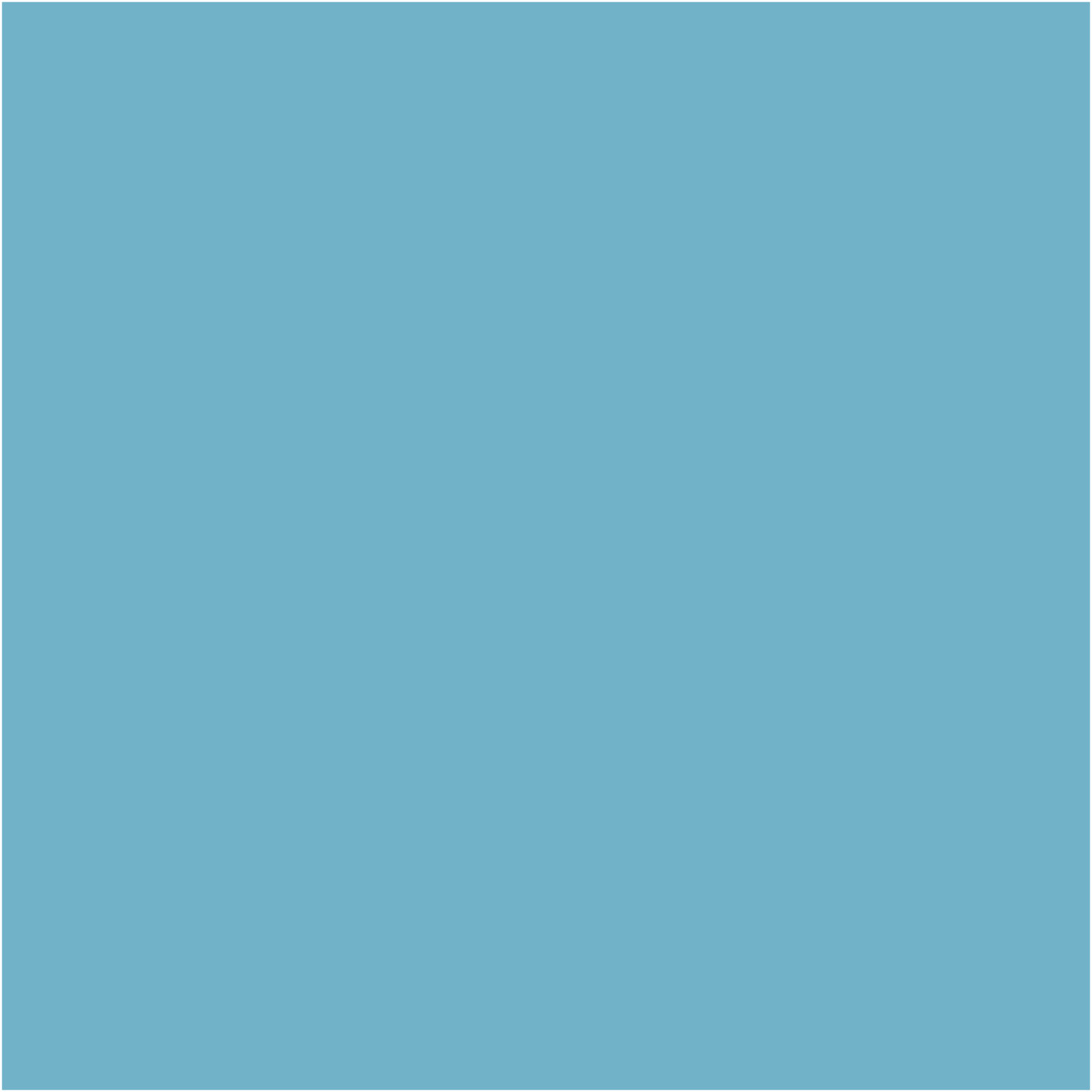

Ipsos
Ipsos MORI
PUSH TO WEB
BEST PRACTICE GUIDE
01 Research Methods Toolkit



PART A

What is Push-to-Web and how good is it?

Introduction

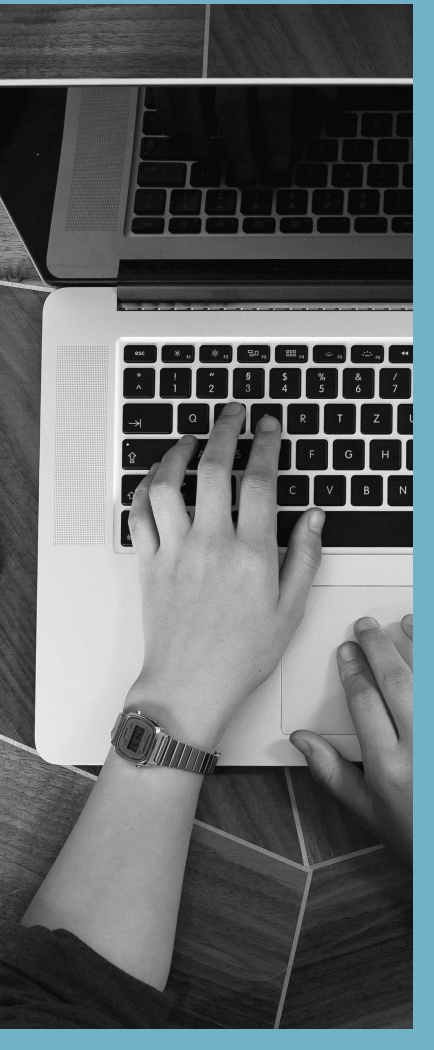
In recent years high quality cost-effective random probability telephone surveys have become impossible to implement in the UK, both because of complications arising from the rapid increase in the proportion of households that are mobile-only and because there has been a precipitous decline in response rates. At the same time random probability face-to-face interview surveys have become gradually more challenging and costly to implement.

Push-to-web methodology has arisen as a possible solution to these problems. It involves the use of offline contact to 'push' people to go online and complete a web questionnaire. It is generally combined with other data collection modes in a mixed mode approach.

In the UK, push-to-web surveys are carried out for clients who wish to take advantage of the low completion error rates associated with computer administered questionnaires, but who cannot justify the considerable cost of a random probability face-to-face survey.

There are several reasons why web-based data collection is becoming increasingly attractive:

- Online survey methods are cheaper and faster than their offline equivalents.
- The public is now coming to expect online official contact.



