

Consumer research methods

This appendix provides some general guidelines for conducting research related to consumer behaviour. However, while these guidelines may help you, a good marketing research text is indispensable when conducting a consumer research project or evaluating a consumer oriented marketing research proposal.

Figure A.1 summarises the various methods of obtaining consumer information that will be discussed in this section.

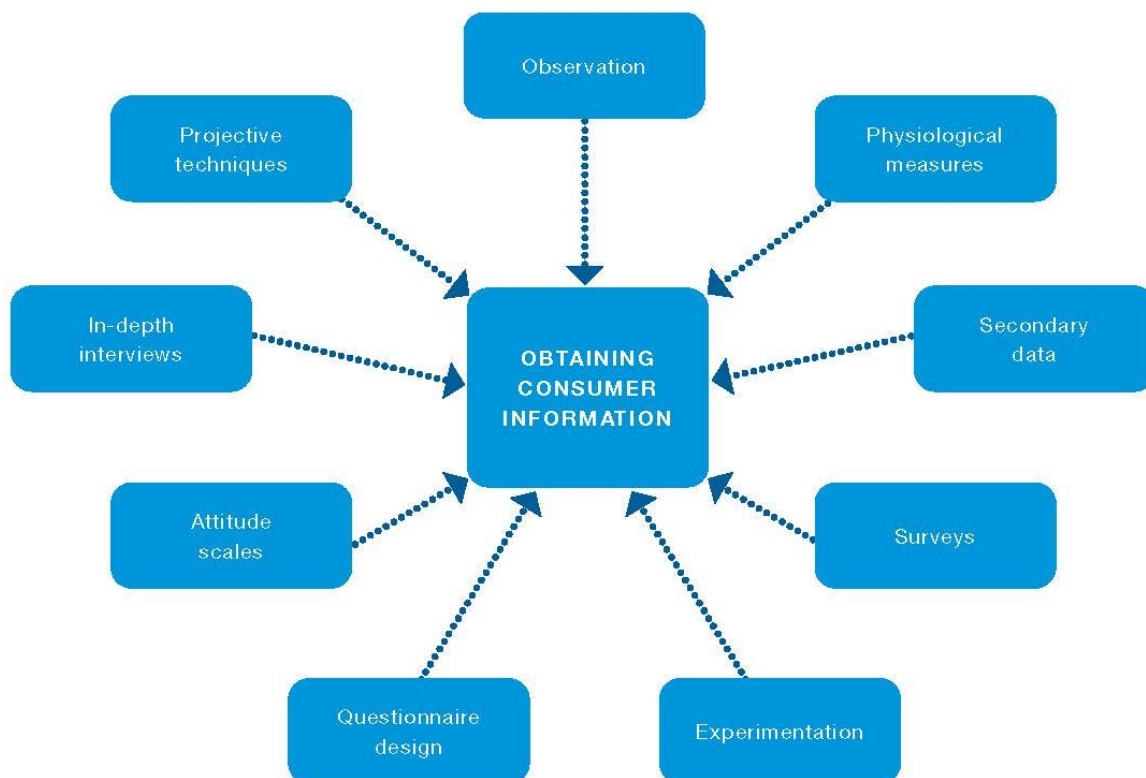


Figure A.1 Methods of obtaining consumer information

Secondary data

Any research project should begin with a thorough search for existing information that is relevant to the project at hand. It may be possible to gather enough existing information needed to make a sound decision from sources that are available. Gathering primary data is costly and time consuming; hence, it is always advisable to see what is already known about your area of interest to ensure that you don't waste resources.

Internal data, such as a company's past studies, sales reports, accounting records and annual reports, should all be consulted. Visit a website with information on types of company annual reports.

External data, including reports, magazine articles, government, organisation or trade-association publications, findings by marketing research firms or advertising agency reports, academic journals, trade journals and books, should also be thoroughly researched.

Computer searches are a fast and economical means of conducting such searches. Most university and state public libraries have computer search capabilities, and so do some large firms. However, computer searches will often miss reports published by trade associations and magazines. Therefore, magazines dealing with the product category or those read by members of the relevant market should also be contacted. In Australia, the Australian Bureau of Statistics (ABS) is an invaluable and trustworthy information resource accessible online. While some of the data and reports are only available for a fee, there is still a wealth of data that is available free of charge. Visit the ABS website —www.abs.gov.au

Sampling

If relevant and reliable information required is not available from secondary sources, **primary data** must be gathered. This generally involves talking to or observing consumers. However, it may also involve asking knowledgeable others (such as sales personnel) about consumers. In either case, time and cost constraints generally preclude researchers from contacting every single potential consumer.

