is also important to maintain the order in which the questions are asked so that any order bias that exists is itself consistent. Keeping the question order means that adding new questions can cause problems, and the positioning of them must be considered very carefully. If possible, new questions should be added to the end of the questionnaire so as not to affect responses to any of the earlier questions. For the sake of the interview flow, though, this is not always possible.

For example, in an ongoing customer satisfaction survey, respondents were asked to give a rating of their overall satisfaction with the service received on their most recent visit to the client company. This had been followed with questions rating various staff and service attributes, including one on efficiency. After a while, a competitor introduced a guarantee that all transactions will be completed within 10 minutes or customers get their money back. To measure the impact of this, the client now asks that, on the next wave of the survey, a new question is inserted between the overall satisfaction question and the service attribute ratings. This question asks how quickly the customers perceive their transaction to have been handled, and how satisfied they were with that. The introduction of these questions at this point could influence the way in which respondents rate the individual service attributes – in particular the one relating to efficiency – as the speed of transaction has been raised higher in their consciousness than in previous waves of the study. Researchers must alert the client to the potential impact of such a change in the questionnaire on the comparability of data with previous waves, and endeavour to find an alternative solution – such as a less sensitive position.

If no alternative solution can be found and the question changes are to be included for the foreseeable future, then it may be worth considering having a split run for one wave. For this, the sample is split randomly into two. One half is asked the existing questionnaire, while the other half is asked the new questionnaire with the changes incorporated. An assessment of the impact of the changes can thus be made.

CASE STUDY Whisky usage and attitude

Writing the questionnaire

In Chapter 3 we planned out the questionnaire in order to collect the data that will meet the objectives. Since then, we have looked at different types of data and different types of questions. Now comes the time to actually write the questions.

We have decided that the survey will be conducted online, so the question wording will be consistent with that (ie as short as possible).

Following the plan established in Chapter 3, and the discussion in Chapters 4 to 8, we can now begin to write the questions:

Table 9.1 (Lists of response codes have been omitted for clarity.)

Questionnaire plan	Questions required
Screening (see Chapter 7)	A Do you or any of your family work in the following industries? B Which of these have you drunk in the last three months? C How often do you drink Scotch whisky?
Spontaneous brand awareness	Q1 Which brands of Scotch whisky have you heard of?
Spontaneous advertising awareness	Q2 Which brands of Scotch whisky have you seen or heard advertising for recently?
Prompted brand awareness	Q3 Which of these brands of Scotch whisky have you heard of?

(*continued*)

Table 9.1 (Continued)

Questionnaire plan	Questions required
Prompted advertising awareness	Q4 Which of these brands of Scotch whisky have you seen or heard advertising for recently? Q5 [IF SEEN/HEARD ADVERTISING FOR CRIANLARICH] Where did you see or hear advertising for Crianlarich? Q6 What do you remember about the Crianlarich ad? [WRITE IN] Q7 [IF SEEN/HEARD ADVERTISING FOR GRAND PRIX] Where did you see or hear advertising for Grand Prix? Q8 What do you remember about the Grand Prix ad? [WRITE IN]
Behavioural information – consumption (see Chapter 7)	Q9 Do you drink Scotch whisky on licensed premises, or at home, or both? Q10 [IF ON LICENSE] How many glasses of Scotch whisky have you drunk in the last seven days in licensed premises? Q11 [IF DRINKS OFF LICENSE] How many glasses of whisky did you drink in the home in the last seven days?
Behavioural information – brand choice	Q12 [IF DRINKS OFF LICENSED] Do you drink Scotch whisky in your own home, in someone else's home, or both? Q13 [IF DRINKS IN OWN HOME] Do you usually buy the Scotch to drink at home or does someone else buy it? Q14 [IF SOMEONE ELSE BUYS IT] Do you have a say in which brand is bought or do they decide, or is it always the same brand? Q15 [IF ALWAYS THE SAME BRAND] Which brand do they buy? Q16 Was that originally your choice, or someone else's choice, or a joint decision? Q17 [IF NO SAY AT Q14] Which brands do they buy? Q18 [IF MORE THAN ONE BRAND] Which do they buy most often?

(*continued*)

Table 9.1 (Continued)

Questionnaire plan	Questions required
	Q19 [IF BOUGHT BY SELF AT Q13 OR HAVE A SAY AT Q14] Which brands do you buy or ask for? Q20 [IF ONE MOST OFTEN BRAND] Which do they buy most often?
Image factor importance in brand choice (Chapter 6)	Q21 For each pair of attributes, move the slider to show which is the more important to you when choosing a whisky.
Brand image association (Chapter 8)	Q22 Which brand or brands do you associate with each of these statements?
Recognition of unbranded ads	Q23 [SHOW UNBRANDED CRIANLARICH AD] Have you seen this ad before? Q24 [IF YES] Which brand of Scotch whisky is it for? Q25 [SHOW UNBRANDED GRAND PRIX AD] Have you seen this ad before? Q25 [IF YES] Which brand of Scotch whisky is it for?
Classification data, to confirm panel-provided details	Age Gender

This gives us our first draft questionnaire, but some of these questions will be returned to in later chapters as we consider other issues.

Key take aways: writing effective questions

- When writing each question ask yourself whether the respondent will:
  - Understand the question in the way that you meant it. Will this understanding be consistent across all respondents?
  - Be able to answer it with the level of accuracy and detail that you need?

  - Be willing to answer it – and honestly? Have you implied that some answers are more interesting or acceptable to you than others?
- Prompted questions using lists of response options are susceptible to primacy effects:
  - Items at the start of the list often receive more attention.
  - Randomizing the list items can balance (but not eliminate) this effect.
  - Keeping the list shorter, with similar items next to each other, will help respondents navigate to the answer that is right for them.
- Always consider the possible influence of preceding questions.
  - will they affect how a question is understood?
  - will they have introduced any bias?