- Over recent years the research community has become increasingly enthusiastic about finding ways of using online data-collection methods.
- Response rates are in decline for the main competing offline methods.

However, the evidence has consistently shown that high quality surveys require random probability samples[1], and online surveys with random probability general population samples are not straightforward to implement. They require high coverage sampling frames, and available high coverage general population sample frames do not include email addresses. If we want a high coverage random probability online survey of the general population, we are forced to contact our sample through offline methods and to ask them to go online to complete the survey.

What does a typical general population push-to-web survey look like?

Typically, push-to-web surveys use a sequential mixed mode methodology[2]. The strategy takes the following approach:

- Sample members (individuals or addresses) are initially approached by mail and asked to participate in an online survey.
- Then, after one or two reminders, they are offered the option of participating through a second mode, usually a self-completion paper questionnaire.

This approach typically delivers an achieved sample with a response rate in the region of 7% to 25%, with around half of these responses completed online.

Push-to-web surveys deliver lower error levels than non-random online surveys at considerably lower cost than face-to-face surveys, which makes them a good alternative. However, clients are still wary of them, unless they can be confident that levels of survey error will remain modest.

What are the downsides of push-to-web and how can we minimise error?

Push-to-web surveys are vulnerable to four of the main error types defined by the total survey error framework: coverage error, sampling error, non-response error and measurement error.

Coverage and non-response error

In practice, these error types can be hard to distinguish and both have similar impacts on survey estimates.

The textbook case of non-coverage error arises when eligible members of the population are excluded from the sample frame. Because typical UK push-to-web surveys of the general population use high coverage sample frames, like the postcode address file (PAF), under-coverage is rarely an issue.

A different form of non-coverage arises in online surveys because individuals without internet access are unable to take part in them. Closely related is the non-response among those with internet access, arising from lack of online skills. Online responders to general population surveys tend to be younger and better educated than other-mode responders. These biases can be reduced by including an offline data collection mode in push-to-web surveys. For example, studies have found that adding a mail questionnaire follow-up to a push-to-web survey considerably reduced the difference between its sample profile and that of a mail-only survey[3].

Although including offline data collection reduces bias, it is important to note that push-to-web surveys typically have considerably lower response rates than the face-to-face surveys they usually replace (decreasing from around 50%-60% to 15%-25%). On the face of it, this should worry us because the risk of non-response bias (an important form of survey error) rises as response rate declines. However, research over the past 20 years or so indicates that the relationship between response rate and non-response bias is generally far weaker than had been previously assumed[4], suggesting that relatively low response rate surveys may deliver high quality estimates. Although we cannot assume that non-response bias will never be a problem, we certainly should not assume that it will.

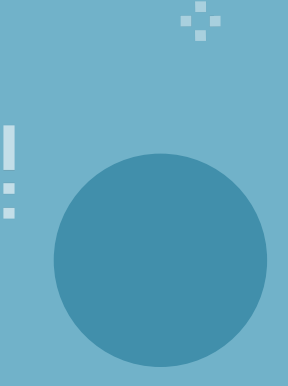
Sampling error

Sampling error comes in two forms – fixed error (bias) and variable error (variance). If random probability sampling procedures are correctly applied there will be no sampling bias and sampling variance will be calculable using established methods. Furthermore, because sampling variance is largely related to the achieved sample size, it is easily controlled by varying the sample size.

In traditional random probability face-to-face surveys in the UK, the sample of addresses is drawn from the postcode address file (PAF) and the interviewer uses well-defined methods like the Kish grid to select one or more individuals at each selected address randomly. This gives a random sample of individuals.

For a general population push-to-web survey, the sample of addresses is drawn in the same way: established guidelines should produce similarly unbiased address samples. But the selection of individuals at each sampled address is more problematic because it has to be carried out by the address residents following quasi-random protocols. This has previously led to error – a clear case of sampling bias[5].

There is an obvious alternative to this – scrap random selection and ask all adults in the household to take part. However, this also has drawbacks: if conditional incentives are used (as we currently believe they must to maximise response rates), allowing multiple responses at each address provides a possible temptation for fraud. Households completing four questionnaires will receive an incentive four times larger than those completing a single questionnaire. Some recipients may be tempted to invent fictional household members and there is circumstantial evidence that this may take place[6].



Currently, we use a compromise approach which we hope will minimise both selection error and fraudulent overclaiming. We ask *all* adults to take part in one (and two) adult households, and *any two* adults to take part in households containing three or more. We must accept there could still be some sampling bias in three-plus adult households, but we also know this cannot have a major impact on overall sample estimates because only 15% of households contain more than two adult residents (we select all adults in 85% of addresses). The selection method also considerably reduces the temptation for fraud because it places strict limits on the total amount any household can claim in incentives.

While this is currently our favoured approach, we continue to explore different individual selection methods.

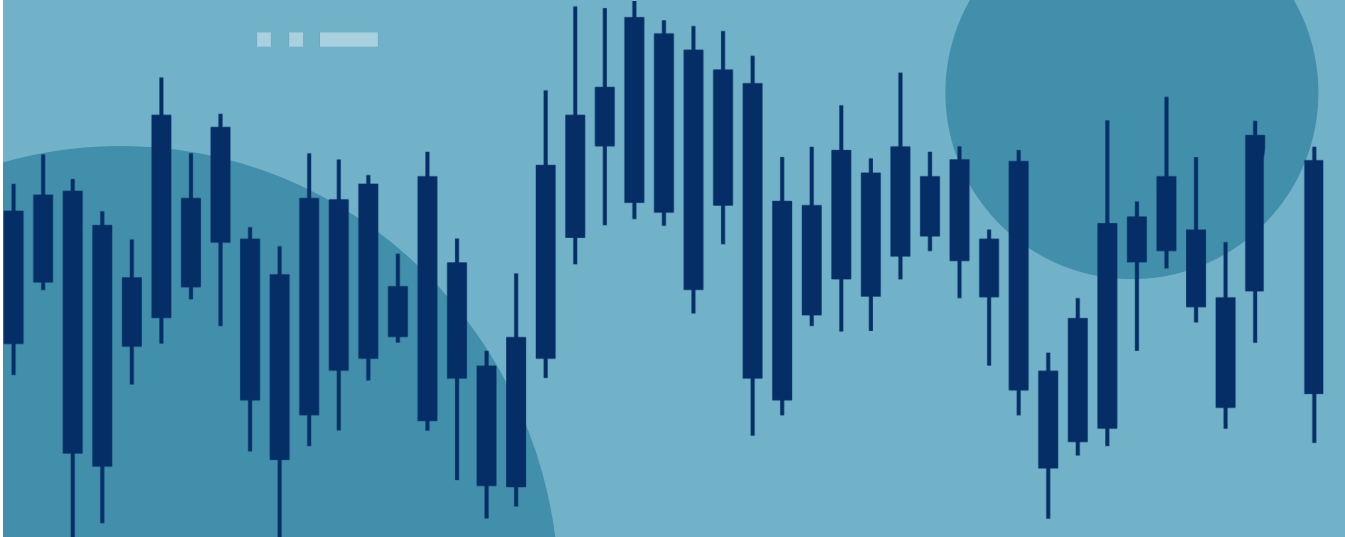
Measurement error

It is equally important to ensure that our respondents give accurate answers to the questions we ask. Encouragingly, in general, online questionnaires deliver high quality data[7]. But two issues remain.