Therefore, most consumer research projects require that data be collected from a **sample** of the types of

consumers that they are interested in. This is a deliberately selected portion of the larger group as a whole. This process requires a number of critical decisions, as outlined in Figure A.2. Mistakes made at this point are difficult to correct later in the study as you will have already expended resources, including your time, gathering information. The key decisions are briefly described below.

Defining the population

The first step is to define the profile of the consumers of interest. Is it necessary to talk to current brand users, current product-category users or potential product-category users? Or would it be better to talk with the purchasers, the users or everyone involved in the purchase process? The population, as defined, must reflect the consumer behaviour on which the specific marketing decision under investigation will be based.

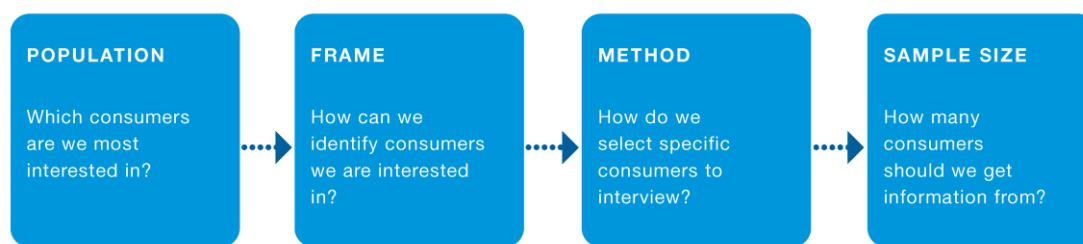


Figure A.2 The consumer sampling process

Specifying the sampling frame

A **sampling frame** is a ‘list’ or grouping of individuals or households that reflects the population of interest. Telephone books, electoral roles, club membership lists or shoppers at a given shopping centre, are examples of ‘sampling frames’. It is from these that your sample of people to research will be determined.

Perfect sampling frames contain every member of the population under investigation. Telephone books do not list households with unlisted numbers, and many people do not visit shopping centres, whereas others visit them frequently. This is an area in which it is important to do the best without expecting a perfect

frame. However, we must be alert for biases that may be introduced by imperfections in the sampling frame.

Selecting a sampling method

The major decision at this point is between a *random sample* (probability sample) and a *non-random sample* (non-probability). Non-random samples, particularly judgment samples, can often provide good results. A **judgment sample** involves the deliberate selection by the researcher of knowledgeable consumers or individuals. For example, a firm might decide to interview University Student Union social activities representatives to estimate campus attitudes towards a carbonated wine drink aimed at the campus market. Such a sample might provide useful insights. However, it might also be biased, since such individuals may be more socially active than the average student.

The most common non-random sampling method, the *convenience sample*, involves selecting sample members in the manner most convenient for the researcher. This type of sample is subject to many types of bias, and should generally be avoided or undertaken with a clear understanding of the possible limitations to subsequent data collected.

Random (or probability) samples mean that every member of the sample frame has a known and equal chance of being selected for the sample and rely on some form of random process to select members. The final sample produced may represent every third person that passes a point-of purchase display, house addresses selected by using a table of random numbers or telephone numbers generated randomly by a computer. While a more robust method of generating a sample, random samples are not guaranteed to be representative of a given population. For example, a random sample of 20 students, from a class containing 50 male and 50 female students, could produce a sample of only 20 males. However, this would be unlikely. More importantly, if random procedures are used, we can calculate within specified limits the likelihood that the sample is not representative.

Gathering a robust sample of suitable candidates for data collection is one of the most challenging aspects of conducting any consumer oriented research. For this reason, it's worth considering the use of professional

organisations to assist with this part of the study, even if they are not involved with the actual data collection or subsequent analysis aspects. They often have access to lists and also have staff trained to specifically recruit consumers as respondents.

Visit Resolution Research, a research recruitment organisation—www.resolutionresearch.com

Determining the sample size

Finally, it is necessary to determine how large a sample should be. If random sampling is being used, there are formulas that can help in making this decision (visit a website where you can calculate sample sizes).

