



# Marketing Research

Applied Insight

Sixth Edition

Daniel Nunan  
David F. Birks  
Naresh K. Malhotra

# MARKETING RESEARCH

APPLIED INSIGHT

and possibly an incentive. The participants complete and return the questionnaires. There is no verbal interaction between the researcher and the participant in the survey process.<sup>20</sup> There may be an initial contact with potential participants, to establish the correct person to send the questionnaire to, and to motivate them before they receive the survey. Before data collection can begin, a sampling frame needs to be compiled so that potential participants can be identified. Therefore, an initial task is to obtain a valid mailing list. Mailing lists can be compiled from telephone directories, customer databases or association membership databases, or can be purchased from publication subscription lists or commercial mailing list companies.<sup>21</sup> Regardless of its source, a mailing list should be current and closely related to the population of interest. (Chapters 13 and 14 will detail the full questionnaire design and sampling implications of this approach.) With an understanding of characteristics of target participants and what will motivate them to respond honestly, as fully and as quickly as possible, the researcher must also make decisions about the various elements of the postal survey package (see Table 10.1).

**Table 10.1**
**Some decisions related to the postal survey package**

<b>Outgoing envelope</b>	Method of addressing; envelope size; colour; postage
<b>Covering letter</b>	Personalisation; sponsorship; type of appeal; signature
<b>Questionnaire</b>	Size, length and content; colour and layout; format and reproduction; participant anonymity
<b>Instructions</b>	As part of covering letter; a separate sheet; alongside individual questions
<b>Return envelope</b>	Whether to include one; type of envelope; postage
<b>Incentives</b>	Feedback of findings; monetary v. non-monetary; prepaid v. promised amount

## A comparative evaluation of survey methods

Not all survey techniques are appropriate in a given situation. Therefore, the researcher should conduct a comparative evaluation to determine which techniques are appropriate. Table 10.2 compares the different survey techniques through a range of criteria. For any particular research project, the relative importance attached to these criteria will vary. These factors may be broadly classified as task, situational and participant factors. Task factors relate to tasks that have to be performed to collect the data and to the topic of the survey. These factors consist of flexibility of data collection, diversity of questions, use of physical stimuli, sample control, quantity of data and response rate. The situational factors comprise control of the data-collection environment, control of field force, potential for interviewer bias, potential to probe participants, potential to build rapport, speed and cost. The participant factors relate to perceived participant anonymity, social desirability, obtaining sensitive information, low incidence rate and participant control. We discuss in detail an evaluation of the different survey methods on each of these factors.

### Task factors

The demand that the survey task places upon participants and the data-collection process influences the survey method that should be used.

Table 10.2

A comparative evaluation of survey techniques

	Email	Online	Telephone CATI	Home and workplace	Street surveys	CAPI	Postal
<b>Flexibility of data collection</b>	*	****	****	*****	*****	****	*
<b>Diversity of questions</b>	***	****	*	*****	*****	*****	***
<b>Use of physical stimuli</b>	*	***	*	****	*****	*****	***
<b>Sample control</b>	*	**	****	****	****	***	*
<b>Quantity of data</b>	***	****	**	***	***	***	**
<b>Response rate</b>	*	**	***	*****	****	*****	*
<b>Control of data-collection environment</b>	*	*	***	****	*****	*****	*
<b>Control of field force</b>	*****	*****	***	*	***	***	*****
<b>Potential for interviewer bias</b>	None	None	***	*****	*****	*	None
<b>Potential to probe participants</b>	*	*	*	*****	***	***	*
<b>Potential to build rapport</b>	*	*	***	*****	****	****	*
<b>Speed</b>	*****	*****	*****	****	***	****	*
<b>Low cost</b>	*****	*****	***	*	**	**	****
<b>Perceived participant anonymity</b>	***	*****	***	*	*	*	*****
<b>Social desirability</b>	*****	*****	***	**	*	****	*****
<b>Obtaining sensitive information</b>	***	***	*	*****	*	***	***
<b>Low incidence rate</b>	***	*****	*****	*	*	*	***
<b>Participant control</b>	*****	****	**	*	*	*	*****

(key: low = \*, moderate to low = \*\*, moderate = \*\*\*, moderate to high = \*\*\*\*, high = \*\*\*\*\*)

## Flexibility of data collection

The flexibility of data collection is determined primarily by the extent to which the participant can interact with the interviewer and the survey questionnaire. The face-to-face survey, whether conducted as a home, workplace or street survey, affords a very high flexibility of the form of data collection. Because the participant and the interviewer meet face to face, the interviewer can administer complex questionnaires, explain and clarify difficult questions and even use unstructured techniques.