First, how can we be sure that respondents' answers are not affected by whether they answer online or offline? This is relatively easily dealt with when we use paper questionnaires for offline data collection by adopting what Dillman[8] terms unified mode construction (using identical wordings and maximising similarities across modes in question formats, in answer formats), and in visual design.

Second, how can we ensure that online answers do not differ by device used (desktop, laptop, tablet or smartphone)? This is the subject of much current methodological work. The emerging consensus is that we should adopt "mobile-first" design principles – if a questionnaire is right for smartphone administration, then tablet/PC administration will look after itself[9]. Questions and answer lists need to be short, clear and concise, but this has been accepted good practice since the 1950s![10]

PART B



GOOD PRACTICE PRINCIPLES FOR DESIGNING GENERAL POPULATION PUSH-TO-WEB IN THE UK

The following nine principles for designing general population push-to-web surveys in the UK are based on both our own experiences at Ipsos MORI and the broader social survey literature. In drawing these up, we are especially indebted to Donald Dillman, who has been the world leader in developing the method.

Principle 1

Draw probability samples of addresses from the Postcode Address File (PAF)

Probability sampling remains an essential component of high quality surveys because it eliminates sampling bias from survey estimates. Empirical comparisons between online surveys using probability sampling methods and ones using non-probability (usually quota) methods have repeatedly demonstrated that the former produce better estimates, even when response rates are low[11].

Because sample members are contacted by mail (see *principle 2*), unclustered address samples should be used. However, there is sense in proportionately stratifying samples by geodemographic variables associated with key survey variables as this can improve estimate precision, and almost never worsens it.

Like all high-quality surveys, push-to-web surveys require high coverage sample frames. At present, there is only one such general population sample frame widely available in the UK, the Postcode Address File (PAF). PAF is a sample frame of addresses and includes no information on who lives at each address. All PAF samples are necessarily *address samples*, which means rules are required to link individuals or households to sampled addresses. See *principle 7* for further details.

Principle 2

Contact the sample by mail, but use supplementary contact modes if these are available

In the UK, mail is the only cost-effective recruitment method for stand-alone push-to-web samples. Occasionally, samples have been initially contacted face-to-face, but this has been in cases where push-to-web samples have been piggy-backed off pre-existing face-to-face surveys.

Under special circumstances (e.g. when the sample has been previously contacted) email addresses or phone numbers may be available in addition to postal addresses. If so, these should be used to supplement, but not replace, postal contact, as this is likely to increase the likelihood that the sample member will receive and read the survey request. An email or SMS message can also include a direct web link which saves respondents the burden of having to type in a URL themselves.

Mail should be used as the primary contact mode and should always be used for initial contact. Physically delivered letters convey greater legitimacy than electronic or telephone contacts and are also more memorable.

Principle 3

Use offline data collection on 2nd/3rd reminder

The advantages of online questionnaire administration over offline equivalents are well-known: it is cheaper, quicker and allows questionnaires to be as complex as needed. Generally, the major disadvantages are relatively low response rates and biased responding sample profiles. These problems are currently dealt with by administering a supplementary (generally mail questionnaire) offline data collection mode. This increases response rate and, more importantly, reduces non-response bias considerably.

Offline data collection should generally be offered only after attempts to achieve online response; otherwise, the evidence suggests, very few online responses will be received. For general population samples with reasonably simple questionnaires, we recommend including a paper version of the questionnaire with the second reminder. However, if the online questionnaire is complex, it may be necessary to simplify it to make is suitable for pen and paper completion.

Although we do not generally include another questionnaire in the 3rd reminder contact package, we refer to the one sent earlier and assure sample members that we are happy to receive either online or mail responses from them. We have found that a four-contact mailing schedule of this sort can result in a roughly 50:50 split in online and mail responses.

Most push-to-web surveys use paper self-completion questionnaires for supplementary offline data collection. It is also possible to use face-to-face interview follow-up, enabling the use of more complex questionnaires. However, it considerably reduces the cost-effectiveness of push-to-web and may also be susceptible to non-ignorable mode effects.

When sampling from PAF, it is not possible to use telephone follow-up of initial non-responders because PAF does not include telephone numbers.

Principle 4

Give scrupulous attention to the messaging and appearance of your communication

Communications should have the appearance of professional business correspondence rather than marketing or junk mail. You should:

- Use respected logos where possible.
- Avoid using flashy colours or visual designs that resemble advertising.
- Avoid marketing buzzwords on envelopes, in subject lines and in your messages.
- Include a complete return address on your envelopes and messages.

Messaging

Your messaging should be brief, clear and engaging. It should cover, in the space of a one-page letter, a short email or an SMS:

- What we are asking respondents to do?
- Why we want them to do it? What general benefits will accrue from it?
- How should they do it?
- What incentive will they receive for taking part?

Your message should convince potential respondents of the benefits of taking part while minimising the burdens. Bear in mind that the potential participants' ideas of benefits vs. cost will vary widely. In an interview survey, the interviewer can use initial interactions with sample members to establish what might appeal to them and use this information to tailor their messages. As this is not an option here, present a range of benefits of participation to appeal to diverse sample members across the full package of communications (initial letter and reminders), emphasising different benefits in different contacts starting with what is likely to have widest appeal in your first communication.

Following Dillman we suggest that the following might appeal to different sample members:

- The survey has social utility.
- We want your help.
- The questions are interesting.
- Opportunities for participating are limited to a few.
- Others are already responding.
- You will receive a financial incentive.