In general, the more diverse the population and the more certain you want to be of getting the correct answer, the more people will need to be interviewed.

Surveys

A **survey** is a systematic way of gathering information from a large number of people. Surveys generally involve the use of a structured or semi-structured questionnaire. They can be administered by mail/email, telephone, over the internet or in a face-to-face situation. Personal interviews often take place in shopping centres, but can also rely on door-to-door techniques or private appointments.

Each method has both advantages and disadvantages. Personal interviews allow the use of complex questionnaires, product demonstrations and the collection of large amounts of data. They can also be completed in a relatively short period of time. However, they are very expensive and require skilled interviewers to ensure there is no interviewer bias. Telephone surveys can be completed rapidly, provide good sample control (i.e. information about who answers the questions) and are relatively inexpensive. Substantial amounts of data can be collected but the information must be relatively simple. Moreover, the deliberate selection of knowledgeable consumers or individuals consumers are becoming more reluctant to take part in telephone surveys as they are believed to be intrusive. Interviewer bias is also a risk with this

method. Mail surveys take the longest to undertake as there is considerable time involved in both mailing the surveys out to consumers and retrieving them by 'pick up' or return mail. This method also suffers from high non-response as people can easily decide to ignore the survey altogether. A benefit of this method is that it can be used to collect moderately complex data and it is very economical. Also, as the consumer completes the survey independently, interviewer bias is not a problem.

A major concern in survey research is **non-response bias**. For most surveys, fewer than 50 per cent of those selected in the study actually do choose to take part.

It is possible to increase the response rate by call-backs in telephone, mail and door-to-door surveys. The call-backs should be made at different times and on different days. Offering incentives to potential participants can increase response rates, as can pre-notification (e.g. a card saying that a questionnaire is coming) and reminder postcards in the case of mail and door-to-door methods.

If the response rate is less than 100%, it must be noted that those who did not respond differ from those who did. (That is, people who did not respond are by definition different in that they did not respond. Whether that difference extends to the type of answers they would have given always remains uncertain, hence the researcher's aim is to minimise the number of non-respondents.) A variety of techniques is available to help estimate the likelihood and nature of non-response error.

More and more researchers involved with consumer studies are taking advantage of advances in internet survey methods. While in the past, lower than acceptable consumer PC ownership and internet usage presented problems in terms of reaching the right people, for many consumer oriented investigations this is no longer the case. Also, consumers seem to respond well to the opportunity to take part in a survey at a time and place convenient for them. Early versions of online survey software were somewhat clumsy and limited in application; however, now very sophisticated and easy to use (for both the consumer and the researcher!) surveys are available. Visit Qualtrics Consumer Research—www.qualtrics.com

Similarly, mobile surveys are also gaining popularity with the diffusion of smartphones. Typically, short surveys are created via mobile applications and distributed via mobile portal, WAP push or SMS messaging, using 'fill-in-the-blank' questions, multiple choice questions, and/or polls. Mobile polling and mobile

surveys are useful as a marketing instrument for sales promotions or customer contests. Their advantages involve high accessibility from anywhere and anytime and participants' participants being in a more engaged state whilst completing the survey.

Experimental approaches

An **experiment** involves changing one or more variables (for example, product features, package colour or advertising theme) and observing the effect this change has on another variable (such as consumer attitude, repeat purchase behaviour or learning). The variable that is changed is called the **independent variable**. The variable that may be affected is called the **dependent variable**. The objective of research that uses an experimental design is to structure the situation so that any change in the dependent variable is very likely to only have been caused by a change in the independent variable.

The basic tool in designing experimental studies is the use of control and treatment groups. A **treatment group** is one in which an independent variable is changed (or introduced) and the change (or lack of change) in the dependent variable is noted. A **control group** is a group similar to the treatment group, except that the independent variable is not altered. There are a variety of ways in which treatment and control groups can be combined to produce differing experimental designs. One such design is illustrated in Figure A.3.

In addition to selecting an appropriate experimental design, an experimental environment can also be developed. In a laboratory experiment, all outside influences can be carefully controlled. This generally means that similar results will be obtained every time the study is repeated. Therefore, if people taste several versions of a salad dressing in the laboratory, similar preference ratings will probably occur each time the study is repeated with similar consumers (internal validity). However, this does not necessarily mean that consumers will prefer the same version at home or in a restaurant (external validity).