By contrast, the traditional telephone survey allows only moderate flexibility because it is more difficult to use unstructured techniques, ask complex questions, or obtain in-depth answers to open-ended questions over the telephone. CATI and CAPI and online surveys allow somewhat greater flexibility because the researcher can use various question formats, can personalise the questionnaire and can handle complex skip or filter patterns (directions for skipping questions in the questionnaire based on the subject's responses). One benefit of

the online survey is the ease with which a survey may be modified. For example, early data returns may suggest additional questions that should be asked. Changing or adding questions as the need becomes apparent would be almost impossible with a postal survey, possible but difficult with face-to-face or telephone surveys, but achievable in a matter of minutes with some online surveys.

## Diversity of questions

The diversity of questions that can be asked in a survey depends on the degree of interaction that the participant has with the interviewer and the questionnaire, as well as the participant's ability actually to see the questions. A variety of questions can be asked in a face-to-face survey because the participant can see the questionnaire and the interviewer is present to clarify ambiguities. Thus, home and office surveys, street interviews and CAPI allow for diversity. In online surveys, multimedia capabilities can be utilised and so the ability to ask a diverse set of questions is moderate to high, despite the absence of an interviewer. In postal surveys and email surveys, less diversity is possible. In traditional telephone surveys and CATI, the participant cannot see the questions while answering, and this limits the diversity of questions. For example, in a telephone survey or CATI, it would be very difficult to ask participants to rank 15 TV programmes in terms of preference.

## Use of physical stimuli

Often it is helpful or necessary to use physical stimuli such as products, product prototypes, commercials or promotional displays during an interview. For the most basic example, a taste test involves tasting a product and answering questions that evaluate the taste. In other cases, photographs, maps or other audio/visual cues are helpful. In these cases, face-to-face surveys conducted at central locations (guided through street surveys and CAPI) are preferable to home surveys. In the central location, many intricate visual stimuli can be set up prior to the actual interview. Postal surveys are moderate on this dimension, because sometimes it is possible to mail the facilitating aids or even product samples. Online surveys are also moderately suitable, because the questionnaires can include multimedia elements such as prototype web pages and advertisements. The use of physical stimuli is limited in traditional telephone surveys and CATIs, as well as in email surveys (depending upon the participant's ability to open attachments).

## Sample control

### Sample control

The ability of the survey mode to reach the units specified in the sample effectively and efficiently.

**Sample control** is the ability of the survey mode to reach participants specified in the sample effectively and efficiently.<sup>22</sup> At least in principle, home and workplace face-to-face surveys offer the best sample control. It is possible to control which sampling units or participants are interviewed, who is interviewed, the degree of participation of other members of the household and many other aspects of data collection. In practice, to achieve a high degree of control, the researcher has to overcome several problems. It is difficult to find participants at home during the day because many people work outside the home. Also, for safety reasons, interviewers are reluctant to venture into certain neighbourhoods and people have become cautious of responding to strangers at their door. Street surveys allow only a moderate degree of sample control. Although the interviewer has control over which participants to intercept, the choice is limited to individuals who are walking down a street or through a shopping centre, and frequent shoppers have a greater probability of being included. Also, potential participants can intentionally avoid or initiate contact with the interviewer. Compared with street surveys, CAPI offers slightly better control, as sampling quotas can be set and participants randomised automatically.