Principle 4

(Continued)

Dillman also recommends minimising the perceived costs of participating by:

- Keeping the questionnaire short and simple.
- Using good visual design.
- Making responding simple, easy and comfortable.
- Minimising the amount of sensitive information sought.
- Communicating trustworthiness by emphasising the legitimacy of the survey sponsor, allowing multiple routes for checking the survey's bona fides (web-sites, written letters, helplines, etc.) and providing confidentiality / data-protection assurances.

As well as offering different reasons for taking part, different contact attempts should vary both in counter-arguments to reasons for not taking part and in methods used for establishing trust.

In letters, ensure you express your key messages in a single page. Then use the back page for information not central to the recruitment message:

- Information about the client, Ipsos MORI, how to get in contact for further information.
- Links to the client and Ipsos MORI websites.
- What to do if the household does not have internet access.
- Information required for GDPR.
- Any additional FAQs.

You won't be able to include as much information in emails and SMS messages, but you must ensure that required GDPR information appears on the questionnaire landing page.

Visual design

Visual design should always be used to ease respondent comprehension and to complement textual content:

- Remember that readers will start reading from the top left corner of the message and work across it and down it.
- Use headings, white space, and shapes or symbols to draw attention to key messages.
- Place information where it is needed – put login details where we ask people to go online and not in a different part of the letter.

Principle 5

Send three to four communications, designed as a package to sample members

In the UK, typical push-to-web surveys will send two or three mail reminders after an initial mailing, in the knowledge that the impact of reminders decreases as more are sent. There is no confirmed best practice on how many contact attempts should be made when using more than one contact mode.

Dillman suggests that, as well as varying message content, as discussed under *principle 3*, the look and feel of contact attempts should vary to maximise their chances of appealing to a range of sample members. One might for example, vary:

- Letter vs. another format (e.g. postcard).
- Envelope size.
- Mode of contact (e.g. mail vs. email).
- Visual design.
- How login instructions are presented.

While contact attempts should vary, there should also be coherence across them in message and look and feel. Contacts should resemble one another in key ways (the use of logos, fonts and colours) and they should be jointly designed as part of a package. The content and look of each should develop the previous contact attempts and should also align with related communications, such as online questionnaire landing pages, FAQs, etc.

The timing of reminders will depend upon contact and response modes used. We find that in push-to-web surveys, questionnaires tend to be completed within 4 or 5 days of receipt. When making contact by mail and / or when using mail questionnaires, additional allowance should be made for postal delivery time. With all modes, you must allow for administrative time required (i) to remove respondents from the sample database and (ii) to prepare for the next despatch. This may be substantial when following up web-non-responders with a mail questionnaire.

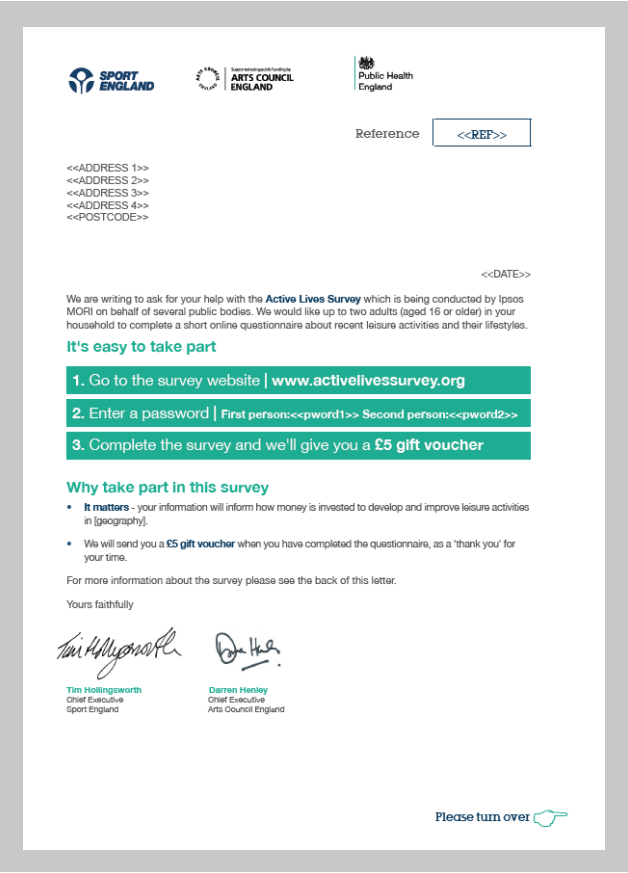
For PAF-based push-to-web surveys with mail contacts, we currently recommend allowing around one to two weeks between contact mailings. In surveys were you are able to use complementary email or SMS reminders, we would aim to send these so that each arrives shortly after a mail reminder.

Examples of a coherent package of recruitment letters, as used for the PAF based Sport England sponsored Active Lives Survey, are shown overleaf.

Principle 5

Active Lives Letter Examples

Initial Mailing



SPORT ENGLAND | ARTS COUNCIL ENGLAND | Public Health England

Reference <<REF>>

<<ADDRESS 1>>
<<ADDRESS 2>>
<<ADDRESS 3>>
<<ADDRESS 4>>
<<POSTCODE>>

<<DATE>>

We are writing to ask for your help with the **Active Lives Survey** which is being conducted by Ipsos MORI on behalf of several public bodies. We would like up to two adults (aged 16 or older) in your household to complete a short online questionnaire about recent leisure activities and their lifestyles.

It's easy to take part

1. Go to the survey website | **www.activelivessurvey.org**

2. Enter a password | **First person:<<pword1>> Second person:<<pword2>>**

3. Complete the survey and we'll give you a **£5 gift voucher**

Why take part in this survey

- **It matters** - your information will inform how money is invested to develop and improve leisure activities in [geography].
- We will send you a **£5 gift voucher** when you have completed the questionnaire, as a 'thank you' for your time.

For more information about the survey please see the back of this letter.