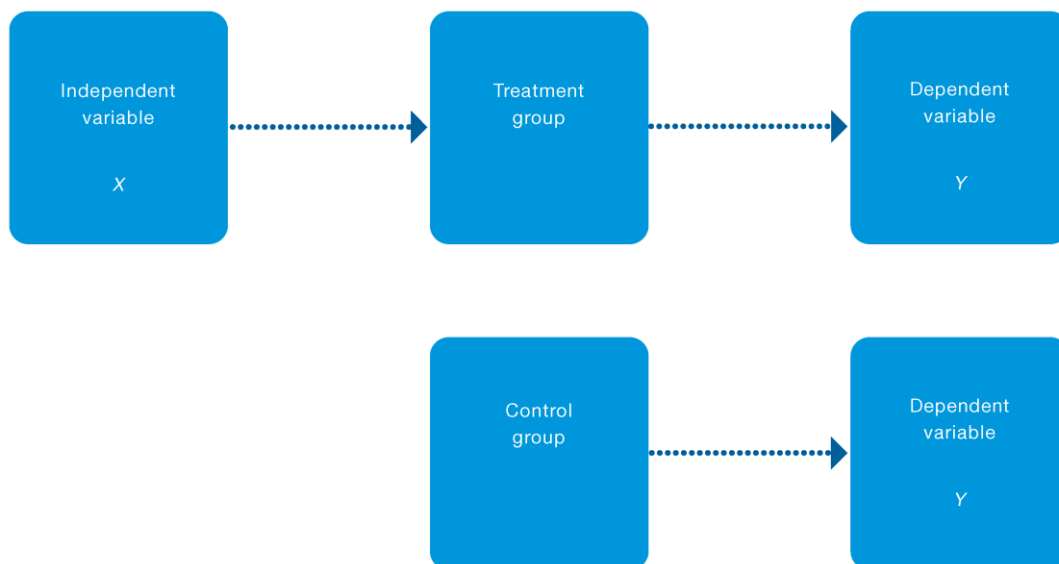


Figure A.3 Using an experiment to evaluate the impact of an independent variable on a dependent variable

In a field experiment, the study is conducted in the most relevant environment possible—the real world. This often means that unusual outside influences will distort the results. However, if the results are not distorted, they should hold true in the actual market application. Therefore, if consumers were to use several of the prototype versions of the salad dressing in their own home, actions by competitors, unusual weather or product availability could influence their responses (internal validity). However, in the absence of such unusual effects, the preferred version would be purchased if available in the market.

Conducting experiments can be challenging, but very rewarding due to their superior ability to infer causality and relationships between the variables that you want to test. As discussed at the beginning, a good research textbook can provide guidance, but there are also websites and organisations that can provide ‘tips’ and advice. To see an example of this type of organisation, visit Marketing Experiments – www.marketingexperiments.com

Questionnaire design

Most surveys, and some experiments, use some form of questionnaire as a data collection device. A

questionnaire is simply a formalised set of questions for the purpose of eliciting desired information. It can

measure the following:

- 1 self-reported behaviour—past, present or intended
- 2 demographic characteristics—age, gender, income, education, occupation
- 3 level of knowledge
- 4 attitudes and opinions.

The process of questionnaire design is outlined below.

The questionnaire design process

1 Preliminary decisions

- Exactly what information is required?
- Exactly who are the target respondents?
- What method of communication will be used to reach respondents?

2 Decisions about question content

- Is this question really needed?
- Will the question elicit the needed information?
- Can respondents answer this question accurately?
- Are there any external events that might bias response to this question?

3 Decisions about response format

- Can this question best be asked as an open-ended, multiple-choice or dichotomous question?

4 Decisions concerning question phrasing

- Do words used have only one meaning for all respondents?
- Are any words or phrases 'loaded' or 'leading' in any way?
- Are there any implied alternatives in this question?

- Are there any unstated assumptions related to this question?
- Will respondents approach this question from the frame of reference desired by the researcher?

5 Decisions concerning question sequence

- Are questions organised in a logical manner that avoids introducing errors?

6 Decisions on layout of questionnaire

- Is the questionnaire designed in a manner to avoid confusion and minimise recording errors?