Moderate to high sampling control can be achieved with traditional telephone surveys and CATIs. Telephones offer access to geographically dispersed participants and hard-to-reach areas. These procedures depend upon a **sampling frame** – a list of population units with their

### Sampling frame

A representation of the elements of the target population that consists of a list or set of directions for identifying the target population.



telephone numbers.<sup>23</sup> The sampling frames normally used are telephone directories, but telephone directories are limited in that:

- (1) not everyone has a phone or even a 'conventional' phone, while some individuals have several phone numbers partly due to the growing use of mobile phones with rapidly changing numbers;<sup>24</sup> (2) the growth in number portability, which allows people to transfer their landline telephone number to a mobile phone and to move to any geographical area of the country;<sup>25</sup> (3) some individuals have unlisted phones or are ex-directory and directories do not reflect new phones in service or recently disconnected phones; and (4) some individuals no longer use landlines, relying solely or using their mobile phone.

Online and postal surveys require a list of addresses of individuals or households eligible for inclusion in the sample. This requirement has underpinned the growth of access panels across the globe. These surveys can reach geographically dispersed participants and hard-to-reach areas. Without the use of access panels, mailing lists are sometimes unavailable, outdated or incomplete, especially for electronic addresses. Another factor outside the researcher's control is whether the questionnaire is answered and who answers it. Some subjects refuse to respond because of lack of interest or motivation; others cannot respond because they are illiterate.<sup>26</sup> Given these reasons, the degree of sample control in online and postal surveys without the use of access panels tends to be low.<sup>27</sup>

The use of access panels provides moderate to high control over the sample. They can provide samples matched to national census statistics on key demographic variables. It is also possible to identify specific user groups within a panel and to direct the survey to households with specific characteristics. Specific members of households in the panel can be questioned. Finally, low-incidence groups, groups that occur infrequently in the population, can be reached with panels, but there is a question of the extent to which a panel can be considered representative of an entire population.

Not all populations are candidates for online survey research. Although participants can be screened to meet qualifying criteria and quotas imposed, the ability to meet quotas is limited by the number and characteristics of participants who may visit a website. However, there are some exceptions to this broad statement. For example, computer-product purchasers and users of internet services are ideal populations. Business and professional users of internet services are also an excellent population to reach with online surveys. Sample control is low to moderate for online surveys, while email surveys suffer from many of the limitations of postal surveys and thus offer low sample control.

## Quantity of data

Home and workplace face-to-face surveys allow the researcher to collect relatively large amounts of data. The social relationship between the interviewer and the participant, as well as the home or office environment, can motivate the participant to spend more time in the interview. Less effort is required of the participant in a face-to-face survey than in a telephone or postal survey. The interviewer records answers to open-ended questions and provides visual aids to help with lengthy and complex scales. Some face-to-face surveys last for as long as 75 minutes. In contrast to home and workplace surveys, street surveys and CAPIs provide only moderate amounts of data. Because these surveys are conducted in shopping centres and other central locations, a participant's time is more limited. Typically, the interview time is 20 minutes or less.

Postal surveys also yield moderate amounts of data. Fairly long questionnaires can be used because short questionnaires do not necessarily generate higher response rates than long ones. The same is true for email and online surveys, although online is a better medium in this respect.

Traditional telephone surveys, CATIs and surveys conducted using mobile devices result in limited quantities of data. They tend to be shorter than other surveys because participants

can easily terminate the telephone conversation or engagement at their own discretion. These interviews commonly last about 15 minutes and could be shorter in the case of mobile devices. Longer interviews may be conducted when the subject matter and the questioning tasks set are of interest to the participants.<sup>28</sup>

## Response rate

### Response rate

The percentage of the total attempted interviews that are completed.

Survey **response rate** is broadly defined as the percentage of the total attempted interviews that are completed. Concerns over declining response rates have been a characteristic of market research over the last two decades. Paradoxically, one of the reasons why traditional face-to-face techniques remain in use is that they can achieve response rates that are not possible with online surveys. Face-to-face, home and workplace, street and CAPI surveys yield the highest response rates (typically between 40 and 80%), though the actual response rate for any survey will vary hugely depending on the context of the survey, the country and demographics and any incentives (monetary or psychological) for taking part in the survey.