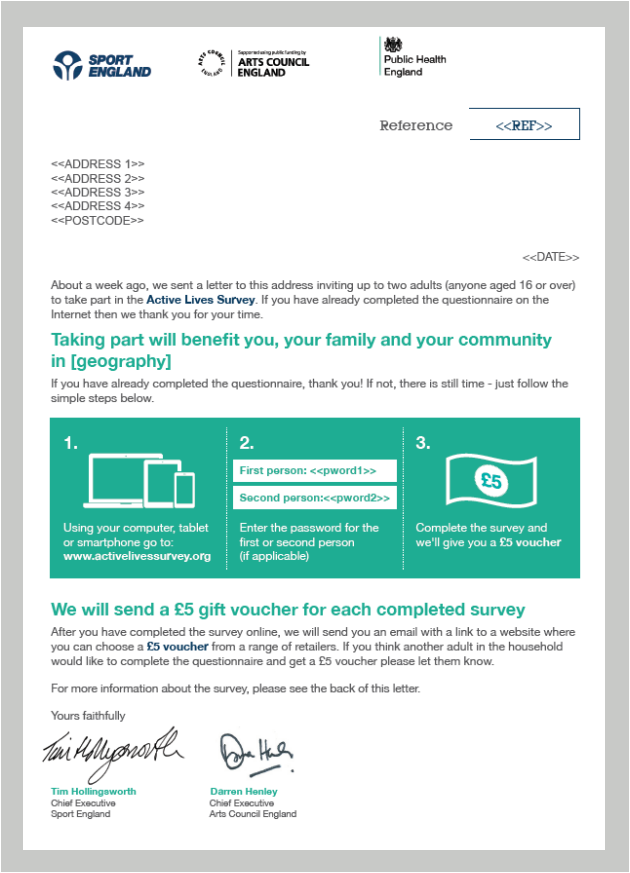
Yours faithfully

Tim Hollingsworth
Chief Executive
Sport England

Darren Henley
Chief Executive
Arts Council England

Please turn over

First reminder mailing



SPORT ENGLAND | ARTS COUNCIL ENGLAND | Public Health England

Reference <<REF>>

<<ADDRESS 1>>
<<ADDRESS 2>>
<<ADDRESS 3>>
<<ADDRESS 4>>
<<POSTCODE>>

<<DATE>>

About a week ago, we sent a letter to this address inviting up to two adults (anyone aged 16 or over) to take part in the **Active Lives Survey**. If you have already completed the questionnaire on the Internet then we thank you for your time.

Taking part will benefit you, your family and your community in [geography]

If you have already completed the questionnaire, thank you! If not, there is still time - just follow the simple steps below.

1. Using your computer, tablet or smartphone go to: **www.activelivessurvey.org**

2. **First person: <<pword1>>** **Second person:<<pword2>>** Enter the password for the first or second person (if applicable)

3. £5 Complete the survey and we'll give you a **£5 voucher**

We will send a £5 gift voucher for each completed survey

After you have completed the survey online, we will send you an email with a link to a website where you can choose a **£5 voucher** from a range of retailers. If you think another adult in the household would like to complete the questionnaire and get a £5 voucher please let them know.

For more information about the survey, please see the back of this letter.

Yours faithfully

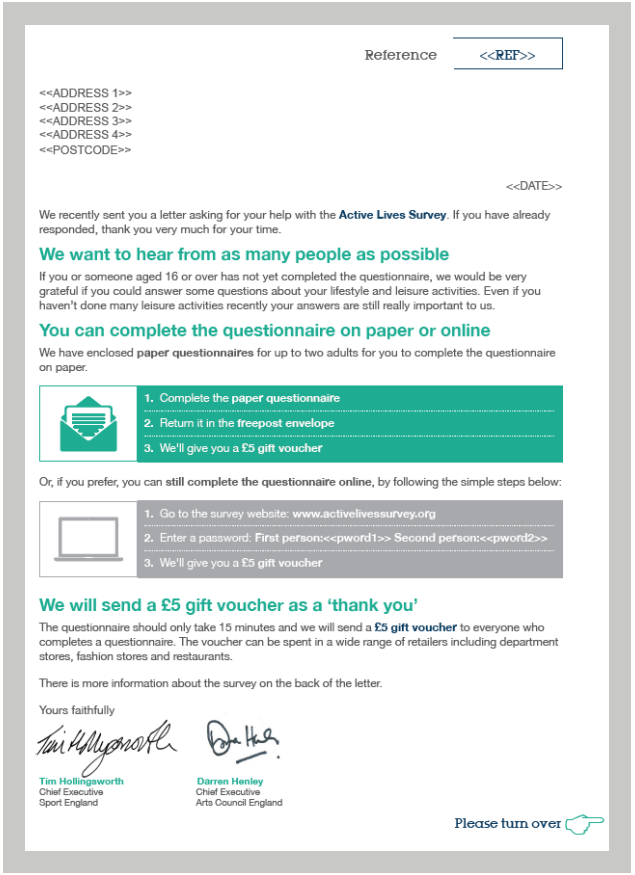
Tim Hollingsworth
Chief Executive
Sport England

Darren Henley
Chief Executive
Arts Council England

Principle 5

(Continued)

Second reminder mailing



Reference <<REF>>

<<ADDRESS 1>>
<<ADDRESS 2>>
<<ADDRESS 3>>
<<ADDRESS 4>>
<<POSTCODE>>

<<DATE>>

We recently sent you a letter asking for your help with the **Active Lives Survey**. If you have already responded, thank you very much for your time.

We want to hear from as many people as possible

If you or someone aged 16 or over has not yet completed the questionnaire, we would be very grateful if you could answer some questions about your lifestyle and leisure activities. Even if you haven't done many leisure activities recently your answers are still really important to us.

You can complete the questionnaire on paper or online

We have enclosed **paper questionnaires** for up to two adults for you to complete the questionnaire on paper.

1. Complete the **paper questionnaire**
2. Return it in the **freepost envelope**
3. We'll give you a **£5 gift voucher**

Or, if you prefer, you can **still complete the questionnaire online,** by following the simple steps below:

1. Go to the survey website: **www.activelivessurvey.org**
2. Enter a password: **First person:<<pword1>> Second person:<<pword2>>**
3. We'll give you a **£5 gift voucher**

We will send a £5 gift voucher as a 'thank you'

The questionnaire should only take 15 minutes and we will send a **£5 gift voucher** to everyone who completes a questionnaire. The voucher can be spent in a wide range of retailers including department stores, fashion stores and restaurants.

There is more information about the survey on the back of the letter.