7 Pre-test and revise accordingly

- Has the final questionnaire been subjected to thorough pre-test, using respondents similar to those who will be included in the final survey?

Attitude scales

Attitudes are frequently measured on specialised scales. **Non-comparative rating scales** require the consumer to evaluate an object or an attribute of the object without directly comparing it to another object. **Comparative rating scales** provide a direct comparison point (a named competitor, ‘your favourite brand’, ‘the ideal brand’). An example of each type of scale follows:

How do you like Pepsi? (non-comparative)

☐
☐
☐
☐
☐

Like it	Like it	Neither like	Dislike it	Dislike it
very much		nor dislike		very much

How do you like the taste of Colgate compared to Macleans? (comparative)

☐
☐
☐
☐
☐

Much more

More

About the same

Less

Much less

Paired comparisons involve presenting the consumer with two objects (brands, packages) at a time and require the consumer to select one of the two according to some criterion such as overall preference, taste or colour. **Rank-order scales** require the consumer to rank a set of brands, advertisements or features in terms of overall preference, taste or importance. The **constant-sum scale** is similar, except it also requires the respondent to allocate 100 points in total to the objects. The allocation is to be done in a manner that reflects the relative preference or importance assigned to each object. The **semantic-differential scale** requires the consumer to rate an item on a number of scales bounded at each end by one of two bipolar adjectives. For example:

<i>Honda Accord</i>								
Fast	X	—	—	—	—	—	—	Slow
Bad	—	—	—	—	—	X	—	Good
Inexpensive	—	—	—	—	X	—	—	Expensive
Large	—	—	—	X	—	—	—	Small

The instructions indicate that the consumer is to mark the ‘place’ that best indicates how accurately one or the other term describes or fits the attitude object. The ‘end’ positions indicate the concept is ‘extremely’ descriptive of the product object (in this case the Honda Accord) and points in between indicate a less associated position. Therefore, the consumer in the example rates the Honda Accord as extremely fast, very good, somewhat expensive, and neither large nor small.

Likert scales ask consumers to indicate their degree of agreement or disagreement with each of a series of statements related to the attitude object, such as:

David Jones is one of the most attractive stores in town.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree

The service at David Jones is not satisfactory.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree

The service at a retail store is very important to me.

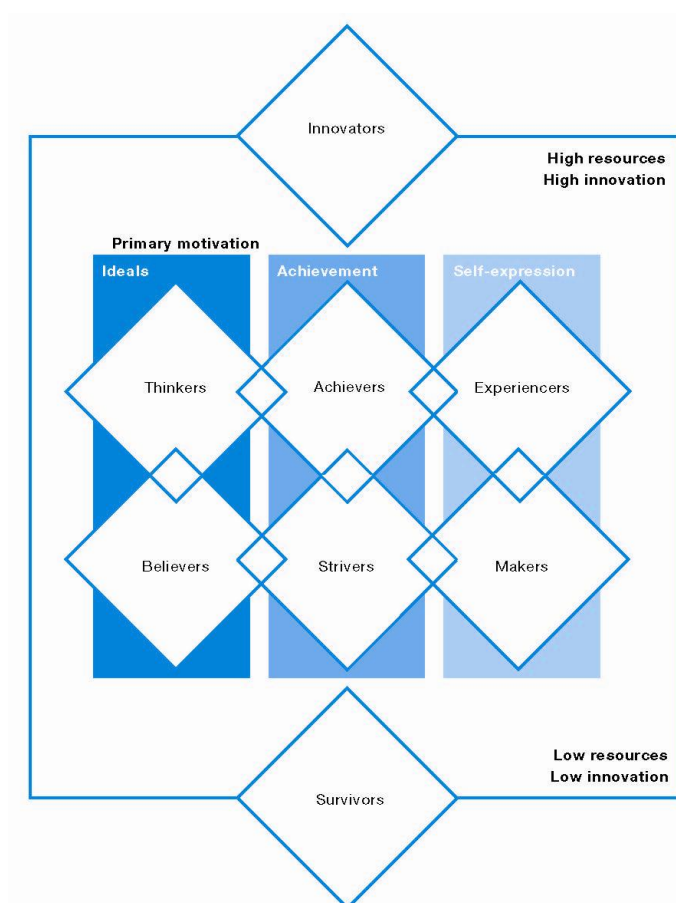
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree

To analyse responses to a Likert scale, each response category is assigned a numerical value. These

examples could be assigned values such as strongly agree = 1 through to strongly disagree = 5, or the scoring could be reversed. Alternatively, a system of -2 through to +2 could be used.