Telephone surveys, traditional and CATI, can yield response rates between 40 and 50%. These modes also suffer from not-at-homes or no-answers. In a study involving qualitative interviews and a census of all Australian telephone market research providers, it was reported that about half of all placed telephone calls go unanswered; refusals can outnumber interviews by up to six to one. Three call-backs per survey were built into the research design in most companies but, surprisingly, in some cases there were none, despite research that shows that call-backs can increase response rates by up to 76%.<sup>29</sup>

### Real research

#### Where participants are particularly reluctant to give their opinions<sup>30</sup>

Non-response is a common problem in most countries, but Germany had a particularly bad reputation when it came to 'closed doors'. A manager, responsible for supplier management at a domestic products company, worked with most global agencies in Germany for quantitative research. For products in baby care, for example, it proved very cumbersome to find out German opinion: 'Door to door was virtually impossible, due also to the fact that there are a lot of apartment blocks. Telephone research was very difficult too, Germans were very careful before answering.' John Attfield of RMM Marketing Research International worked in England before his 11-year stint in Germany. The differences in response he observed were dramatic. He took extra care in designing questionnaires, for instance:

*One cannot approach Germans with the same introductory texts as in, for instance, the US. In the US the assumption is made that the participant was going to enjoy the survey. But in Germany people thought it was a pain.*

### Non-response bias

Bias caused when actual participants differ from those who refuse to participate.

Postal surveys have the poorest response rate. In a postal survey of randomly selected participants, without any pre- or post-mailing contact, response rates can be less than 15% – sometimes much less. Such low response rates can lead to serious bias (**non-response bias**). This is because whether a person responds to a postal survey is related to how well the benefits of taking part in the survey are meaningful to the person and are clearly communicated to them. The magnitude of non-response bias increases as the response rate decreases.

Online surveys can have very poor response rates – very frequently under 10% – though much will depend upon how comprehensive and current the sampling frame is. With a well-constructed sampling frame that is relevant to the survey topic, online survey response

rates can be relatively high. This challenge is where the access panel has helped to improve online response rates. With a good relationship between panel participants and the panel owner, and well-chosen incentives to take part in online surveys, response rates can be greatly improved.

A comprehensive though dated review of the literature covering 497 response rates in 93 journal articles found weighted average response rates of 81.7%, 72.3% and 47.3% for, respectively, face-to-face, telephone and postal surveys.<sup>31</sup> However, response rates have decreased in recent times and many current researchers would be delighted with such high response rates.<sup>32</sup> The same review also found that response rates increase with the following:

- Either prepaid or promised monetary incentives.
- An increase in the amount of monetary incentive.
- Non-monetary premiums and rewards (pens, pencils, books).
- Preliminary notification.
- Foot-in-the-door techniques. These are multiple-request strategies. The first request is relatively small, and all or most people agree to comply. The small request is followed by a larger request, called the **critical request**, which is actually the target behaviour being researched.
- Personalisation.
- Follow-up letters.

(A further discussion of improving response rates is given in Chapter 15.)

### Critical request

The target behaviour being researched.

## Situational factors

In any practical situation, the researcher has to balance the need to collect accurate and high-quality data with the budget and time constraints. The situational factors that are important include control of the data-collection environment, control of field force, potential for interviewer bias, potential to probe participants, potential to build rapport, speed and cost.

### Control of the data-collection environment

The context in which a questionnaire is completed can affect the way that a participant answers questions. An example of this would be the amount of distraction from other people around, noise and temperature. The degree of control a researcher has over the context or environment in which the participant answers the questionnaire differentiates the various survey modes. Face-to-face surveys conducted at central locations (from street surveys and CAPIs) offer the greatest degree of environmental control. For example, the researcher can set up a special facility for demonstrating a product upon which a survey is based. Home and workplace face-to-face surveys offer moderate to high control because the interviewer is present. Traditional telephone surveys and CATIs offer moderate control. The interviewer cannot see the environment in which the interview is being conducted, but can sense the background conditions and encourage the participant to be attentive and involved. In postal surveys, email and online surveys, the researcher has little or no control over the environment. In the case of mobile online surveys, the questionnaire can be completed anywhere with the result that there is little or no consistency in the context in which the survey is completed. However, this ability for the participant to have control over the context may be instrumental in their fully engaging in the survey.

### Control of field force

The **field force** consists of interviewers and supervisors involved in data collection. Because they require no such personnel, postal surveys, email and online surveys eliminate field force problems. Traditional telephone surveys, CATIs, street surveys and CAPIs all offer moderate

### Field force

Both the actual interviewers and the supervisors involved in data collection.