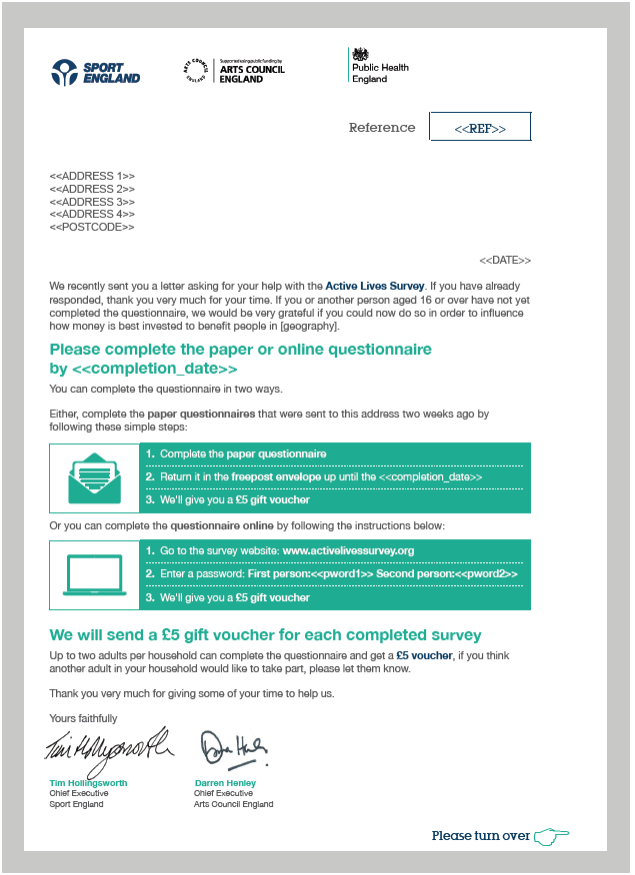
Yours faithfully

Tim Hollingsworth
Chief Executive
Sport England

Darren Henley
Chief Executive
Arts Council England

Please turn over

Third reminder mailing



SPORT ENGLAND | ARTS COUNCIL ENGLAND | Public Health England

Reference <<REF>>

<<ADDRESS 1>>
<<ADDRESS 2>>
<<ADDRESS 3>>
<<ADDRESS 4>>
<<POSTCODE>>

<<DATE>>

We recently sent you a letter asking for your help with the **Active Lives Survey**. If you have already responded, thank you very much for your time. If you or another person aged 16 or over have not yet completed the questionnaire, we would be very grateful if you could now do so in order to influence how money is best invested to benefit people in [geography].

Please complete the paper or online questionnaire by <<completion_date>>

You can complete the questionnaire in two ways.

Either, complete the **paper questionnaires** that were sent to this address two weeks ago by following these simple steps:

1. Complete the **paper questionnaire**
2. Return it in the **freepost envelope** up until the <<completion_date>>
3. We'll give you a **£5 gift voucher**

Or you can complete the **questionnaire online** by following the instructions below:

1. Go to the survey website: **www.activelivessurvey.org**
2. Enter a password: **First person:<<pword1>> Second person:<<pword2>>**
3. We'll give you a **£5 gift voucher**

We will send a £5 gift voucher for each completed survey

Up to two adults per household can complete the questionnaire and get a **£5 voucher**, if you think another adult in your household would like to take part, please let them know.

Thank you very much for giving some of your time to help us.

Yours faithfully

Tim Hollingsworth
Chief Executive
Sport England

Darren Henley
Chief Executive
Arts Council England

Please turn over

Principle 6

Offer conditional quasi-cash incentives in the region of £5 or £10

Methodological literature has repeatedly demonstrated that the most effective incentive regime for increasing response rates is to send cash to all sample members, unconditionally, in advance[12]. Unfortunately, given prevailing response rates in UK push-to-web surveys (c. 20-25%), in order to control costs, this approach would be either very expensive or require the use of very small incentives. For this reason, to-date, conditional incentives have usually been used, generally in the region of £5 to £10 paid for each completed response. These are proven to increase response rates, but not by as much as would the same level of incentive sent in advance. Furthermore, although the research literature indicates that cash incentives are superior to non-cash ones and to lotteries, in practice cash-like ones (vouchers redeemable at a variety of retail outlets) have been used rather than actual cash largely because they are simpler to administer.

In light of this, our current preferred approach is to send £5 to £10 shopping vouchers to all respondents.

We acknowledge that best practice guidance here may change with further methodological research. For example, work we have done for ONS indicates that sending tote bags as an unconditional incentive was effective in increasing response rates.

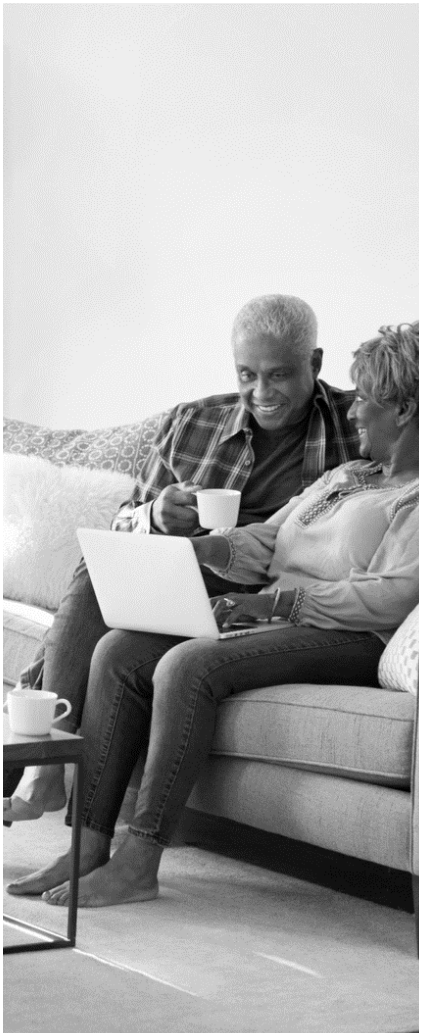
The impact of sending a small unconditional real-cash incentive (e.g. a £1 or £2 coin in the first mailing) remains untested, despite indications in the literature (notably from Dillman) that it might be effective.

Principle 7

Invite responses from any two adults in each household

When households are asked to follow specified procedures (like the next birthday method) to select random individuals for survey participation in surveys without interviewers, compliance is poor. We believe that, in the UK, it is better to ask all adult household members, to a maximum of two, to participate. We limit the maximum to minimise the incentive for fraudulently claiming incentives. In households containing more than two adults we invite responses from any two despite this giving a non-random selection. The number of such households is too small for this to impact meaningfully on sample bias.

This approach helps keep the instructions in our letters to sample members as simple as possible – it encourages response without seriously compromising the quality of the responding sample.