Scales such as the ones illustrated in this section are often used to differentiate consumer segments on a psychographic basis; for example to identify groups that are particularly sensitive to price, or those that seek similar types of products due to lifestyle habits. A commonly applied basis for such forms of segmentation is the Values, Attitudes and Lifestyle Segmentation categorisation method. By applying a specific set of scale oriented questions in a questionnaire, participating consumers can be ‘segmented’ into specific groups according to their aims in life and lifestyle preferences. These classifications are then used to determine appropriate products and services to each identified group. To see more on this type of application, visit Strategic Business Insights—www.strategicbusinessinsights.com

The figure below shows a summary of identified consumer segments:



Source : <http://www.strategicbusinessinsights.com/vals/ustypes.shtml>

Visit the website below to view descriptions of each of the VALS™ types:

<http://www.strategicbusinessinsights.com/vals/ustypes.shtml>

- Innovators
- Thinkers
- Believers
- Achievers
- Strivers
- Experiencers
- Makers
- Survivors

See also Sample Demographics and Behaviours, and Chapter 12 of the text.

In-depth interviews

In-depth interviews can involve one respondent and one interviewer. In this form, they are called **individual in-depth interviews**. They may also involve a small group (eight to 12 respondents) and an interviewer.

This type is called a **focus group interview** or *group discussion*. Groups of four or five are often referred to as *mini-group* interviews. In-depth interviews in general are commonly referred to as qualitative research.

More details are given below.

Individual in-depth interviews

Individual in-depth interviews involve a one-to-one relationship between the interviewer and the respondent. The interviewer does not have a specific set of predetermined questions that must be asked according to the order imposed by a questionnaire. Instead, there is freedom to create questions, to probe those responses that appear relevant, and generally to try to develop the best set of data in any way practical. However, the interviewer must follow one rule: he or she must not consciously try to affect the content of the answers

given by the respondent. The respondent must feel free to reply to the various questions, probes and other, subtler ways of encouraging responses in the manner deemed most appropriate. Individual in-depth interviews are appropriate in six situations:

- 1 Detailed probing of an individual's behaviour, attitudes or needs is required.
- 2 The subject matter under discussion is likely to be of a highly confidential nature (e.g. personal investments).
- 3 The subject matter is of an emotionally charged or embarrassing nature.
- 4 Certain strong, socially acceptable norms exist (e.g. those relating to breastfeeding) and the need to conform in a group discussion may influence responses.
- 5 A highly detailed (step-by-step) understanding of complicated behaviour or decision-making patterns (e.g. planning the family holiday) is required.
- 6 The interviews are with professional people or with people on the subject of their jobs (e.g. finance managers).

Focus group interviews

Focus group interviews have a different application. They can be applied to:

- 1 basic-needs studies for product-idea creation
- 2 new product idea or concept exploration
- 3 product-positioning studies
- 4 advertising and communications research
- 5 background studies on consumers' frames of reference
- 6 the establishment of consumer vocabulary as a preliminary step in questionnaire development
- 7 the determination of attitudes and behaviours.

The standard focus group interview involves eight to 12 individuals. Normally, the group is designed to reflect the characteristics of a particular market segment. The respondents are selected according to the

relevant sampling plan and meet at a central location that generally has facilities for taping or video recording. The discussion itself is 'led' by a moderator. The competent moderator attempts to develop three clear stages in the one- to three-hour interview:

- 1 establishing rapport with the group, structuring the rules of group interaction and setting objectives
- 2 attempting to provoke intense discussion in the relevant areas
- 3 attempting to summarise the group's responses in order to determine the extent of agreement.

In general, either the moderator or a second person prepares a summary of each session after analysing the session's transcript. To see an example of a short clip of a focus group, watch the YouTube video Focus group—salad dressing packaging. Many other examples can be viewed on YouTube, as well as an advertisement for a Dodge that plays on the idea of the focus group.

Projective techniques

Projective techniques are designed to measure feelings, attitudes and motivations that consumers would be unable or unwilling to reveal otherwise. They are based on the theory that the description of vague objects requires interpretation, and this interpretation can only be based on the individual's own attitudes, values and motives. Table 10.3 in Chapter 10 of the text provides descriptions and examples of the more common projective techniques.

Observation

Observation can be used when the behaviours of interest are public, are repetitive, frequent or predictable, and cover a relatively brief time span. An observational study requires five decisions:

- 1 *Natural versus contrived situation*: Should the researcher wait for a behaviour to occur in its natural environment, or should he or she create an artificial situation in which it will occur?
- 2 *Open versus disguised observation*: To what extent are the consumers aware that their behaviour is

under observation?

3 *Structured versus unstructured observation:* Will the researcher limit the observations to predetermined behaviours, or will he or she note whatever occurs?

4 *Direct or indirect observations:* Will the researcher observe the behaviours themselves, or merely the outcomes of those behaviours?

5 *Human or mechanical observations:* Will observations be made mechanically or by people?

Physiological measures

Physiological measures are direct observations of physical responses to a stimulus such as an advertisement. These responses may be controllable, such as eye movements, or uncontrollable, such as galvanic skin response. The idea is that by monitoring physical reactions to some stimulus (such as advertising or textures of creams, etc), researchers can get a better understanding of what may be the most appropriate strategies to employ, for example, which ad campaigns are likely to be most effective, or which products will be preferred. Indeed, there have even been suggestions that how consumers 'react' under testing may indicate their likely political orientation, as seen in an article shown on the website eScience News. The major physiological measures are described in Chapter 8 of the text, which lists direct measures of attention.

GLOSSARY

internal data data collected from past studies, sales reports and accounting records

comparative rating scales scales that provide a direct comparison point (a named competitor, 'your favourite brand', 'the ideal brand')

constant-sum scales the most common method of direct measurement; requires the consumer to allocate 100 points in total to his or her evaluative criteria, with individual points allocated depending on the relative importance of each criterion

control group in an experiment, a group similar to the treatment group except that the independent variable is not altered

dependent variable the variable that may be affected in an experiment

experiment a trial that involves changing one or more variables (e.g. product features, package colour, advertising theme) and observing the effect this change has on another variable (e.g. consumer attitude, repeat purchase behaviour, learning)

external data reports, magazine articles, government organisation or trade association publications, findings by marketing research firms or advertising agency reports, academic journals, trade journals, books

focus group interview interview that involves a group of 8 to 12 individuals in a relatively free-form discussion about a product, brand or advertisement

independent variable the variable that is changed during an experiment

individual in-depth interviews interviews that involve only one respondent and one interviewer

judgment sample the deliberate selection of knowledgeable consumers or individuals

Likert scales scales that require consumers to indicate a degree of agreement or disagreement with each of a series of statements related to the attitude object

non-comparative rating scales scales that require the consumer to evaluate an object or an attribute of the object without directly comparing it to another object

non-response bias the consequence of a low response rate (in most surveys, fewer than 50 per cent of those selected to participate in the study actually do choose to participate), stemming from the suspicion that non-respondents may differ in some way from those who have responded

observation a method that can be used when the behaviours of interest are public, repetitive, frequent or predictable and cover a relatively brief time span

paired comparisons comparisons that present the consumer with two objects (brands, packages) at a time and require the selection of one of the two according to some criterion such as overall preference, taste or colour

physiological measures direct observations of physical responses to a stimulus such as an advertisement

primary data data gathered specifically to answer a research question, often by talking to, or observing, consumers

projective techniques techniques designed to measure feelings, attitudes and motivations that consumers would be unable or unwilling to reveal otherwise

questionnaire a formalised set of questions for the purpose of eliciting responses to particular research questions

rank-order scales scales that require the consumer to rank a set of brands, advertisements or features in terms of overall preference, taste or importance

sample a deliberately selected portion of the larger group

sampling frame a 'list' or grouping of individuals or households that reflects the population of interest

semantic-differential scales scales that requires the consumer to rate an item on a number of scales bounded at each end by one of two bipolar adjectives (e.g. fast/slow, expensive/inexpensive)

survey a systematic way of gathering information from a large number of people; generally involves the use of a questionnaire and either activity analysis, product analysis or problem analysis

treatment group a group in which an independent variable is changed (or introduced) and the change (or lack of change) in the dependent variable is noted