Principle 8

Use unified mode construction principles to design questionnaires

Mixed mode surveys are susceptible to mode effects within the survey because respondents may give different responses depending on the mode used to ask questions.

We present the following recommendations to minimise mode effects within push-to-web studies:

1. Avoid if possible mixing self-completion and interviewer administered modes: evidence suggests that social desirability bias differs little between online and paper questionnaires, but that it increases in interviewer administered modes[13]. Our recommended approach combines online and paper questionnaires, so it is far less likely to cause problems than combining online with telephone and/or face-to-face interviews.

2. Use the same wording for questions and answer codes: it is important to use identical wording across modes; even small differences can impact what respondents select. For example, a question in a web survey that does not initially show a "Don't know" option would be likely to produce fewer "Don't know" answers than one in a paper questionnaire where "Don't know" was always visible.

3. Ensure questions work in all modes: it is important to test all questions in all modes used. For example, multi-code lists are difficult to use in telephone surveys because they require respondents to remember the full list of answers when answering.

Principle 8

(Continued)

4. Make all options look visually similar: the presentation of a question on the page can impact on how participants respond, for example subtly encouraging them to select more answers at the top of a scale than at the bottom. Look to minimise differences in appearance between methods. This has the added benefit of making all the questionnaires used appear part of a cohesive whole, which further supports legitimacy of a survey[14].

5. Keep the questionnaire short: when using the same questionnaire across multiple modes, it is important to ensure that the questionnaire is short enough for all modes used. In online surveys, it is generally recommended that questionnaire should not take longer than 20 minutes to complete even if supplementary modes are also used.

Principle 9

Use mobile-first mode construction principles to design questionnaires

A large number of respondents complete online surveys using mobile devices so it is vital for online surveys to be 'device-agnostic': optimised for smartphones as well as for conventional PCs, tablets, and for all browsers for each. The importance of mobile optimisation is increasing rapidly – around one in five respondents complete Sport England's Active Lives Survey on a smartphone[15] and this is likely to increase.

Optimisation is necessary because the small screen size of mobile devices substantially constrains the presentation of questionnaires and leads to the need for horizontal and vertical scrolling. This can lead to significant increases in drop-outs and measurement errors if the survey is not designed for mobile completion[16]. The device-agnostic design principles we use focus on harmonising visual appearance, removing or reducing non-essential content, and standardising question text and response options across devices and modes. Our approach draws upon more general methodological good practice principles from current survey literature[17] and our own experimentation[18], and is perhaps best termed 'mobile-first' because we begin our design work by considering the look, feel and usability of a questionnaire on a mobile device (given this mode of delivery is the most restrictive) and only then work out to other devices.

Ipsos MORI's mobile-first questionnaire design guidelines are as follows:

- Reduce all non-essential, non-question content: for example, show logos on the welcome/closing screens only.
- Use progress bars only where they are motivational and do not clutter: this is most likely when the survey is short and there is limited routing, so the progress bar is accurate.
- Avoid exceeding 140 characters in the question stem (including spaces).
- Standardise the question text and response options across devices and modes.
- Avoid using drop-downs; but if their use is deemed essential, limit the number of response options.

Principle 9
(Continued)

- Limit the number of response options to 7 per question, as far as possible; if more than 7 response options are required, consider the use of expandable headers and ensure that the "next" button is at the bottom of the list so that respondents must scroll through the list to move on.
- Use a 5-point scale where Likert items are used; this minimises the need for scrolling and the potential for primacy effects.
- Ensure the questionnaire is 'finger-friendly': unrealistic levels of touch precision should be avoided e.g. avoid sliders and small response buttons.
- Harmonise the visual appearance and layout of the questionnaire across devices and modes.
- Avoid open-ended questions as far as possible; where text-entry must be used, set a character limit and ensure the text wraps automatically to allow for vertical scrolling only.
- Avoid grids and replace with multiple questions (grouping similar questions on the same screen/page) or use mobile-friendly grid formats (*see next subsection below*).
- Restrict the use of instructions and explanations to those that are essential.

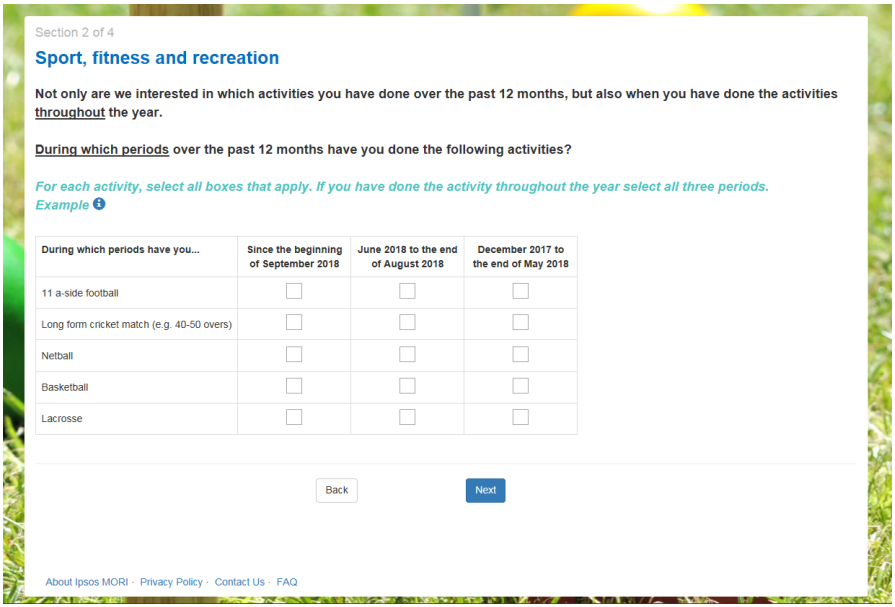
Principle 9

(Continued)

Mobile-friendly grid formats

Grid questions are common in online surveys, but they create display issues on the smaller screen sizes of mobile devices, as they require horizontal and vertical scrolling.

The traditional grid format displays question wording followed by a grid. Rows present question items or statements and columns present response options. The respondent is asked to select one answer per row.



Principle 9

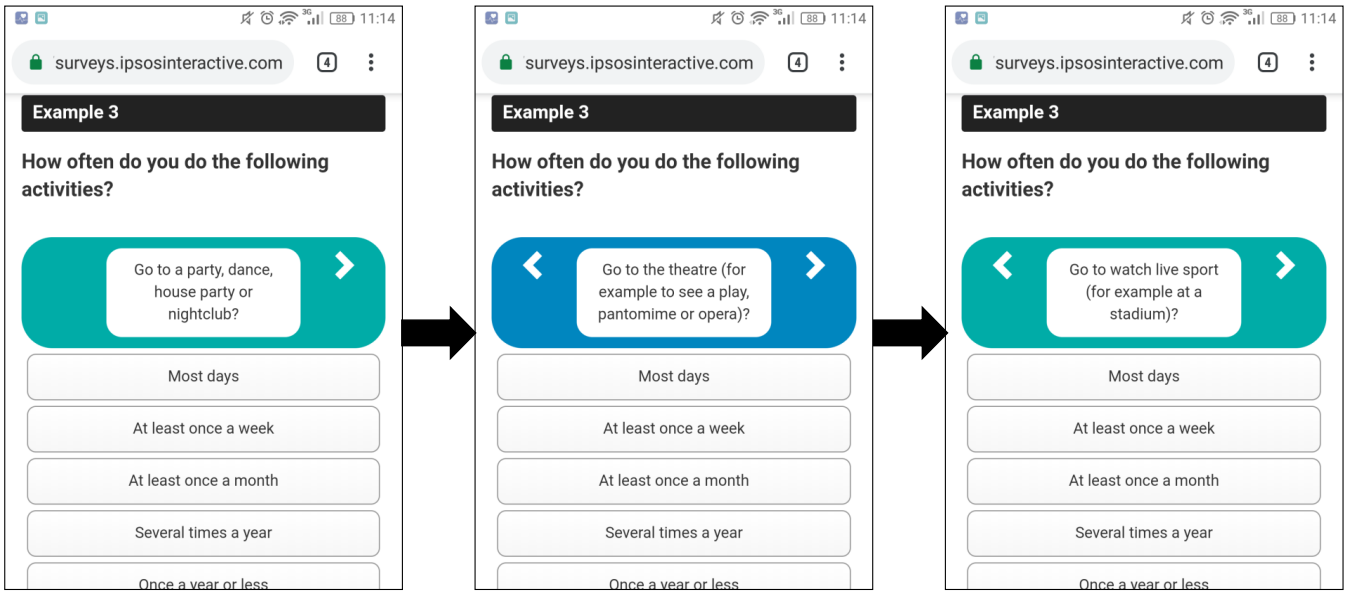
(Continued)

The appearance and usability of grid questions can be improved with 'progressive' or 'collapsible' grids.

The **progressive** grid (also known as the carousel) displays the question wording at the top of the screen.

Beneath this, the first question item or statement is shown in a coloured box, with the response options listed beneath. Once the respondent has selected their chosen response, the progressive grid automatically moves to the next question item or statement. The coloured box changes colour with each item/statement, while the list of response option remains the same. Arrows are provided within the coloured box to help respondents navigate back and forth through the question items/statements if they choose. This format is useful when a respondent should think about each answer independently.

Example of progressive grid:



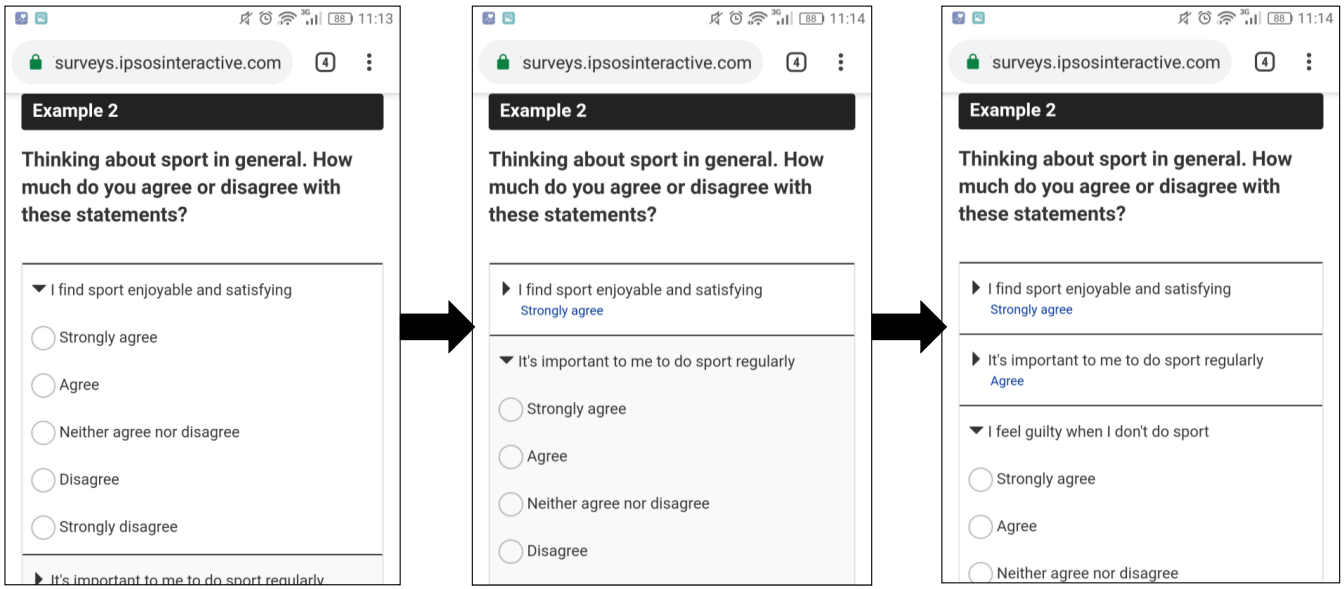
Principle 9
(Continued)

For a demo of our mobile-friendly grid formats, visit: https://ipsos.uk/demogrids

The **collapsible** grid displays the question wording at the top of the screen. Beneath this, the first question item or statement is shown as text, with the list of response options underneath. Once the respondent has selected their chosen response, the collapsible grid automatically collapses response options for that question item/statement and displays them for the next one. The response option selected for each previous item is displayed enabling respondents to check and compare against their previous answers. If a respondent wishes to change a previous answer, they can re-open a section by selecting the question item/statement.

Our usability testing has found that these mobile-friendly grid formats reduce respondent burden. Evidence from experiments suggest that data collected using either the progressive or the collapsible grid is comparable to data from traditional grids[19].

Example of collapsible grid:



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